

**Volume 39, No. 4, Pages 2884 to 3844,
March 18 – April 13, 2024**

FCC Record

**A comprehensive compilation of decisions,
reports, public notices and other documents
of the Federal Communications Commission
of the United States.**



FCC Record

Volume 39, No. 4, Pages 2884 to 3844, March 18 – April 13, 2024



FEDERAL COMMUNICATIONS COMMISSION

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Federal Communications Commission Record

Table of Contents

Volume 39

Issue 4

| | |
|--|-------------------|
| <i>Table of Cases</i> | <i>i</i> |
| <i>Table of FCC and Delegated Authority Numbers</i> | <i>iii</i> |
| <i>Table of Docket Numbers</i> | <i>v</i> |
| <i>Table of Rulemaking Numbers</i> | <i>vi</i> |
| <i>Table of Cities</i> | <i>vii</i> |

Federal Communications Commission Record

Table of Cases Volume 39 Issue 4

| Case Name | Page |
|---|-------------|
| EB Commences 2024 EEO Audits | 2884 |
| Iglesia Cristiana de Jehova, New LPFM, Dismissal Letter | 2899 |
| WCB & OEA Announces Availability of Preliminary IPCS Database | 2903 |
| Latino Public Radio, New LPFM, Dismissal Letter | 2907 |
| New Hope and Good News, New NCE FM, Dismissal Letter | 2911 |
| WTB Seeks Comment on Watts Bar's COLEM Application | 2915 |
| WTB Grants Ho-Chunk Nation Waiver Request | 2917 |
| WCB Approves FY 2024 PIA Form 471 Review Procedures, Notification Letter | 2922 |
| WCB Announces Reimbursement Rate Estimates for May 2024 ACP Benefits | 2923 |
| FCC Announces Effective Dates for TRS-URD Grace Period and Carceral TRS Access | 2925 |
| MB Seeks Comment on Joint Caption Display Settings Proposal | 2926 |
| EB Requests Information on Private-Led Tracebacks Efforts | 2929 |
| Table of Allotments, FM Broadcast Stations, Mattoon, Illinois | 2932 |
| OET Announces Ex Parte Status for Experimental License WW9XPI | 2936 |
| CGB Extends CaptionCall and Sorenson TRS Certifications | 2937 |
| Vero Broadband, LLC, NALF | 2939 |
| EB Removes BPO From Robocall Database | 2953 |
| WCB Invites Comments on Section 214 Discontinuance Application(s) | 2958 |
| Satellite Licensing Division and Satellite Programs and Policy Division Information Actions Taken | 2962 |
| FCC Announces Effective and Compliance Dates for VRS Improvements | 2965 |
| PSHSB Grants Morgan County STA Request to operate TIS | 2966 |
| MB Provides Guidance on Settlement Window for MX LPFM Application | 2969 |
| RENEW Taylorsville, New LPFM, Dismissal Letter | 2971 |
| CGB Intends to Place IP CTS Providers' Cost and Demand Data in the Record | 2975 |
| FCC Announces Precision Ag Connectivity Task Force Working Groups | 2978 |
| WCB Establishes Procedures for 2024 Annual Access Charge Tariff Filings | 2982 |
| WCB Reminds IXCs to File Annual Section 64.1900 Certifications by May 1, 2024 | 2987 |
| WCB Issues Monthly USF Appeals | 2989 |
| PSHSB Announces Comment Deadlines for Cybersecurity Labeling for Internet of Things FNPRM | 3000 |
| OMD Seeks Comment on SpaceX 1.6/2.4 GHz Petition for Rulemaking | 3002 |
| OMD Seeks Comment on SpaceX 2 GHz MSS Petition for Rulemaking | 3004 |
| SB Dismisses SpaceX Gen2 MSS Application as Unacceptable for Filing | 3007 |
| MB Admonishes MEC Licensee for Section 73.3539 Violation, KMEC-LP | 3017 |
| MB Announces Comment Dates for Joint Captioning Display Settings Proposal | 3019 |
| FCC Releases Agenda for the March 27, 2024 CEDC Meeting | 3020 |
| WTB Grants Waiver of 47 CFR 17.47(b) | 3027 |
| WCB Seeks Comment on Domestic 214 Transfer of CCI - the Charter Entities | 3035 |
| FCC Initiates Cable Price Survey; Responses Due May 24, 2024 | 3039 |
| OIA & WTB Issues T-Mobile and Ka'ena Transaction Protective Order | 3057 |
| PSHSB Seeks Comment on Implementation of Security Protocols | 3068 |
| International Authorizations Granted | 3075 |
| Actions Taken Under Cable Landing License Act | 3080 |
| Satellite Licensing Division and Satellite Programs and Policy Division Information Action Taken | 3083 |
| WCB Grants Waiver Request Filed by Filer Mutual Telephone Co. | 3085 |
| WCB Issues Streamlined Resolution of Reimbursement Program Term Extension Requests | 3091 |
| WCB Seeks Comments on Domestic 214 Transfer of Buckland - HCI | 3098 |
| CGB Grants Clear Rate Unauthorized Change Complaint | 3102 |

Federal Communications Commission Record

| Case Name | Page |
|---|-------------|
| FCC Announces Tribal Workshop in Wyandotte, OK on May 15, 2024 | 3105 |
| La Iglesia de Dios Pentecostes, New LPFM, Dismissal Letter | 3107 |
| PSHSB Announces Comment and Reply Dates in Outage Reporting Proceeding | 3111 |
| WTB Announces Comment Dates for 900 MHz Band Rulemaking Petition | 3113 |
| MB Denies One Ministries, KQSL, Petition for Reconsideration | 3116 |
| MB Announces Comment Dates for Reinstatement of Form 395-A | 3122 |
| Broadcast Station Totals as of March 31, 2024 | 3123 |
| FCC Warns Providers About Illegal Tax Relief Robocalls From Veriwave | 3124 |
| Interconnected VoIP Numbering Authorization Application Filed by UTC | 3129 |
| WTB Provides Guidance on 2.5 GHz Tribal Licensee Interim Performance | 3132 |
| Roseland Broadcasting, Inc., KXCC-LD, Forfeiture Order | 3138 |
| MB Grants CNZ, WGBP-TV Complaint Against DISH | 3144 |
| PSHSB Seeks Comment on New Bedford T-Band Waiver Request | 3149 |
| Satellite Licensing Division and Satellite Programs and Policy Division Information Action Taken | 3153 |
| PSHSB Approves Region 21 (Michigan) 700 MHz Regional Plan Amendment | 3155 |
| PSHSB Grants Westchester County 700 MHz Extension Request | 3157 |
| Community Media of Union City, New LPFM, Dismissal Letter | 3160 |
| WCB Invites Comments on Section 214 Discontinuance Application(s) | 3163 |
| WCB Seeks Comments on Domestic 214 Transfer of Ligonier and LigTel - Schloss and Burchfield | 3167 |
| MB Grants Pinal County, Arizona Petition for Modification | 3170 |
| FCC Announces the Next DAC Meeting to be Held May 16, 2024 | 3180 |
| PSHSB Announces Compliance Date and PRA Approval for MDRI | 3181 |
| Prairie Public Broadcasting, Inc., Consent Decree | 3183 |
| MB & OEA Releases Fourth Quarter 2023 Inflation Adjustment Figures for Cable Operators | 3196 |
| WCB Announces the Maximum Partial Reimbursement Amounts for May 2024 ACP Benefits | 3198 |
| PSHSB Denies Lincoln County, Maine TIS Waiver Request | 3201 |
| PSHSB Denies Waldo County, Maine TIS Waiver Request | 3205 |
| Actions Taken Under Cable Landing License Act | 3210 |
| International Authorizations Granted | 3213 |
| Shelby Broadcast Associates, LLC, Forfeiture Order | 3218 |
| EB Proposes Penalty for KXOL Licensing Contest Violations | 3223 |
| Actions Taken Under Cable Landing License Act | 3230 |
| CGB Grants Clear Rate Unauthorized Change Complaint | 3233 |
| CGB Grants Clear Rate Unauthorized Change Complaint | 3236 |
| Satellite Licensing Division and Satellite Programs and Policy Division Information Action Taken | 3239 |
| CGB Extends Hamilton IP CTS Certification to December 31, 2024 | 3241 |
| WCB Invites Comments on Section 214 Discontinuance Application(s) | 3243 |
| FCC Issues Section 706 Report on the Deployment of ATC to All Americans | 3247 |
| FCC Adopts 'All-In' Cable and Satellite Video Pricing | 3586 |
| FCC Affirms Repurposing 5.9 GHz Band Between Wi-Fi and Auto Safety | 3641 |
| FCC Dismisses UPM Complaint Against Digicel Haiti | 3655 |
| FCC Finds Apparent TV Ownership Violations by Nexstar and Mission, NALF | 3676 |
| FCC Adopts FM Booster Program Origination Order and FNPRM | 3718 |
| FCC Dismisses CenturyLink Complaint Against Peerless | 3795 |
| FCC Denies Roger Wahl Application for Review | 3808 |
| FCC Proposes Rules to Protect Survivors Using Connected Cars | 3817 |
| FCC Denies BIU's Request to Reinstatement the Spectrum Five Petition | 3840 |

Federal Communications Commission Record

Table of FCC and Delegated Authority Numbers Volume 39 Issue 4

| DA/FCC Number | Page | DA/FCC Number | Page |
|----------------------|-------------|----------------------|-------------|
| DA 24-179 | 2884 | DA 24-321 | 3116 |
| DA 24-266 | 2899 | DA 24-322 | 3122 |
| DA 24-267 | 2903 | DA 24-323 | 3123 |
| DA 24-268 | 2907 | DA 24-324 | 3124 |
| DA 24-269 | 2911 | DA 24-325 | 3129 |
| DA 24-270 | 2915 | DA 24-327 | 3132 |
| DA 24-272 | 2917 | DA 24-328 | 3138 |
| DA 24-273 | 2922 | DA 24-329 | 3144 |
| DA 24-274 | 2923 | DA 24-330 | 3149 |
| DA 24-275 | 2925 | DA 24-331 | 3153 |
| DA 24-276 | 2926 | DA 24-332 | 3155 |
| DA 24-277 | 2929 | DA 24-333 | 3157 |
| DA 24-278 | 2932 | DA 24-334 | 3160 |
| DA 24-280 | 2936 | DA 24-335 | 3163 |
| DA 24-281 | 2937 | DA 24-336 | 3167 |
| DA 24-282 | 2939 | DA 24-337 | 3170 |
| DA 24-283 | 2953 | DA 24-338 | 3180 |
| DA 24-284 | 2958 | DA 24-339 | 3181 |
| DA 24-285 | 2962 | DA 24-340 | 3183 |
| DA 24-286 | 2965 | DA 24-341 | 3196 |
| DA 24-287 | 2966 | DA 24-342 | 3198 |
| DA 24-288 | 2969 | DA 24-343 | 3201 |
| DA 24-289 | 2971 | DA 24-344 | 3205 |
| DA 24-290 | 2975 | DA 24-345 | 3210 |
| DA 24-293 | 2978 | DA 24-346 | 3213 |
| DA 24-294 | 2982 | DA 24-347 | 3218 |
| DA 24-295 | 2987 | DA 24-348 | 3223 |
| DA 24-296 | 2989 | DA 24-349 | 3230 |
| DA 24-297 | 3000 | DA 24-350 | 3233 |
| DA 24-298 | 3002 | DA 24-351 | 3236 |
| DA 24-299 | 3004 | DA 24-352 | 3239 |
| DA 24-300 | 3007 | DA 24-353 | 3241 |
| DA 24-301 | 3017 | DA 24-354 | 3243 |
| DA 24-302 | 3019 | FCC 24-27 | 3247 |
| DA 24-303 | 3020 | FCC 24-29 | 3586 |
| DA 24-304 | 3027 | FCC 24-32 | 3641 |
| DA 24-305 | 3035 | FCC 24-33 | 3655 |
| DA 24-306 | 3039 | FCC 24-34 | 3676 |
| DA 24-307 | 3057 | FCC 24-35 | 3718 |
| DA 24-308 | 3068 | FCC 24-36 | 3795 |
| DA 24-309 | 3075 | FCC 24-37 | 3808 |
| DA 24-310 | 3080 | FCC 24-38 | 3817 |
| DA 24-311 | 3083 | FCC 24-39 | 3840 |
| DA 24-312 | 3085 | | |
| DA 24-313 | 3091 | | |
| DA 24-314 | 3098 | | |
| DA 24-315 | 3102 | | |
| DA 24-316 | 3105 | | |
| DA 24-318 | 3107 | | |
| DA 24-319 | 3111 | | |
| DA 24-320 | 3113 | | |

Federal Communications Commission Record

Table of Docket Numbers Volume 39 Issue 4

| Docket Number | Page | Docket Number | Page |
|----------------------|-------------|----------------------|-------------|
| 12-375 | 2903 | | |
| 24-89 | 2915 | | |
| 02-6 | 2922 | | |
| 21-450 | 2923 | | |
| 13-24 | 2925 | | |
| 12-108 | 2926 | | |
| 20-195 | 2929 | | |
| 24-83 | 2932 | | |
| 10-51 | 2937 | | |
| 24-33 | 2958 | | |
| 10-51 | 2965 | | |
| 13-24 | 2975 | | |
| 19-329 | 2978 | | |
| 24-41 | 2982 | | |
| 96-61 | 2987 | | |
| 02-60 | 2989 | | |
| 23-239 | 3000 | | |
| 12-108 | 3019 | | |
| 17-208 | 3020 | | |
| 24-31 | 3035 | | |
| 92-266 | 3039 | | |
| 23-171 | 3057 | | |
| 18-99 | 3068 | | |
| 10-90 | 3085 | | |
| 18-89 | 3091 | | |
| 24-57 | 3098 | | |
| 21-346 | 3111 | | |
| 24-99 | 3113 | | |
| 23-4 | 3116 | | |
| 98-204 | 3122 | | |
| 23-310 | 3129 | | |
| 24-27 | 3144 | | |
| 02-378 | 3155 | | |
| 24-52 | 3163 | | |
| 24-43 | 3167 | | |
| 24-28 | 3170 | | |
| 21-346 | 3181 | | |
| 21-450 | 3198 | | |
| 03-123 | 3241 | | |
| 24-91 | 3243 | | |
| 22-270 | 3247 | | |
| 23-203 | 3586 | | |
| 19-138 | 3641 | | |
| 23-64 | 3655 | | |
| 17-105 | 3718 | | |
| 22-172 | 3795 | | |
| 21-401 | 3808 | | |
| 22-238 | 3817 | | |
| 20-399 | 3840 | | |

Federal Communications Commission Record

Table of Rulemaking Numbers

Volume 39

Issue 4

| Rulemaking Number | Page | Rulemaking Number | Page |
|--------------------------|-------------|--------------------------|-------------|
| RM-11975 | 3002 | | |
| RM-11976 | 3004 | | |
| RM-11977 | 3113 | | |

Federal Communications Commission Record

Table of Localities

Volume 39

Issue 4

| City/State | Page | City/State | Page |
|-------------------|-------------|-------------------|-------------|
| Mattoon, IL | 2932 | | |



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA: 24-179
Released: March 22, 2024

ENFORCEMENT BUREAU COMMENCES 2024 EEO AUDITS

On March 22, 2024, the Enforcement Bureau issued the first of its Equal Employment Opportunity (EEO) audit letters for 2024 to randomly selected radio and television stations. In accordance with section 73.2080(f)(4) of the Commission's EEO rules,¹ the Enforcement Bureau annually audits the EEO programs of randomly selected broadcast licensees. Each year, approximately five percent of all radio and television stations are selected for EEO audits.

A list of the radio and television stations included in this audit as well as the text of the March 22, 2024 audit letter appears on the following pages, which are also located at the Enforcement Bureau's EEO headline page on the FCC website at: <https://www.fcc.gov/enforcement/eb-eeo/equal-employment-opportunity-headlines>. The deadline for stations to upload audit responses to their FCC-hosted online public inspection files is May 6, 2024.

As a reminder, the Enforcement Bureau will no longer issue letters to licensees upon completion of our review of audit responses. If questions arise during staff review, the Enforcement Bureau will contact the licensee.

Enforcement Bureau Contact: EB-EEO@fcc.gov or 202-418-1450

– FCC –

¹ 47 CFR § 73.2080(f)(4).



Federal Communications Commission
Washington, D.C. 20554

March 22, 2024

Dear Licensee:

1. In accordance with 47 CFR § 73.2080(f)(4), [Station call sign] (the Station) and all other stations, if any, in the same station employment unit (defined by 73.2080(e)(2) as commonly owned stations in the same market that share employees) (the Unit) has been randomly selected for an audit of its Equal Employment Opportunity (EEO) program. A copy of section 73.2080 of the Federal Communications Commission (FCC or Commission) rules can be found here: <https://www.fcc.gov/enforcement/eb-eeo/equal-employment-opportunity-rules>.

2. Audit Data Requested.

(a) If the Unit has fewer than five full-time employees (defined by section 73.2080(e)(1) as employees regularly assigned to work 30 hours a week or more), submit a response listing the Unit's full-time employees identified by job title (no personal names should be provided), the number of hours each is regularly assigned to work per week, and a response to Question 2(b)(vi) below. Please also see Questions 3 and 4 below for guidance regarding brokers and brokered stations.

(b) If the Unit employs five or more full-time employees, provide the following information:

(i) Copies of the Unit's two most recent EEO Public File Reports, described in section 73.2080(c)(6).

(ii) For each station in the Unit that maintains a website, the website address. If the Unit's most recent EEO Public File Report is not posted on each website as required by section 73.2080(c)(6), identify that website and explain why the report is not so posted. If the Unit does not maintain a website, but its corporate site contains a link to a site pertaining to the Unit, identify the corporate website address where the Unit's most recent EEO Public File Report is linked pursuant to section 73.2080(c)(6).

(iii) For each of the Unit's full-time positions filled during the period covered by the EEO Public File Reports noted above, or since acquisition of the Unit (if during that period), the date of hire as required by section 73.2080(c)(5)(vi) as well as dated copies of all advertisements, bulletins, letters, faxes, e-mails or other communications announcing the position, as described in section 73.2080(c)(5)(iii). However, to reduce the burden of responding to this audit, if a job notice was sent to multiple sources, the Unit may include in its response: (1) documentation showing one such notice was sent, (2) a list of the additional sources to which the notice was distributed, and (3) a statement confirming notices to all additional sources used to announce the vacancy were retained, as required by section 73.2080(c)(5)(iii).² Include, however, copies of all job announcements sent to any organization (identified separately from other recruitment sources) that has notified the Unit that it wants to be notified of the Unit's job openings, as described in section 73.2080(c)(1)(ii).

(iv) As required by section 73.2080(c)(5)(v), the total number of interviewees for each vacancy and the referral source for each interviewee for all the Unit's full-time vacancies filled during the period covered by the above-noted EEO Public File Reports.

² For on-air announcements that aired multiple times to advertise the position, you may send a traffic log summary documenting the timeframe during which the announcements aired (in lieu of the log in its entirety). The log showing all air dates and times may be required for additional verification, but the Unit need not provide with its initial response.

(v) Dated documentation demonstrating performance of the Unit's recruitment initiatives described in section 73.2080(c)(2) during the period covered by the above-noted EEO Public File Reports, such as participation in job fairs, events with educational institutions, and mentoring or training programs for staff. Specify the Unit personnel involved in each recruitment initiative. In addition, provide the Unit's total number of full-time employees and state whether the population of the market in which any of the Unit's stations operates is 250,000 or more. Based upon these two factors, and as required by section 73.2080(c)(2) and (e)(3) of the Commission's rules, state whether the Unit is required to perform two or four points worth of initiative activities within a two-year period (measured from the date the stations in the Unit file their renewal applications and the second, fourth, sixth and eighth anniversaries of that date). If the Unit performed more than the required number of initiative activities, it may provide documentation for only the required amount in its response, i.e., two or four points worth. If any documentation provided appears inadequate, e.g., it is not dated or does not clearly prove the Unit's participation, the Commission may ask for additional verification.

(vi) Any pending or resolved complaints involving the Unit filed during the Unit's current license term(s) before any body having competent jurisdiction under federal, state, territorial or local law, alleging unlawful discrimination in the employment practices of the Unit on the basis of race, color, religion, national origin, or gender. For each such complaint, provide: (1) a brief description of the allegations and issues involved; (2) the names of the complainant and other persons involved; (3) the date the complaint was filed; (4) the court or agency before which it is pending or by which it was resolved; (5) the file or case number; and (6) the disposition and date thereof or current status. Note that the Unit must report all complaints, regardless of their status or disposition.

(vii) In accordance with section 73.2080(b), during the Unit's current license term(s) (or since acquisition of the Unit (if during that period)), a description of the responsibilities of each level of Unit management responsible for implementing Unit EEO policies and how the Unit has informed employees and job applicants of its EEO policies and program.

(viii) In accordance with section 73.2080(c)(3), during the Unit's current license term(s) (or since acquisition of the Unit (if during that period)), a description of the Unit's efforts to analyze its EEO recruitment program to ensure that it is effective and to address any problems found as a result of such analysis.

(ix) As required by section 73.2080(c)(4), during the Unit's current license term(s) (or since acquisition of the Unit (if during that period)), a description of the Unit's efforts to analyze periodically its measures taken to examine pay, benefits, seniority practices, promotions, and selection techniques and tests to ensure that they provide equal opportunity and do not have a discriminatory effect. If the Unit has one or more union agreements, describe how the Unit cooperates with each union to ensure EEO policies are followed for the Unit's union-member employees and job applicants.

(x) If your entity is a religious broadcaster and any of the Unit's full-time employees are subject to a religious qualification as described in section 73.2080(a) of the rules, the Unit should indicate that status in its response and provide data as applicable to its EEO program. For example, for those full-time hires subject to a religious qualification, you must provide only a record of the hire listed by job title and date filled, the recruitment sources used for the opening, and the source that referred the person hired. No other records are required for those hires. If five or more full-time positions are not subject to a religious qualification, the licensee must maintain and provide all records for such hires and complete the initiatives required under section 73.2080(c)(2). Otherwise, a religious broadcaster is not required to perform these initiatives.

(c) Resumes, company training manuals, posters, employee handbooks, and corporate guidebooks are not required to be submitted. If any of the information in these or similar materials is relevant to any part of this audit letter, the Unit may provide a summary of any content if it so wishes. If this audit requires an unusually burdensome volume of documentation, the Unit may contact EEO staff at (202) 418-1450 at least seven days prior to the response deadline to discuss alternative ways of condensing the information.

3. Time Brokerage—Licensee of brokered station(s) receives audit letter.

If any station included in the Unit is subject to a time brokerage agreement, the licensee must immediately forward a copy of this letter to the broker under each such agreement. Additionally, if the Unit employs fewer than five full-time employees, the licensee must respond by providing a list of the Unit's full-time employees listed by job title, the number of hours each employee is assigned to work, and a response to paragraph 2(b)(vi) above. If the Unit employs five or more full-time employees, the licensee must respond fully to paragraph 2(b).

4. Time Brokerage—Broker receives audit letter.

(a) **Broker receives audit letter from brokered station licensee.** The broker must submit information requested in paragraph 2(b) above concerning information relating only to its own full-time employees working on behalf of the brokered station, as required by section 73.2080(f)(3) of the Commission's rules. If recruitment activity for those brokered station employees is maintained with that of other stations licensed to you, and you lack the ability to separate the information, submit information pertaining to both.

(b) **Broker receives audit letter directly from Commission.** If any station in the Unit is licensed to you, submit information requested in paragraph 2(b) above for the Unit's EEO program. If recruitment activity pertaining to full-time employees working on behalf of another station you broker is maintained with that of the Unit, and you lack the ability to separate the information, submit information pertaining to both.

(c) **Broker described in 4(a) or 4(b).** If full-time employees at the station you broker, combined with full-time employees at the Station (or Unit), total fewer than five, you need only respond to this letter by submitting a list of full-time employees (identified by job title and number of hours regularly assigned to work per week) for both the brokered station(s) and subject Station as well as a response to paragraph 2(b)(vi).

5. Procedures.

(a) **The response to this audit letter must be uploaded to the FCC-hosted online public inspection file (<https://publicfiles.fcc.gov/>) belonging to each station in the Unit by no later than May 6, 2024.** The response should be placed in the EEO Audits, Investigations, and Complaints subfolder in the online public file (found at EEO Records>>Additional Documents>> EEO Audits, Investigations, and Complaints). Include in the response the Station's Facility ID Number and an e-mail address of a Station representative.

(b) Any extension of time must be requested at least five days prior to aforementioned deadline (via email to EB-EEO@fcc.gov), indicate the additional time the Unit believes it needs to complete its response (not to exceed 45 days) and will be granted only upon a showing of good cause. Unless and until an extension is granted, the original deadline remains in effect.

(c) If the Unit submitted an EEO audit response in 2022 or 2023 and/or the most recent license renewal application(s) applicable to the Unit were granted after February 1, 2022, send an email to EB-EEO@fcc.gov for additional guidance on whether a response is required. In the email, provide a

reference to the relevant filings/applications before the Commission.

(d) The accuracy and completeness of the response must be certified by an officer, partner or other principal of the Station licensee or broker (as appropriate) or, in the case of a noncommercial educational station, by an officer, member or other principal of the licensee. (See 47 CFR § 1.16.) To knowingly and willfully make any false statement or conceal any material fact in response to this audit is punishable by fine or imprisonment (see 18 U.S.C. § 1001; 47 CFR § 1.17), revocation of any station license or construction permit (47 U.S.C. § 312(a)(1)), and/or forfeiture (47 U.S.C. § 503). Failure to respond to this audit letter by the deadline is punishable by sanctions in accordance with section 73.2080(g).

(e) As required by sections 73.3526(e)(10) (commercial stations) and 73.3527(e)(11) (noncommercial educational stations), a copy of this letter and the response must be placed in the FCC-hosted online public inspection file belonging to each station in the Unit. Consequently, the response should **NOT include personal information about individuals, such as social security numbers, home addresses, or other personally identifiable information. The FCC does not require that employment units retain such information in their records, or that such information be provided in response to this letter.**

(f) Upon receipt, audit responses will be reviewed for completeness. If any questions arise or there are missing materials, EEO staff will contact you. The Enforcement Bureau no longer issues letters to licensees upon completion of our review of audit responses.

6. Should you have any questions, please contact EEO Staff at EB-EEO@fcc.gov or (202) 418-1450. Thank you for your cooperation.

Sincerely,

/s/ Elizabeth Goldin

Elizabeth E. Goldin
Assistant Chief, Investigations & Hearings Division
Enforcement Bureau

**MARCH 22, 2024 BROADCAST EEO AUDIT
RADIO & TELEVISION STATIONS**

| | CALL SIGN | SERVICE | FACILITY ID | CITY OF LICENSE | STATE | LICENSEE NAME |
|-----|------------------|----------------|--------------------|------------------------|--------------|--|
| 1. | KAFT | DTV | 2767 | FAYETTEVILLE | AR | Arkansas Educational Television Commission |
| 2. | KAHL | AM | 67070 | SAN ANTONIO | TX | San Antonio RadioWorks, LLC |
| 3. | KAIT | DTV | 13988 | JONESBORO | AR | Gray Television Licensee, LLC |
| 4. | KASI | AM | 2116 | AMES | IA | iHM Licenses, LLC |
| 5. | KATC | DTV | 33471 | LAFAYETTE | LA | Scripps Broadcasting Holdings LLC |
| 6. | KBCW-FM | FM | 66622 | MCALESTER | OK | University of Central Oklahoma |
| 7. | KBEX | FM | 15018 | DALHART | TX | Viva Media, L.L.C. |
| 8. | KBOA-FM | FM | 33673 | PIGGOTT | AR | Pollack Broadcasting Co. |
| 9. | KBST | AM | 33684 | BIG SPRING | TX | Kbest Media, LLC |
| 10. | KBSZ | AM | 11217 | APACHE JUNCTION | AZ | Wook Radio DC INC. |
| 11. | KBWA | FM | 91420 | BRUSH | CO | HOPE MEDIA GROUP |
| 12. | KCCR | AM | 60858 | PIERRE | SD | Riverfront Broadcasting LLC |
| 13. | KCME | FM | 10791 | MANITOU SPRINGS | CO | Cheyenne Mountain Public Broadcast House, Inc. |
| 14. | KDAG | FM | 29519 | FARMINGTON | NM | iHM Licenses, LLC |
| 15. | KDFM | FM | 86553 | FALFURRIAS | TX | Cantico Nuevo Ministry Inc |
| 16. | KDOK | AM | 48950 | KILGORE | TX | Chalk Hill Communications, LLC |
| 17. | KDUP | FM | 172273 | CEDARVILLE | CA | Surprise Valley Culture and Arts |
| 18. | KEYH | AM | 2911 | HOUSTON | TX | Estrella Radio License of Houston LLC |
| 19. | KEYJ-FM | FM | 17804 | ABILENE | TX | Townsquare License, LLC |
| 20. | KFAN-FM | FM | 22671 | JOHNSON CITY | TX | Hill Country Broadcasting, LLC |
| 21. | KFAY | AM | 16573 | FARMINGTON | AR | Cumulus Licensing LLC |
| 22. | KFRG | FM | 1241 | SAN BERNARDINO | CA | Audacy License, LLC |
| 23. | KFYI | AM | 63918 | PHOENIX | AZ | iHM Licenses, LLC |
| 24. | KGLK | FM | 59951 | LAKE JACKSON | TX | Radio One Licenses, LLC |
| 25. | KGOH | FM | 767241 | COLBY | KS | Divine Mercy Radio, Inc. |
| 26. | KHCU | FM | 82894 | CONCAN | TX | Houston Christian Broadcasters, Inc. |
| 27. | KHIT | AM | 38458 | RENO | NV | Lotus Radio Corp |
| 28. | KHKM | FM | 76981 | HAMILTON | MT | Legacy Broadcasting, Inc. |

**MARCH 22, 2024 BROADCAST EEO AUDIT
RADIO & TELEVISION STATIONS**

| | CALL SIGN | SERVICE | FACILITY ID | CITY OF LICENSE | STATE | LICENSEE NAME |
|-----|------------------|----------------|--------------------|------------------------|--------------|---|
| 29. | KHOV-FM | FM | 29021 | WICKENBURG | AZ | Univision Radio Stations Group, Inc. |
| 30. | KHSU | FM | 28111 | ARCATA | CA | California State Polytechnic University, Humboldt |
| 31. | KIDO | AM | 17396 | NAMPA | ID | Townsquare License, LLC |
| 32. | KISO | FM | 71411 | OMAHA | NE | iHM Licenses, LLC |
| 33. | KIST-FM | FM | 31434 | CARPINTERIA | CA | Rincon Broadcasting LS LLC |
| 34. | KJTV | AM | 55061 | LUBBOCK | TX | Ramar Communications, Inc. |
| 35. | KKAP | DTV | 58267 | LITTLE ROCK | AR | Educational Broadcasting Corporation |
| 36. | KKNT | AM | 13508 | PHOENIX | AZ | Salem Communications Holding Corporation |
| 37. | KKQX | FM | 164232 | MANHATTAN | MT | Silver Star Communications, Inc. |
| 38. | KKWS | FM | 28650 | WADENA | MN | HBI Radio Brainerd/Wadena, LLC |
| 39. | KLRT-TV | DTV | 11951 | LITTLE ROCK | AR | Mission Broadcasting, Inc. |
| 40. | KLTY | FM | 2809 | ARLINGTON | TX | Inspiration Media of Texas, LLC |
| 41. | KMAT | FM | 72527 | SEADRIFT | TX | Cordell Communications, Inc. |
| 42. | KMCT-TV | DTV | 38584 | WEST MONROE | LA | KMCT Holdings, LLC |
| 43. | KMEL | FM | 35121 | SAN FRANCISCO | CA | iHM Licenses, LLC |
| 44. | KNHD | AM | 27124 | CAMDEN | AR | Family Worship Center Church, Inc. |
| 45. | KNLV | AM | 35247 | ORD | NE | MWB Broadcasting II, LLC |
| 46. | KOEZ | FM | 7823 | AMES | IA | Saga Communications Of Iowa, LLC |
| 47. | KOFK-FM | FM | 172286 | BOZEMAN | MT | Guild of St. Peter Educational Association |
| 48. | KOHH | FM | 172573 | SAN LUCY | AZ | Tohono O'Odham Nation |
| 49. | KOUW | FM | 83882 | ISLAND PARK | ID | Wood River Media, LLC |
| 50. | KPHX | AM | 13790 | PHOENIX | AZ | La Hermosa Radio, LLC |
| 51. | KPOP | FM | 190388 | HARTSHORNE | OK | Heartbeat Oklahoma LLC |
| 52. | KPRW | FM | 31058 | PERHAM | MN | Leighton Radio Holdings, Inc. |
| 53. | KQBU | AM | 67065 | EL PASO | TX | 97.5 Licensee TX LLC |
| 54. | KQCI | FM | 174323 | FREER | TX | CENTRO CRISTIANO DE VIDA ETERNA |
| 55. | KQFC | FM | 51217 | BOISE | ID | Radio License Holding CBC, LLC |
| 56. | KQNU | FM | 3971 | ONAWA | IA | Powell Broadcasting Company, Inc. |

**MARCH 22, 2024 BROADCAST EEO AUDIT
RADIO & TELEVISION STATIONS**

| | CALL SIGN | SERVICE | FACILITY ID | CITY OF LICENSE | STATE | LICENSEE NAME |
|-----|------------------|----------------|--------------------|------------------------|--------------|---|
| 57. | KQWB-FM | FM | 64359 | BRECKENRIDGE | MN | Radio Fargo-Moorhead, Inc. |
| 58. | KRDP | FM | 122359 | APACHE JUNCTION | AZ | Desert Soul Media, Inc. |
| 59. | KRNW | FM | 49747 | CHILLICOTHE | MO | Northwest Missouri State University |
| 60. | KRVX | FM | 164198 | WIMBLEDON | ND | I3G Media, Inc. |
| 61. | KTAT | AM | 67312 | FREDERICK | OK | HIGH PLAINS RADIO NETWORK, LLC |
| 62. | KTFX-FM | FM | 56622 | WARNER | OK | K95.5, Inc. |
| 63. | KTLB | FM | 28657 | TWIN LAKES | IA | Alpha 3E Licensee LLC |
| 64. | KTME | FM | 176985 | RELIANCE | WY | Western Inspirational Broadcasters Inc |
| 65. | KUAD-FM | FM | 49538 | WINDSOR | CO | Townsquare Media of Fort Collins, Inc. |
| 66. | KUND-FM | FM | 69127 | GRAND FORKS | ND | Prairie Public Broadcasting, Inc. |
| 67. | KUWG | FM | 82478 | GILLETTE | WY | University of Wyoming |
| 68. | KVHP | DTV | 35852 | LAKE CHARLES | LA | KVHP License Subsidiary, LLC |
| 69. | KVPM | FM | 198792 | ARVIN | CA | Shemogul Media, LLC |
| 70. | KVSF-FM | FM | 83285 | Pecos | NM | Hutton Broadcasting, LLC |
| 71. | KWNW | FM | 51855 | CRAWFORDSVILL E | AR | iHM Licenses, LLC |
| 72. | KWUZ | FM | 164293 | PONCHA SPRINGS | CO | Three Eagles Communications of Colorado, LLC |
| 73. | KWYN | AM | 18183 | WYNNE | AR | East Arkansas Broadcasters, Inc. |
| 74. | KXLM | FM | 34349 | OXNARD | CA | Lazer Licenses LLC |
| 75. | KXPZ | FM | 63453 | LAS CRUCES | NM | Bravo MIC Communications, LLC |
| 76. | KXTL | AM | 63871 | BUTTE | MT | Townsquare License, LLC |
| 77. | KYQQ | FM | 37121 | ARKANSAS CITY | KS | SM-KYQQ, LLC |
| 78. | KZBR | FM | 162292 | LA JARA | CO | Wolf Creek Broadcasting, LLC |
| 79. | KZNT | AM | 70825 | COLORADO SPRINGS | CO | Bison Media, Inc. |
| 80. | KZTP | FM | 164085 | SIBLEY | IA | Absolute Communications, L.L.C. |
| 81. | KZUE | AM | 36185 | EL RENO | OK | LA Tremenda Radio Mexico, Inc. |
| 82. | WAAY-TV | DTV | 57292 | HUNTSVILLE | AL | Alabama TV License Company, LLC |
| 83. | WACX | DTV | 60018 | LEESBURG | FL | SuperChannel Worship Ministries, Inc. |

**MARCH 22, 2024 BROADCAST EEO AUDIT
RADIO & TELEVISION STATIONS**

| | CALL SIGN | SERVICE | FACILITY ID | CITY OF LICENSE | STATE | LICENSEE NAME |
|------|------------------|----------------|--------------------|------------------------|--------------|---|
| 84. | WAND | DTV | 70852 | DECATUR | IL | WAND(TV) Partnership |
| 85. | WARV-FM | FM | 176832 | COLONIAL HEIGHTS | VA | Educational Media Foundation |
| 86. | WATC-DT | DTV | 13206 | ATLANTA | GA | Community Television, Inc. |
| 87. | WATN-TV | DTV | 11907 | MEMPHIS | TN | TEGNA Memphis Broadcasting, Inc. |
| 88. | WAVF | FM | 24776 | HANAHAN | SC | Saga South Communications, LLC |
| 89. | WAXN-TV | DTV | 12793 | KANNAPOLIS | NC | WSOC Television, LLC |
| 90. | WAZY-FM | FM | 68970 | LAFAYETTE | IN | CTI License, LLC |
| 91. | WBBJ-TV | DTV | 65204 | JACKSON | TN | Tennessee Broadcasting Partners |
| 92. | WBBM-TV | DTV | 9617 | CHICAGO | IL | CBS Broadcasting Inc. |
| 93. | WBFF | DTV | 10758 | BALTIMORE | MD | Chesapeake Television Licensee, LLC |
| 94. | WBIH | DTV | 84802 | SELMA | AL | Radiant Life Ministries, Inc. |
| 95. | WBNX-TV | DTV | 72958 | AKRON | OH | Winston Broadcasting Network, Inc. |
| 96. | WBYM | AM | 295 | BAYAMON | PR | CAGUAS EDUCATIONAL TV, INC |
| 97. | WCLD | AM | 54530 | CLEVELAND | MS | Radio Cleveland, Inc. |
| 98. | WCNC-TV | DTV | 32326 | CHARLOTTE | NC | WCNC-TV, Inc |
| 99. | WCYB-TV | DTV | 2455 | BRISTOL | VA | Sinclair Media Licensee, LLC |
| 100. | WCZQ | FM | 46942 | MONTICELLO | IL | Neuhoff Media Decatur, LLC |
| 101. | WDCQ-TV | DTV | 16530 | BAD AXE | MI | Delta College |
| 102. | WDEF-TV | DTV | 54385 | CHATTANOOGA | TN | WDEF-TV, Inc. |
| 103. | WDFX-TV | DTV | 32851 | OZARK | AL | Dothan TV LLC |
| 104. | WDJR | FM | 25575 | HARTFORD | AL | Gulf South Communications Inc |
| 105. | WDJT-TV | DTV | 71427 | MILWAUKEE | WI | WDJT-TV Limited Partnership |
| 106. | WDPM-DT | DTV | 83740 | MOBILE | AL | Word of God Fellowship, Inc. |
| 107. | WDSI-TV | DTV | 71353 | CHATTANOOGA | TN | New Age Media of Tennessee License, LLC |
| 108. | WECN | DTV | 19561 | NARANJITO | PR | Encuentro Christian Network, Corp. |
| 109. | WECV | FM | 67633 | NASHVILLE | TN | Community Broadcasting, Inc. |
| 110. | WEDB | FM | 54832 | EAST DUBLIN | GA | RadioJones, L.L.C. |
| 111. | WEDU | DTV | 21808 | TAMPA | FL | Florida West Coast Public Broadcasting Inc. |

**MARCH 22, 2024 BROADCAST EEO AUDIT
RADIO & TELEVISION STATIONS**

| | CALL SIGN | SERVICE | FACILITY ID | CITY OF LICENSE | STATE | LICENSEE NAME |
|------|------------------|----------------|--------------------|------------------------|--------------|---|
| 112. | WEIQ | DTV | 721 | MOBILE | AL | Alabama Educational Television Commission |
| 113. | WEPH | DTV | 83946 | TUPELO | MS | CHRISTIAN TELEVISION NETWORK OF MISSISSIPPI, INC. |
| 114. | WERL | AM | 4907 | EAGLE RIVER | WI | Heartland Comm. License, LLC |
| 115. | WFAW | AM | 24446 | FORT ATKINSON | WI | Magnum Communications, Inc. |
| 116. | WFRK | FM | 183329 | QUINBY | SC | Community Broadcasters, LLC |
| 117. | WFXG | DTV | 3228 | AUGUSTA | GA | Augusta TV LLC |
| 118. | WFXK | FM | 24931 | BUNN | NC | Radio One Licenses, LLC |
| 119. | WFXW | DTV | 25236 | GREENVILLE | MS | Radiant Life Ministries, Inc. |
| 120. | WGBC | DTV | 24314 | MERIDIAN | MS | CTM License LLC |
| 121. | WGBO-DT | DTV | 12498 | JOLIET | IL | WGBO License Partnership, G.P. |
| 122. | WGHN-FM | FM | 72105 | GRAND HAVEN | MI | WGHN, INC. |
| 123. | WGNM | DTV | 24618 | MACON | GA | Christian Television Network, Inc. |
| 124. | WGRD-FM | FM | 55650 | GRAND RAPIDS | MI | Townsquare Media of Grand Rapids, Inc. |
| 125. | WGTA | DTV | 63329 | TOCCOA | GA | Marquee Broadcasting Georgia, Inc. |
| 126. | WGTQ | DTV | 59279 | SAULT STE. MARIE | MI | TRAVERSE CITY (WGTU-TV) LICENSEE, INC. |
| 127. | WGZB-FM | FM | 53202 | LANESVILLE | IN | Alpha Media Licensee LLC |
| 128. | WHAS-TV | DTV | 32327 | LOUISVILLE | KY | Sander Operating Co. I LLC |
| 129. | WHIZ-TV | DTV | 61216 | ZANESVILLE | OH | Marquee Broadcasting Ohio, Inc. |
| 130. | WHNO | DTV | 37106 | NEW ORLEANS | LA | Christian Television Corporation of New Orleans, Inc. |
| 131. | WHQG | FM | 36372 | MILWAUKEE | WI | Lakefront Communications, LLC |
| 132. | WHRM-TV | DTV | 73036 | WAUSAU | WI | State of Wisconsin - Educational Communications Board |
| 133. | WHTN | DTV | 11117 | MURFREESBORO | TN | CHRISTIAN TELEVISION NETWORK, INC |
| 134. | WHVE | FM | 26639 | RUSSELL SPRINGS | KY | Shoreline Communications, Inc. |
| 135. | WHVO | AM | 55651 | HOPKINSVILLE | KY | Ham Broadcasting Co Inc |
| 136. | WIAT | DTV | 5360 | BIRMINGHAM | AL | Nexstar Media, Inc. |
| 137. | WICS | DTV | 25686 | SPRINGFIELD | IL | WICS Licensee, LLC |
| 138. | WIFS | DTV | 26025 | JANESVILLE | WI | Byrne Acquisition Group, LLC |

**MARCH 22, 2024 BROADCAST EEO AUDIT
RADIO & TELEVISION STATIONS**

| | CALL SIGN | SERVICE | FACILITY ID | CITY OF LICENSE | STATE | LICENSEE NAME |
|------|------------------|----------------|--------------------|------------------------|--------------|--|
| 139. | WIJR | AM | 72890 | HIGHLAND | IL | Birach Broadcasting Corporation |
| 140. | WIPX-TV | DTV | 10253 | BLOOMINGTON | IN | INYO Broadcast Licenses LLC |
| 141. | WIRS | DTV | 39887 | YAUCO | PR | America-CV Station Group, Inc. |
| 142. | WISC-TV | DTV | 65143 | MADISON | WI | Television Wisconsin, Inc. |
| 143. | WISN-TV | DTV | 65680 | MILWAUKEE | WI | WISN Hearst Television Inc. |
| 144. | WJBK | DTV | 73123 | DETROIT | MI | New World Communications of Detroit, Inc. |
| 145. | WJCL | DTV | 37174 | SAVANNAH | GA | WJCL Hearst Television LLC |
| 146. | WJYS | DTV | 32334 | HAMMOND | IN | Millennial Telecommunications, Inc. |
| 147. | WKAQ-TV | DTV | 64983 | SAN JUAN | PR | Telemundo of Puerto Rico |
| 148. | WKBC-FM | FM | 72458 | NORTH WILKESBORO | NC | WILKES BROADCASTING COMPANY, INC. |
| 149. | WKEF | DTV | 73155 | DAYTON | OH | WKEF Licensee, L.P. |
| 150. | WKGX | AM | 22915 | LENOIR | NC | Foothills Radio Group, LLC |
| 151. | WKLG | FM | 73177 | ROCK HARBOR | FL | WKLG INC |
| 152. | WKMJ-TV | DTV | 34195 | LOUISVILLE | KY | Kentucky Authority for Educational TV |
| 153. | WKOI-TV | DTV | 67869 | RICHMOND | IN | ION Television License, LLC |
| 154. | WKOP-TV | DTV | 18267 | KNOXVILLE | TN | East Tennessee Public Communications Corporation |
| 155. | WKPT-TV | DTV | 27504 | KINGSPORT | TN | Holston Valley Broadcasting Corporation |
| 156. | WKRC-TV | DTV | 11289 | CINCINNATI | OH | WKRC Licensee, LLC |
| 157. | WKTN | FM | 54588 | KENTON | OH | Home Town Media Ltd. |
| 158. | WKUL | FM | 31933 | CULLMAN | AL | Jonathan Christian Corp |
| 159. | WLAE-TV | DTV | 18819 | NEW ORLEANS | LA | Educational Broadcasting Foundation, Inc. |
| 160. | WLBE | AM | 73202 | LEESBURG-EUSTIS | FL | Q-BROADCASTING CORPORATION, INC. |
| 161. | WLFB | DTV | 37806 | BLUEFIELD | WV | Living Faith Ministries Inc |
| 162. | WLJC-TV | DTV | 27696 | BEATTYVILLE | KY | Hour of Harvest, Inc. |
| 163. | WLJT-DT | DTV | 71645 | LEXINGTON | TN | West Tennessee Public Television Council |
| 164. | WLOS | DTV | 56537 | ASHEVILLE | NC | WLOS Licensee, LLC |
| 165. | WLOX | DTV | 13995 | BILOXI | MS | Gray Television Licensee, LLC |

**MARCH 22, 2024 BROADCAST EEO AUDIT
RADIO & TELEVISION STATIONS**

| | CALL SIGN | SERVICE | FACILITY ID | CITY OF LICENSE | STATE | LICENSEE NAME |
|------|------------------|----------------|--------------------|------------------------|--------------|---|
| 166. | WLXI | DTV | 54452 | GREENSBORO | NC | Radiant Life Ministries, Inc. |
| 167. | WMGC-FM | FM | 40407 | DETROIT | MI | BEASLEY MEDIA GROUP LICENSES, LLC |
| 168. | WMPV-TV | DTV | 60827 | MOBILE | AL | Trinity Broadcasting of Texas, Inc. |
| 169. | WMTJ | DTV | 2174 | FAJARDO | PR | Sistema Universitario Ana G Mendez |
| 170. | WNIN | DTV | 67802 | EVANSVILLE | IN | WNIN Tri-State Public Media, Inc. |
| 171. | WNJX-TV | DTV | 73336 | MAYAGUEZ | PR | Televiscentro of Puerto Rico, LLC |
| 172. | WNKY | DTV | 61217 | BOWLING GREEN | KY | Marquee Broadcasting Kentucky, Inc. |
| 173. | WNPX-TV | DTV | 28468 | FRANKLIN | TN | ION Media License Company, LLC |
| 174. | WOGO | AM | 63427 | HALLIE | WI | Stewards of Sound Inc. |
| 175. | WOGX | DTV | 70651 | OCALA | FL | Fox Television Stations, LLC |
| 176. | WOOZ-FM | FM | 74581 | HARRISBURG | IL | MRR LICENSE LLC |
| 177. | WOPX-TV | DTV | 67602 | MELBOURNE | FL | ION Television License, LLC |
| 178. | WOZN | AM | 87154 | MADISON | WI | MID-WEST MANAGEMENT |
| 179. | WPBG | FM | 42114 | PEORIA | IL | Midwest Communications, Inc. |
| 180. | WFRV | DTV | 9635 | GREEN BAY | WI | Nexstar Media, Inc. |
| 181. | WPBT | DTV | 13456 | MIAMI | FL | South Florida PBS, Inc. |
| 182. | WPCV | FM | 25872 | WINTER HAVEN | FL | Hall Communications, Inc. |
| 183. | WPGX | DTV | 2942 | PANAMA CITY | FL | Panama City TV LLC |
| 184. | WPTD | DTV | 25067 | DAYTON | OH | GREATER DAYTON PUBLIC TELEVISION INC |
| 185. | WPXD-TV | DTV | 5800 | ANN ARBOR | MI | INYO Broadcast Licenses LLC |
| 186. | WPXK-TV | DTV | 52628 | JELICO | TN | ION Television License, LLC |
| 187. | WQAD-TV | DTV | 73319 | MOLINE | IL | TEGNA Broadcast Holdings, LLC |
| 188. | WQOW | DTV | 64550 | EAU CLAIRE | WI | La Crosse TV License Company, LLC |
| 189. | WQPT-TV | DTV | 5468 | MOLINE | IL | Western Illinois University |
| 190. | WQRF-TV | DTV | 52408 | ROCKFORD | IL | Nexstar Media Inc. |
| 191. | WQWV | FM | 30171 | FISHER | WV | Save Our Station, LLC |
| 192. | WRDQ | DTV | 55454 | ORLANDO | FL | WFTV, LLC |
| 193. | WRET-TV | DTV | 61011 | SPARTANBURG | SC | South Carolina Educational Television Commission |

**MARCH 22, 2024 BROADCAST EEO AUDIT
RADIO & TELEVISION STATIONS**

| | CALL SIGN | SERVICE | FACILITY ID | CITY OF LICENSE | STATE | LICENSEE NAME |
|------|------------------|----------------|--------------------|------------------------|--------------|---|
| 194. | WREX | DTV | 73940 | ROCKFORD | IL | Rockford TV License Company, LLC |
| 195. | WRLH-TV | DTV | 412 | RICHMOND | VA | WRLH Licensee, LLC |
| 196. | WRQY | FM | 56641 | MOUNDSVILLE | WV | Ohio Midland Newsgroup, LLC |
| 197. | WRSP-TV | DTV | 62009 | SPRINGFIELD | IL | GOCOM Media of Illinois, LLC |
| 198. | WSAV-TV | DTV | 48662 | SAVANNAH | GA | Nexstar Media, Inc. |
| 199. | WSB-TV | DTV | 23960 | ATLANTA | GA | Georgia Television, LLC |
| 200. | WSDZ | AM | 4622 | BELLEVILLE | IL | Relevant Radio, Inc. |
| 201. | WSEC | DTV | 70536 | JACKSONVILLE | IL | Board of Trustees of southern Illinois University |
| 202. | WSES | DTV | 21258 | TUSCALOOSA | AL | HSH Birmingham (WSES & WGWW) Licensee, LLC |
| 203. | WSFA | DTV | 13993 | MONTGOMERY | AL | Gray Television Licensee, LLC |
| 204. | WSFN | AM | 29131 | BRUNSWICK | GA | Southern Media Interactive LLC |
| 205. | WSIL-TV | DTV | 73999 | HARRISBURG | IL | Harrisburg TV License Company, LLC |
| 206. | WSMH | DTV | 21737 | FLINT | MI | WSMH Licensee, LLC |
| 207. | WSMO | FM | 175350 | MOUNT FOREST | MI | Smile FM |
| 208. | WSNS-TV | DTV | 70119 | CHICAGO | IL | NBC Telemundo License LLC |
| 209. | WSSM | FM | 85341 | PRENTISS | MS | Sunbelt Broadcasting Corporation |
| 210. | WSUP | FM | 4278 | PLATTEVILLE | WI | Board Of Regents, Univ. Of Wisconsin System |
| 211. | WSVI | DTV | 2370 | CHRISTIANSTED | VI | Alpha Broadcasting Corporation |
| 212. | WSYX | DTV | 56549 | COLUMBUS | OH | WSYX Licensee, Inc. |
| 213. | WTCK | FM | 121256 | CHARLEVOIX | MI | Relevant Radio, Inc. |
| 214. | WTGA-FM | FM | 54590 | THOMASTON | GA | Radio Georgia Inc |
| 215. | WTGS | DTV | 27245 | HARDEEVILLE | SC | WTGS Licensee, LLC |
| 216. | WTHI-TV | DTV | 70655 | TERRE HAUTE | IN | Terre Haute TV License Company, LLC |
| 217. | WTNZ | DTV | 19200 | KNOXVILLE | TN | Marble City TV LLC |
| 218. | WTPC-TV | DTV | 82574 | VIRGINIA BEACH | VA | Trinity Broadcasting of Texas, Inc. |
| 219. | WTSP | DTV | 11290 | ST. PETERSBURG | FL | TEGNA East Coast Broadcasting, LLC |
| 220. | WTTE | DTV | 74137 | COLUMBUS | OH | Columbus (WTTE-TV) Licensee, Inc. |
| 221. | WTVC | DTV | 22590 | CHATTANOOGA | TN | WTVC Licensee, LLC |

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| | CALL SIGN | SERVICE | FACILITY ID | CITY OF LICENSE | STATE | LICENSEE NAME |
|------|------------------|----------------|--------------------|------------------------|--------------|---|
| 222. | WTVK | DTV | 52280 | PEORIA | IL | Four Seasons Peoria, LLC |
| 223. | WTVP | DTV | 28311 | PEORIA | IL | Illinois Valley Public Telecommunications Corp |
| 224. | WTVS | DTV | 16817 | DETROIT | MI | DETROIT EDUCATIONAL TELEVISION FOUNDATION |
| 225. | WTVT | DTV | 68569 | TAMPA | FL | New World Communications of Tampa, Inc. |
| 226. | WTXL-TV | DTV | 41065 | TALLAHASSEE | FL | Scripps Broadcasting Holdings LLC |
| 227. | WUPW | DTV | 19190 | TOLEDO | OH | WUPW License Subsidiary, LLC |
| 228. | WUVG-DT | DTV | 48813 | ATHENS | GA | Univision Atlanta LLC |
| 229. | WVAL | AM | 78914 | SAUK RAPIDS | MN | Tri-County Broadcasting, Inc. |
| 230. | WVCY-TV | DTV | 72342 | MILWAUKEE | WI | VCY America Inc |
| 231. | WVEC | DTV | 74167 | HAMPTON | VA | WVEC Television, LLC |
| 232. | WVEN-TV | DTV | 5802 | MELBOURNE | FL | UniMas Orlando, Inc. |
| 233. | WVIK | FM | 3242 | ROCK ISLAND | IL | Augustana College |
| 234. | WVLS | FM | 52866 | MONTEREY | VA | Pocahontas Communications Cooperative Corp |
| 235. | WVPB | FM | 70604 | CHARLESTON | WV | West Virginia Educational Broadcasting Authority |
| 236. | WVUD | FM | 69439 | NEWARK | DE | University of Delaware |
| 237. | WWBL | FM | 50239 | WASHINGTON | IN | Old Northwest Broadcasting, Inc. |
| 238. | WWEG | FM | 39806 | MYERSVILLE | MD | Manning Broadcasting Inc |
| 239. | WWPX-TV | DTV | 23264 | MARTINSBURG | WV | ION Television License, LLC |
| 240. | WWRS-TV | DTV | 68547 | MAYVILLE | WI | Trinity Broadcasting of Texas, Inc. |
| 241. | WWTV | DTV | 26994 | CADILLAC | MI | Heritage Broadcasting Company of Michigan |
| 242. | WXGA-TV | DTV | 23929 | WAYCROSS | GA | GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION |
| 243. | WXLP | FM | 13663 | MOLINE | IL | Townsquare License, LLC |
| 244. | WXOW | DTV | 64549 | LA CROSSE | WI | La Crosse TV License Company, LLC |
| 245. | WYBZ | FM | 74317 | CROOKSVILLE | OH | AVC Communications Multimedia Group LLC |
| 246. | WYDO | DTV | 35582 | GREENVILLE | NC | New Bern (WYDO-TV) Licensee, Inc. |
| 247. | WZDX | DTV | 28119 | HUNTSVILLE | AL | TEGNA Broadcast Holdings, LLC |
| 248. | WZPX-TV | DTV | 71871 | BATTLE CREEK | MI | INYO Broadcast Licenses LLC |

**MARCH 22, 2024 BROADCAST EEO AUDIT
RADIO & TELEVISION STATIONS**

| | CALL SIGN | SERVICE | FACILITY ID | CITY OF LICENSE | STATE | LICENSEE NAME |
|------|------------------|----------------|--------------------|------------------------|--------------|-------------------------------|
| 249. | WZSP | FM | 85759 | NOCATEE | FL | Solmart Media, LLC |
| 250. | WZVN-TV | DTV | 19183 | NAPLES | FL | Montclair Communications Inc. |



Federal Communications Commission
Washington, D.C. 20554

DA 24-266
In Reply Refer to:
1800B3-CEG
Released March 18, 2024

Iglesia Cristiana de Jehova
c/o Emilia Manson
170 Broadway
Newport, RI 02840
iglesiacristianadenewport@gmail.com

Aaron Read
97 Central Ave
East Providence, RI 02914
aareonread1@gmail.com

In re: Iglesia Cristiana de Jehova
New LPFM, Newport, RI
Facility ID No. 787748
Application File No. 231695

Informal Objection

Dear Applicant and Objector:

We have before us the above-referenced application (Application) for a construction permit for a new low power FM (LPFM) station at Newport, Rhode Island, filed by Iglesia Cristiana de Jehova (ICJ) on December 6, 2023, and amended on February 1, 2024. We also have an informal objection (Objection) to the Application filed by Aaron Read (Read) on December 26, 2023.¹ For the reasons set forth below, we grant the Objection and dismiss the Application.

Background. ICJ filed the Application on December 6, 2023, during the 2023 LPFM filing window.² In the Application, ICJ certified that it was eligible for an LPFM authorization because, *inter alia*, it is a nonprofit educational institution or organization.³ In support of this certification, ICJ provided a copy of its articles of incorporation, executed January 1, 2022.⁴

In the Objection, Read alleges that ICJ is “a revoked entity” according to the Rhode Island Secretary of State (Secretary of State) corporation search database, explaining that ICJ’s Certificate of Incorporation/Authority was revoked by the Secretary of State on June 16, 2022, for failure to maintain a

¹ Pleading File No. 234040. On January 26, 2024, ICJ filed an opposition to the Objection (Opposition). Pleading File No. 236943.

² *Media Bureau Announces Filing Procedures and Requirements for November 1 – November 8, 2023, Low Power FM Filing Window*, Public Notice, DA 23-642 (MB July 31, 2023) (*Procedures Public Notice*). Based on a request from LPFM advocates, the Bureau subsequently delayed the window until December 6, 2023. *Media Bureau Announces Revised Dates for LPFM New Station Application Filing Window*, Public Notice, DA 23-984 (MB Oct. 17, 2023). The Bureau subsequently extended the close of the window until December 15, 2023. *Media Bureau Announces Extension of LPFM New Station Application Filing Window*, Public Notice, DA 23-1150 (MB Dec. 11, 2023).

³ See Application, Legal Certifications, Eligibility Certifications and Community-Based Criteria, Questions 1, 2.

⁴ Application, Attach. entitled “Articles of Incorporation” at 2.

registered office.⁵ Thus, Read argues, the Application fails to demonstrate that ICJ is a legal entity eligible to apply for an LPFM license.⁶

In the Opposition, ICJ explains that it has now updated its office address information and resolved this matter with the Secretary of State.⁷ In considering this argument, we take official notice of the following documents, publicly available on the Secretary of State's Business Portal:⁸ (1) the Certificate of Revocation of Certificate of Incorporation/Authority dated June 16, 2022 ; and (2) the Reinstatement dated January 16, 2024 (RI SOS Filing No. 202444086750).⁹

Discussion. Pursuant to section 309(d) of the Communications Act of 1934, as amended (Act),¹⁰ petitions to deny and informal objections must provide properly supported allegations of fact that, if true, would establish a substantial and material question of fact that grant of the application would be *prima facie* inconsistent with the public interest.¹¹

An LPFM applicant must meet basic eligibility requirements¹² and certify its eligibility to own and operate an LPFM station at the time that it files its FCC Form 2100, Schedule 318 application (LPFM Application).¹³ Specifically, each applicant claiming eligibility as a nonprofit educational organization must certify it is a noncommercial educational institution, corporation, foundation, association, or entity that is recognized under state law at the time its application is submitted.¹⁴ Each applicant must also submit an explanatory exhibit in connection with its application.¹⁵ Applicants who fail to meet these requirements are subject to dismissal.¹⁶

Here, the record establishes that on December 6, 2023—the date that the Application was filed—ICJ's previously authorized Certificate of Incorporation/Authority [to transact business in Rhode Island] had been officially revoked by the Secretary of State (on June 16, 2022) and was not reinstated until

⁵ Objection at 1.

⁶ *Id.*

⁷ Opposition at 1.

⁸ Available at <https://business.sos.ri.gov/CorpWeb/CorpSearch/CorpSearch.aspx> (last visited February 15, 2024).

⁹ See 47 U.S.C. § 309(d)(1).

¹⁰ 47 U.S.C. § 309(d).

¹¹ See, e.g., *WWOR-TV, Inc.*, Memorandum Opinion and Order, 6 FCC Rcd 193, 197 n.10 (1990), *aff'd sub nom. Garden State Broad. L.P. v. FCC*, 996 F. 2d 386 (D.C. Cir. 1993), *rehearing denied* (Sep. 10, 1993); *Gencom, Inc. v. FCC*, 832 F.2d 171, 181 (D.C. Cir. 1987); *Area Christian Television, Inc.*, Memorandum Opinion and Order, 60 RR 2d 862, 864, para. 6 (1986) (petitions to deny and informal objections must contain adequate and specific factual allegations sufficient to warrant the relief requested).

¹² See 47 CFR § 73.853.

¹³ See Instructions for LPFM Application, Legal Certifications, Eligibility Certifications. See also LPFM Application, Legal Certifications, Eligibility Certifications.

¹⁴ See *id.*; 47 U.S.C. § 397(6)(A); *Procedures Public Notice* at 5-6; *Applications for Review of Decisions Regarding Six Applications for New Low Power FM Stations*, Memorandum Opinion and Order, 28 FCC Rcd 13390, 13397-98, para. 22 (2013) (*Six Applications*).

¹⁵ See LPFM Application, Legal Certifications, Eligibility Certifications. See also *Procedures Public Notice* at 6 (nonprofit educational organizations “also must submit complete copies of the documents establishing their nonprofit status, such as corporate charters or articles of incorporation.”).

¹⁶ See *Procedures Public Notice* at 6.

January 16, 2024. ICJ provides no argument or evidence that it sought, or that its January 16, 2024, reinstatement was effective *nunc pro tunc*, or that it was organized and performing the functions of a nonprofit entity at the time of application filing, or that it could otherwise be considered a *de facto* nonprofit entity under any other state law regarding corporate formation.¹⁷ Therefore, we find that ICJ has failed to establish that at the time the Application was filed, ICJ was legally recognized or authorized by the State of Rhode Island as a valid nonprofit corporate entity.

An LPFM applicant's status as a valid nonprofit organization at the time it files its application is fundamental to our determination of the applicant's qualifications to hold an LPFM authorization.¹⁸ We have found that an organization is ineligible to hold an NCE license when its corporate status has lapsed, or the corporation has been administratively dissolved, by the relevant secretary of state for failure to make required filings.¹⁹ Because we find that ICJ failed to demonstrate its authorized legal existence under pertinent state law at the time it filed the Application, we grant the Objection and dismiss the Application.

In general, a dismissed LPFM applicant has one opportunity to file a minor curative amendment to its application and petition for reconsideration requesting reinstatement of the application *nunc pro tunc*. Any such amendment and petition must be filed within 30 days of the dismissal, propose only minor changes, and comply with all relevant rules. In this case, a petition for reconsideration requesting reinstatement of the Application must include a showing that, although its authority to transact business in Rhode Island had been revoked for administrative reasons, ICJ continued to qualify as a *de facto* nonprofit entity under Rhode Island state law, or that the January 16, 2024, reinstatement of its Certificate of Incorporation/Authority had retroactive effect or was otherwise effective *nunc pro tunc* under state law as of the date the Application was filed.²⁰

Conclusion/Action. Accordingly, **IT IS ORDERED** that the informal objection filed by Aaron Read on December 26, 2023, (Pleading File No. 234040) **IS GRANTED**.

¹⁷ Cf. *New Bohemia Group, Inc.*, Letter Decision, 24 FCC Rcd 1357, 1360 (MB 2009) (granting new NCE FM application where applicant's corporate status had lapsed with the State of Iowa, but applicant had sought *nunc pro tunc* reinstatement of its corporate status with the state).

¹⁸ *Six Applications*, 28 FCC Rcd at 13395-96, para. 14.

¹⁹ See, e.g., *Sanctuary Church*, Letter Decision, 2023 WL 3071003, DA 23-335 (MB 2023).

²⁰ See *Procedures Public Notice* at 12.

IT IS FURTHER ORDERED that the application of Iglesia Cristiana de Jehova for a construction permit for a new low power FM station at Newport, Rhode Island (Application File No. 231695) **IS DISMISSED**.

Sincerely,

Albert Shuldiner
Chief, Audio Division
Media Bureau



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202 / 418-0500
Internet: <https://www.fcc.gov>

DA 24-267

Released: March 18, 2024

**WIRELINE COMPETITION BUREAU AND OFFICE OF ECONOMICS AND
ANALYTICS MAKE INCARCERATED PEOPLE'S COMMUNICATIONS
SERVICES 2023 MANDATORY DATA COLLECTION DATABASE AVAILABLE
TO ELIGIBLE INDIVIDUALS PURSUANT TO PROTECTIVE ORDER**

WC Docket Nos. 23-62, 12-375

By this Public Notice, the Wireline Competition Bureau (Bureau) and the Office of Economics and Analytics (OEA) announce the availability, under the terms of the *2023 IPCS Protective Order*, of the preliminary Incarcerated People's Communications Services (IPCS) Database (2023 IPCS Database).¹ The Commission staff developed this database to help analyze data and other information that IPCS providers submitted in response to the Commission's 2023 Mandatory Data Collection.² That analysis facilitates the Commission's implementation of the Martha Wright-Reed Just and Reasonable Communications Act of 2022.³

The preliminary 2023 IPCS Database contains IPCS providers' confidential information, including cost and revenue information.⁴ The preliminary 2023 IPCS Database also includes geocoding information on facility locations added by the Commission staff to facilitate outside parties' review of the data submissions. Making this preliminary database available at this time will allow interested parties whose counsel and outside consultants comply with the terms of the *2023 IPCS Protective Order* to rely on a common dataset in evaluating the Commission's proposals in this proceeding, while ensuring providers remain protected against the unwarranted disclosure of their confidential information. It will also allow those parties to provide feedback on the preliminary 2023 IPCS Database and to recommend

¹ *Incarcerated People's Communications Services; Implementation of the Martha Wright-Reed Act; Rates for Interstate Inmate Calling Services*, WC Docket Nos. 23-62 and 12-375, Protective Order, DA 23-298 (WCB Apr. 5, 2023) (*2023 IPCS Protective Order*).

² *Incarcerated People's Communications Services; Implementation of the Martha Wright-Reed Act; Rates for Interstate Inmate Calling Services*, WC Docket Nos. 23-62 and 12-375, Order, DA 23-638 (WCB July 26, 2023) (adopting instructions, a reporting template, and a certification form for the 2023 IPCS Mandatory Data Collection).

³ Martha Wright-Reed Just and Reasonable Communications Act of 2022, Pub. L. No. 117-338, 136 Stat. 6156; see *Incarcerated People's Communications Services; Implementation of the Martha Wright-Reed Act; Rates for Interstate Inmate Calling Services*, WC Docket Nos. 23-62 and 12-375, Notice of Proposed Rulemaking and Order, FCC 23-19, at 20-21, paras. 47-51 (Mar. 17, 2023) (*2023 IPCS Notice* or *2023 IPCS Order*). Twenty-one providers submitted responses to the 2023 Mandatory Data Collection. The preliminary 2023 IPCS Database consolidates data from twelve of these responses into a single set of spreadsheets and provides the original or first revised versions from the other nine providers.

⁴ This information in the preliminary database was initially due on October 31, 2023 and was supplemented or revised by providers through March 5, 2024.

any potential modifications to the database. Commission staff will continue to refine this database to ensure that it accurately and reliably accounts for the data and related information submitted by providers.

To request access to the preliminary 2023 IPCS Database, interested individuals must first satisfy the requirements of the *2023 IPCS Protective Order*. Under the terms of that Order, access to information submitted under a claim of confidentiality is limited to counsel and outside consultants who are not involved in competitive decision-making, who have executed either the Acknowledgement of Confidentiality appended to the *2023 IPCS Protective Order* or the Acknowledgement of Confidentiality appended to the *2013 ICS Protective Order*,⁵ and who meet the other requirements of those two protective orders.⁶ Individuals who qualify thereunder should contact the Bureau's staff, as set forth below. Before making the database available, Bureau staff will require each qualified person seeking access to execute a separate Recipient Acknowledgment, attached hereto as Appendix A, governing use of the preliminary 2023 IPCS Database.⁷ As detailed more fully in the Recipient Acknowledgment, recipients will be obligated to ensure that their copies of the database are not duplicated (whether in full or in part) and that there will be no disclosure of any of the confidential information in the database except as specifically permitted by the *2023 IPCS Protective Order*. Any other use of any confidential information contained in the preliminary 2023 IPCS Database will constitute a violation of an order of the Commission.⁸

Additional Information. For further information and to request access to the database, please contact Erik Raven-Hansen, Pricing Policy Division, Wireline Competition Bureau, at 202-418-1532 or via e-mail at Erik.Raven-Hansen@fcc.gov, and Stephen Meil, Pricing Policy Division, Wireline Competition Bureau, at 202-418-7233 or via e-mail at Stephen.Meil@fcc.gov.

- FCC -

⁵ *Rates for Interstate Inmate Calling Services*, WC Docket No. 12-375, Protective Order, 28 FCC Rcd 16954, 16960, Appx. A (WCB 2013) (*2013 ICS Protective Order*). The *2023 IPCS Protective Order* stated that individuals that had previously obtained access to confidential information pursuant to the *2013 Protective Order* did not need to resubmit executed Acknowledgments of Confidentiality. Instead, those prior Acknowledgements of Confidentiality were incorporated by reference into WC Docket No. 23-62. *2023 IPCS Protective Order* at 3-4, para. 6.

⁶ *2023 IPCS Protective Order* at Appx. A; *2013 ICS Protective Order* at Appx. A.

⁷ Individuals requesting access are hereby directed to email the Bureau at Erik.Raven-Hansen@fcc.gov and at Stephen.Meil@fcc.gov with the subject line "IPCS 23-62, 12-375 – Request for IPCS Database" and must likewise submit an executed copy of the Recipient Acknowledgment via email to the same addresses.

⁸ See *2023 IPCS Protective Order* at 6, para. 18; *2013 ICS Protective Order* at 5, para. 16.

APPENDIX A

Recipient Acknowledgment

Incarcerated People's Communications Services; Implementation of the Martha Wright-Reed Act; Rates for Interstate Inmate Calling Services**WC Docket Nos. 23-62, 12-375**

By signing below, I certify that I am Counsel or Outside Consultant, as such terms are defined in the *2023 IPCS Protective Order* in WC Docket Nos. 23-62 and 12-375.¹ I further certify that I am a signatory of the Acknowledgement of Confidentiality appended either to the *2023 IPCS Protective Order* or the *2013 ICS Protective Order*, and that I understand it.² I acknowledge that I will be receiving instructions that will allow me to download a database (the preliminary IPCS Database) with data submitted to the Commission in WC Docket Nos. 23-62 and 12-375. I also acknowledge that the IPCS Database contains information that is not publicly available and that constitutes Confidential Information under the terms of the *2023 IPCS Protective Order*.

I agree that I will download no more than one copy of the Commission's preliminary 2023 IPCS Database and will delete the preliminary 2023 IPCS Database upon completion of this proceeding in accordance with the terms of the *2023 IPCS Protective Order*. I acknowledge that it is my obligation to ensure that my copy of the preliminary 2023 IPCS Database is not duplicated (in whole or in part) except as specifically permitted by the terms of the *2023 IPCS Protective Order*. I also acknowledge that it is my obligation to ensure that there is no disclosure of any Confidential Information in the preliminary 2023 IPCS Database except as specifically permitted by the terms of the *2023 IPCS Protective Order*. I further acknowledge that any use of any Confidential Information contained therein other than as permitted under the terms of the *2023 IPCS Protective Order* constitutes a violation of an order of the Commission.³ I further acknowledge that the provisions of the *2023 IPCS Protective Order* and the *2013 Protective Order* do not terminate at the conclusion of this proceeding.⁴

¹ *Incarcerated People's Communications Services; Implementation of the Martha Wright-Reed Act; Rates for Interstate Inmate Calling Services*, WC Docket Nos. 23-62 and 12-375, Protective Order, DA 23-298, at para. 2 (WCB Apr. 5, 2023) (*2023 IPCS Protective Order*).

² *2023 IPCS Protective Order* at Appx. A; *Rates for Interstate Inmate Calling Services*, WC Docket No. 12-375, Protective Order, 28 FCC Rcd 16954, 16960, Appx. A (WCB 2013) (*2013 ICS Protective Order*). Individuals that have previously executed and filed with the Commission the Acknowledgement of Confidentiality appended to the *2023 IPCS Protective Order* or the Acknowledgement of Confidentiality appended *2013 ICS Protective Order* and meet the other requirements of those orders do not need to refile those executed Acknowledgements. See *2023 Protective Order* at 3, para. 6.

³ *2023 IPCS Protective Order* at 4-6, paras. 9, 18; *2013 ICS Protective Order* at 4-5, paras. 7, 16.

⁴ *2023 IPCS Protective Order* at 6-7, para. 19; *2013 ICS Protective Order* at 5-6, para. 17.

I acknowledge that I have read the above paragraph and agree to its terms. I attach a copy of my signed Acknowledgment from the *2023 IPCS Protective Order* or *2013 ICS Protective Order*. I confirm that with regard to Confidential Information, any objection to such Acknowledgment pursuant to the *2023 IPCS Protective Order* or the *2013 ICS Protective Order* has been resolved in my favor and the Acknowledgment remains in full force and effect.⁵

Executed this ____ day of _____, 2024.

By: _____
Name: _____
Title: _____
Organization: _____
Party Representing: _____
Telephone: _____

⁵ *2023 IPCS Protective Order* at 3-4, para. 6-7; *2013 Protective Order* at 3, para. 5.



Federal Communications Commission
Washington, D.C. 20554

March 18, 2024

DA 24-268

In Reply Refer to:

1800B3-ARR

Released: March 18, 2024

Latino Public Radio
c/o Jose Sosa
264 Main Dunstable Rd.
Nashua, NH 03062
latinopublicradio@outlook.com

Re: **Latino Public Radio**
New LPFM, Nashua, New Hampshire
Facility ID No. 787833
Application File No. 0000231826

Petition for Reconsideration

Dear Applicant:

We have before us the Petition for Reconsideration (Petition)¹ filed by Latino Public Radio (Petitioner), seeking reconsideration of the Media Bureau's (Bureau) dismissal of Petitioner's application (Application) for a construction permit for a new low power FM (LPFM) station at Nashua, New Hampshire.² For the reasons set forth below, we deny the Petition.

Background. Petitioner filed the Application during the 2023 LPFM Filing Window,³ and certified that "the proposed facility complies with the engineering requirements of 47 CFR [s]ection 73.807(a) through (g), and 73.825" and did not request a waiver of that rule.⁴ On January 19, 2024, Bureau staff dismissed the Application for failure to meet the minimum distance spacing requirements enumerated in section 73.807(a)⁵ of the Commission's rules (Rules), with respect to the second-adjacent channel license of station WOKQ(FM), Dover, New Hampshire, and noted that an amendment was not permitted under section 73.870(c) of the Rules.⁶

On January 31, 2024, Petitioner filed the Petition, seeking reinstatement of the Application and a waiver of section 73.870(c) in order to amend the Application to correct the proposed Station coordinates

¹ Pleading File No. 0000237815 (filed Jan. 31, 2024).

² Application File No. 0000231826 (filed Dec. 7, 2023).

³ *Media Bureau Announces Filing Procedures and Requirements for November 1 – November 8, 2023, Low Power FM Filing Window*, Public Notice, DA 23-642 (MB July 31, 2023) (*Procedures Public Notice*). Based on a request from LPFM advocates, the Bureau subsequently delayed the window until December 6, 2023. *Media Bureau Announces Revised Dates for LPFM New Station Application Filing Window*, Public Notice, DA 23-984 (MB Oct. 17, 2023). The Bureau subsequently extended the close of the window until December 15, 2023. *Media Bureau Announces Extension of LPFM New Station Application Filing Window*, Public Notice, DA 23-1150 (MB Dec. 11, 2023).

⁴ Application at Technical Certifications, Interference.

⁵ See 47 CFR § 73.807(a).

⁶ See *Broadcast Actions*, Public Notice, Report No. PN-2-240123-01 (MB Jan. 23, 2024) (citing 47 CFR § 73.870(c)). See also Application File No. BLH-19940214KE (license application for WOKQ(FM)).

to meet the minimum spacing requirements of section 73.807. Specifically, Petitioner characterizes the second channel spacing error as a “simple data entry error” on the part of its consulting engineer, and argues that a minor amendment could correct the coordinates, to make the Application a singleton, and warrants reinstatement of the Application *nunc pro tunc*.⁷

Discussion. The Commission will consider a petition for reconsideration only when the petitioner shows either a material error in the Commission’s original determination, or raises additional facts not known or existing at the time of the petitioner’s last opportunity to present such matters.⁸ Petitioner has not demonstrated any legal error in the Bureau’s dismissal of the Application, nor has it cited any precedent that warrants reinstatement.

Section 73.807 Violation. Bureau staff correctly dismissed the Application for failure to meet second-adjacent channel spacing requirements, as outlined in section 73.807(a). Specifically, LPFM applicants must protect authorized FM stations, pending applications for new and existing FM stations filed prior to the release of the *Procedures Public Notice*, authorized LPFM stations, and vacant FM allotments, by meeting the minimum distance separation requirements specified in section 73.807 of the Commission’s rules.⁹ Pursuant to section 73.870(c), any application submitted during an LPFM filing window that fails to meet the spacing requirements of section 73.807 will be dismissed without opportunity to amend.¹⁰ Moreover, the *Procedures Public Notice* warned LPFM applicants that, “[c]onsistent with established processing rules, an LPFM application that fails to protect these authorizations, applications, and vacant FM allotments will be *dismissed with no opportunity to correct the deficiency*.”¹¹

Additionally, although section 3(b)(2)(A) of the Local Community Radio Act of 2010 (LCRA) authorizes the Commission to waive second-adjacent channel spacing requirements, an LPFM applicant must specifically request the waiver and demonstrate that its proposed LPFM facilities “will not result in interference to any authorized radio service.”¹² The Bureau explicitly cautioned LPFM applicants that it will dismiss any application that fails to comply with the second-adjacent channel spacing requirements without requesting a waiver, supported by the requisite engineering exhibit, and that a dismissed applicant will *not* be permitted to seek *nunc pro tunc* reinstatement of its application.¹³

Here, the Bureau correctly dismissed the Application because Petitioner failed to meet the minimum spacing requirements of section 73.807(a)(1) with respect to second-adjacent station WOKQ(FM), and failed to submit a waiver request and supporting exhibit. The Commission has previously held that the Bureau may properly prohibit dismissed LPFM applicants that did not submit waiver requests of the second-adjacent channel spacing rules in the filing window from filing

⁷ Petition at 1.

⁸ See 47 CFR § 1.106(c), (d); see also *WWIZ, Inc.*, Memorandum Opinion and Order, 37 FCC 685, 686 (1964).

⁹ See 47 CFR § 73.807(a)(1).

¹⁰ See 47 CFR § 73.870(c).

¹¹ See *Procedures Public Notice* at 3 and n.14 (emphasis in original) (citing *Low Power FM Filing Window*, Public Notice, 15 FCC Rcd 24817, 24818 (MB 2000); *Media Bureau Announces Availability of the Revised FCC Form 318 and the Filing Procedures for October 15-October 29, 2013 Low Power FM Filing Window*, Public Notice, 28 FCC Rcd 8854, 8855 (MB 2013); 47 CFR §73.870(c)).

¹² Pub. L. No. 111-371, 124 Stat. 4072 (2011); see also 47 CFR § 73.807(e) (outlining LPFM applicant requirements for a second-adjacent channel spacing waiver).

¹³ See *Procedures Public Notice* at 4; see also *Clifford Brown Jazz Foundation*, Memorandum Opinion and Order, 29 FCC Rcd 13258 (2014) (*Clifford Brown*) (affirming dismissal of application, without ability to amend and seek reinstatement, where applicant failed to comply with second-adjacent spacing rules and failed to include a waiver request with its application) (citing 47 CFR § 73.870(c)).

amendments to correct violations of section 73.807.¹⁴ Petitioner has not demonstrated any basis to contravene the rules and established precedent and reinstate the Application.

Section 73.870(c) Waiver Request. We reject Petitioner's request of a waiver of section 73.870(c) to allow it to amend the Application to correct the proposed Station coordinates to meet the minimum spacing requirements of section 73.807. The Commission's Rules may be waived only for good cause shown.¹⁵ The Commission must give waiver requests "a hard look," but an applicant for waiver "faces a high hurdle even at the starting gate"¹⁶ and must support its waiver request with a compelling showing.¹⁷ Waiver is appropriate only if both (1) special circumstances warrant a deviation from the general rule, and (2) such deviation better serves the public interest.¹⁸

Petitioner fails to meet this burden. Petitioner states generally that a waiver "is justified and aligns with the public interest,"¹⁹ but offers no other justification, circumstance, or precedent warranting grant of the request. Petitioner likewise fails to assert a "special circumstance" warranting the waiver beyond the error of its engineer. The Commission, however, has long held that errors of technical assistants are not an excuse for failure to adhere to the Rules.²⁰ Additionally, the Commission has held that the fact that an application is a singleton²¹ is not a special circumstance that justifies a waiver of the Rules.²² Moreover, permitting applicants to file requests to waive section 73.807 minimum distance separation requirements after the close of the filing window and the Commission's dismissal of their application for lack of such a waiver request would frustrate the processing efficiencies which sections 73.807 and 73.870(c) were designed to promote, be unfair to the many applicants who fully complied with the rules and filing requirements, and is therefore, contrary to the public interest.²³ Accordingly, we

¹⁴ See *Christian Charities Deliverance Church*, Memorandum Opinion and Order, 30 FCC Rcd 10548, 10549, para. 5 (2015) (finding *nunc pro tunc* reinstatement inapplicable because it is superseded by section 73.870(c)) (citing *People of Progress*, Memorandum Opinion and Order, 29 FCC Rcd 15065 (2014); *Clifford Brown*, 29 FCC Rcd 13258).

¹⁵ 47 CFR § 1.3.

¹⁶ *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969) (subsequent history omitted).

¹⁷ *Greater Media Radio Co., Inc.*, Memorandum Opinion and Order, 15 FCC Rcd 7090 (1999) (citing *Stoner Broadcasting System, Inc.*, Memorandum Opinion and Order, 49 FCC 2d 1011, 1012 (1974)).

¹⁸ *NetworkIP, LLC v. FCC*, 548 F.3d 116, 125-128 (D.C. Cir. 2008); *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

¹⁹ Petition at 1.

²⁰ See *Roy E. Henderson*, Memorandum Opinion and Order, 33 FCC 3385, 3387-88, para. 6 (2018) (rejecting argument that licensee's engineer was to blame for station's unauthorized operations); *Whidbey Island Ctr. for the Arts*, Forfeiture Order, 25 FCC Rcd 8204, 8205, para. 6 and n.12 (MB 2010) ("the Commission has long held that 'licensees are responsible for the acts and omissions of their employees and independent contractors'"); *Vista Services Corporation*, Forfeiture Order, 15 FCC Rcd 20646, 20650 para. 9, n.24 (2000) ("[e]mployers are routinely held liable for breach of statutory duties, even where the failings are those of an independent contractor").

²¹ An application which is not in conflict with any other application is deemed a singleton application.

²² See *NCE MX Group 543*, Memorandum Opinion and Order, 31 FCC Rcd 1358, 1360-61, para. 6 (2016).

²³ See *Creation of a Low Power Radio Service*, Report and Order, 15 FCC Rcd 2205, 2257 (2000) ("In accordance with our window filing procedure for commercial broadcast applications, after the LPFM window closes, the staff initially will screen applications for the purpose of identifying those that are mutually exclusive and those that fail to protect existing broadcast stations in accordance with the standards adopted herein. Applications that fail to properly protect these existing stations will be dismissed without the applicant being afforded an opportunity to amend. This will increase the speed and efficiency with which LPFM applications can be processed by the staff.").

find Petitioner fails to show that special circumstances warrant a deviation from our rules or that such deviation would serve the public interest.

Conclusion. For the reasons set forth above, **IT IS ORDERED** that the Petition for Reconsideration filed by Latino Public Radio, on January 31, 2024 (Pleading File No. 0000237815), IS DENIED.

Sincerely,

Albert Shuldiner
Chief, Audio Division
Media Bureau



Federal Communications Commission
Washington, D.C. 20554

March 18, 2024

DA 24-269
In Reply Refer to:
1800B3-SDW
Released March 18, 2024

New Hope Baptist Church – Gallup
c/o Mr. Jason Perry
1711 West Centre Avenue
Artesia, NM 88210
(sent by electronic mail to: nhbcartesia@gmail.com)

Good News Broadcasting Network, Inc.
c/o Donald E. Martin, Esq.
Law Office of Donald E. Martin
P.O. Box 8433
Falls Church, VA 22041
(sent by electronic mail to: dempc@prodigy.net)

In re: **NCE MX Group 152**

New Hope Baptist Church - Gallup
New NCE FM, Gallup, New Mexico
Facility ID No. 768308
Application File No. 0000167524

**Good News Broadcasting Network,
Inc.**
New NCE FM, Gallup, New Mexico
Facility ID No. 768192
Application File No. 0000167858

Petition to Deny

Dear Counsel and Applicants:

We have before us two mutually exclusive applications filed by Good News Broadcasting Network, Inc. (Good News) and New Hope Baptist Church – Gallup (New Hope) for construction permits for new noncommercial educational (NCE) FM stations in Gallup, New Mexico.¹ We also have before us the Petition to Deny the New Hope Application (Petition), filed by Good News.² For the reasons set forth below, we grant the Petition, dismiss the New Hope Application, and accept for filing the Good News Application as a singleton.

Background. Good News and New Hope filed their respective applications during the 2021 NCE FM filing window.³ The Media Bureau (Bureau) identified the applications as NCE MX Group 152.⁴ In the *Fifth Comparative Order*,⁵ the Commission compared the Good News Application and the New Hope Application under the point system. In the point system analysis, the Commission identified New Hope, the applicant with the most points,⁶ as the tentative selectee of NCE MX Group 152 and established a 30-day period for filing petitions to deny.⁷

In the Petition, Good News argues that the New Hope Application should be dismissed on the basis of section 73.3513(a)(3) of the Commission’s Rules.⁸ Good News notes that the New Hope Application was signed by Jason Perry, who is not identified as an officer or director of New Hope in either the New Hope Application or on the listing for New Hope on the website of the New Mexico Secretary of State (NMSOS).⁹ Good News also alleges that the New Hope Application should be denied because New Hope failed to disclose several individuals—who are listed as officers of New Hope on the

¹ Application File Nos. 0000167858 (Good News Application) and 0000167524 (New Hope Application).

² Pleading File No. 0000239677 (filed Feb. 22, 2024).

³ *Media Bureau Announces NCE FM New Station Application Filing Window; Window Open from November 2, 2021, to November 9, 2021*, MB Docket No. 20-343, Public Notice, 36 FCC Rcd 7449 (MB 2021).

⁴ *Media Bureau Identifies Groups of Mutually Exclusive Applications Submitted in the November 2021, Filing Window for New Noncommercial Educational Stations; Opens Window to Accept Settlements and Technical Amendments*, Public Notice, 36 FCC Rcd 16452 (MB 2021). This group originally included an application filed by Gallup Public Radio (Gallup) for a construction permit for a new NCE FM station in St. Michaels, Arizona. Application File No. 0000166062 (Gallup Application). Gallup was previously identified as the tentative selectee of the group. However, the Bureau later dismissed the Gallup Application due to a violation of the Signature Rule. *Comparative Consideration of 32 Groups of Mutually Exclusive Applications for Permits to Construct New Noncommercial Educational FM Stations*, Memorandum Opinion and Order, 37 FCC Rcd 12898, 12916 (Oct. 25, 2022); *NCE MX Group 152*, Letter Order, DA 23-924 (MB Oct. 3, 2023) (*Gallup Letter Order*); 47 CFR § 73.3513(a)(3) (Signature Rule). This dismissal of the Gallup Application was not challenged, and the decision is now final. Based on the elimination of the Gallup Application, the Bureau referred the group to the Commission to conduct a new point system analysis.

⁵ *Comparative Consideration of Six Groups of Mutually Exclusive Applications for Permits to Construct New Noncommercial Educational FM Stations*, Memorandum Opinion and Order, FCC 24-12, at 10, para. 25 (Jan. 23, 2024) (*Fifth Comparative Order*).

⁶ The Commission awarded two points to New Hope for diversity of ownership and one point to Good News for the best technical proposal.

⁷ *Fifth Comparative Order* at 25, para. 74.

⁸ Petition at 2 (citing 47 CFR § 73.3513(a)(3)).

⁹ *Id.* See also New Hope Application at Certification (signed by Jason Perry, Pastor).

NMSOS website—as parties to the application.¹⁰ Good News further argues that the Commission failed to credit it with two points for diversity of ownership.¹¹ New Hope did not file an opposition to the Petition.

Discussion. Pursuant to section 309(d) of the Communications Act of 1934, as amended (Act),¹² petitions to deny and informal objections must provide properly supported allegations of fact that, if true, would establish a substantial and material question of fact that grant of the application would be *prima facie* inconsistent with the public interest.¹³

We agree that the New Hope Application violates the Signature Rule. The Signature Rule requires that an application filed by a corporation—such as New Hope—must be signed by an officer.¹⁴ The Commission has made clear that it will “adhere strictly” to the Signature Rule requirements and has held that violations of the Signature Rule are not curable.¹⁵ Here, the New Hope Application was signed by Jason Perry, who is identified in the New Hope Application as a Pastor. Jason Perry is not identified as an officer nor a director of New Hope, and thus the New Hope Application must be dismissed.¹⁶

Eliminating New Hope renders the Good News Application a singleton. Accordingly, we will accept for filing the Good News Application.

Conclusion/Action. Accordingly, **IT IS ORDERED** that the Petition to Deny filed by Good News Broadcasting Network, Inc., on February 22, 2024 (Pleading File No. 0000167524), **IS GRANTED.**

¹⁰ Petition at 3.

¹¹ *Id.* at 3-4.

¹² 47 U.S.C. § 309(d).

¹³ See, e.g., *WWOR-TV, Inc.*, Memorandum Opinion and Order, 6 FCC Rcd 193, 197 n.10 (1990), *aff'd sub nom. Garden State Broad. L.P. v. FCC*, 996 F. 2d 386 (D.C. Cir. 1993), *rehearing denied* (Sep. 10, 1993); *Gencom, Inc. v. FCC*, 832 F.2d 171, 181 (D.C. Cir. 1987); *Area Christian Television, Inc.*, Memorandum Opinion and Order, 60 RR 2d 862, 864, para. 6 (1986) (petitions to deny and informal objections must contain adequate and specific factual allegations sufficient to warrant the relief requested).

¹⁴ See 47 CFR § 73.3513(a)(3); see also *Mary Ann Salvatoriello*, Memorandum Opinion and Order, 6 FCC Rcd 4705 (1991), and *Central Florida Communications Group, Inc.*, Hearing Designation Order, 6 FCC Rcd 522, 523, para. 3 (MMB 1991).

¹⁵ See *Frank Rackley, Jr.*, Memorandum Opinion and Order, 35 FCC Rcd 681, 684, para. 10 (2020); *Gallup Letter Order* at 5.

¹⁶ Given our dismissal of the New Hope Application based on its violation of the Signature Rule, we need not, and do not, address Good News’s other allegations.

IT IS FURTHER ORDERED that the application of New Hope Baptist Church – Gallup for a construction permit for a new noncommercial educational FM station at Gallup, New Mexico (Application File No. 0000167524) **IS DISMISSED**.

IT IS FURTHER ORDERED that the application of Good News Broadcasting Network, Inc. for a construction permit for a new noncommercial educational FM station at Gallup, New Mexico (Application File No. 0000167858) **IS ACCEPTED FOR FILING**, establishing a deadline thirty (30) days hereafter for the filing of petitions to deny. If, after the petition to deny period has run, there is no substantial and material question concerning the grantability of the application, we intend, by public notice, **TO GRANT** the application of Good News Broadcasting Network, Inc. (Application File No. 0000167858).

Sincerely,

Albert Shuldiner
Chief, Audio Division
Media Bureau



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-270

Released: March 18, 2024

WIRELESS TELECOMMUNICATIONS BUREAU SEEKS COMMENT ON WATTS BAR MARITIME AND AMATEUR RADIO SCHOOL'S COMMERCIAL OPERATOR LICENSE EXAMINATION MANAGER APPLICATION

WT Docket No. 24-89

Comments Due: April 17, 2024

Reply Comments Due: May 2, 2024

By this Public Notice, we seek comment on an application from Watts Bar Maritime and Amateur Radio School (WBMARS) seeking certification as a Commercial Operator License Examination Manager (COLEM).¹ On January 14, 1993, the Commission privatized the administration of license examinations for Commercial Radio Operators and delegated authority to the Chief of the Wireless Telecommunications Bureau to certify private entities to be COLEMs.² There are currently twelve entities certified by the Commission as COLEMs.³

When applying to serve as a COLEM, an entity must submit an application that complies with the prescribed COLEM application requirements.⁴ On January 29, 2024, Dr. William Ofray, the Chairman of WBMARS, filed an application seeking certification for WBMARS to serve as a COLEM.⁵ In the application, WBMARS asserts that examinations will be offered upon request and administered on-site or remotely in almost all U.S. states, Puerto Rico, and the U.S. Virgin Islands beginning within 10 days following approval of his application, if granted.⁶

The Bureau seeks comment on WBMARS's application. Interested parties may file comments on or before the dates indicated on the first page of this document.

¹ Petition of Watts Bar Maritime and Amateur Radio School, INBOX-1.41, at 1–2 (filed Jan. 29, 2024), <https://www.fcc.gov/ecfs/document/10129839326196/1> (WBMARS Application).

² *Amendment of Part 13 of the Commission's Rules to Privatize the Administration of Examinations for Commercial Operator Licenses and to Clarify Certain Rules*, FO Docket No. 92-206, Report and Order, 8 FCC Rcd 1046 (1993).

³ FCC, *Commercial Operator License Examination Managers (COLEMs) and Fees*, <https://www.fcc.gov/wireless/bureau-divisions/mobility-division/commercial-radio-operator-license-program/commercial> (last updated May 5, 2023).

⁴ *Commission Opens Filing Window for Commercial Operator License Examination Managers*, DA 93-407, Public Notes, 8 FCC Rcd 2570 (1993).

⁵ WBMARS Application at 1–2.

⁶ *Id.* at 1–2. WBMARS's application lists representation in all states, except for Florida and Virginia. *Id.* at 1.

Procedural Matters

To develop a complete record on the issues presented by the Application, the proceeding will be treated, for *ex parte* purposes, as a “permit-but-disclose” proceeding in accordance with section 1.1200(a) of the Commission’s rules, subject to the requirements under section 1.1206(b). We have opened a new docket, **WT Docket No. 24-89**, to facilitate consideration of the Application and have moved WBMARS’s Application into this docket. Parties should file all comments and reply comments in **WT Docket No. 24-89**.

Filing Requirements. Pursuant to sections 1.415 and 1.419 of the Commission’s rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS).⁷

- Electronic Filers: Comments may be filed electronically using the internet by accessing ECFS: <https://www.fcc.gov/ecfs/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
 - U.S. Postal Service First-Class, Express, and Priority Mail must be addressed to 45 L Street NE, Washington, D.C. 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals and to mitigate the transmission of COVID-19.⁸

People with Disabilities. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Government Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

Additional Information. For further information regarding this Public Notice, please contact Christine Parola, Mobility Division, Wireless Telecommunications Bureau, at Christine.Parola@fcc.gov.

-FCC-

⁷ See Federal Communications Commission, Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (June 30, 1998).

⁸ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, DA 20-304, Public Notice, 35 FCC Rcd 2788 (Mar. 19, 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
HO-CHUNK NATION) ULS File Nos. 0009210316, 0009210488,
Requests for Waiver of the 2.5 GHz Rural Tribal) 0009210636, 0009210647, 0009225560, and
Priority Window Rules) 0009225561

MEMORANDUM OPINION AND ORDER

Adopted: March 14, 2024

Released: March 19, 2024

By the Chief, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. The Ho-Chunk Nation (Ho-Chunk or the Tribe) filed multiple applications in the 2.5 GHz Rural Tribal Priority Window (Tribal Window). In connection with six applications, Ho-Chunk submitted requests for waiver of section 27.1204(b)(2) of the Commission’s rules, 1 which defines eligible Tribal lands for purposes of the Tribal Window. 2 In this Memorandum Opinion and Order, we grant the Waiver Requests in part, as specified below.

II. BACKGROUND

2. In July 2019, the Commission approved an order modernizing the portion of the 2.5 GHz band formerly known as the Educational Broadband Service. 3 Among other things, the order created a Rural Tribal Priority Window during which eligible Tribal entities could apply for licenses for currently unassigned 2.5 GHz spectrum. 4 To obtain a license in the Tribal Window, an applicant must meet four requirements. First, the applicant must be an eligible entity, which the rule defines as “[a] federally recognized American Indian Tribe or Alaska Native Village; or an entity that is owned and controlled by a federally-recognized Tribe or a consortium of federally-recognized Tribes.” 5 Second, the applicant must apply for eligible Tribal lands, as defined in section 27.1204(b)(2) of the Commission’s rules. 6 Third, the eligible Tribal lands must be in a rural area, which is defined as “lands that are not part of an

1 File Nos. 0009210316, 0009210488, 0009210636, 0009210647, 0009225560, and 0009225561, Petitions for Waiver (collectively, Waiver Requests).

2 See 47 CFR § 27.1204(b)(2). Two of Ho-Chunk's applications also request a waiver of 47 CFR § 27.1204(b)(3), which excludes lands that are part of an urban area or urban cluster with a population of greater than 50,000 from being eligible in the Tribal Window. File No. 0009210647, Petition for Waiver (Beloit Waiver Request) at 7; File No. 0009210316, Petition for Waiver (Madison Waiver Request) at 7. See para. 3, infra.

3 Transforming the 2.5 GHz Band, Report and Order, 34 FCC Rcd 5446 (2019) (2.5 GHz Report & Order).

4 Id. at 5463-69, paras. 47-65.

5 47 CFR § 27.1204(b)(1).

6 Id. § 27.1204(b)(2). The rule defines eligible Tribal lands in relevant part as “any federally recognized Indian Tribe’s reservation, pueblo or colony, including former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688) and Indian Allotments, see § 54.400(e) of this chapter, as well as Hawaiian Home Lands—areas held in trust for native Hawaiians by the State of Hawaii, pursuant to the Hawaiian Homes Commission Act, 1920, July 9, 1921, 42 Stat 108, et seq., as amended.” Id.

urbanized area or urban cluster area with a population equal to or greater than 50,000.”⁷ Finally, the applicant must have a local presence on the eligible Tribal lands for which it is applying.⁸

3. Among the criteria adopted by the Commission as part of the Tribal Window was the requirement that any area being requested be “in a rural area, which is defined to be lands that are not part of an urbanized area or urban cluster area with a population equal to or greater than 50,000”⁹ The Commission later denied a petition for reconsideration seeking to include urban areas in the definition of eligible Tribal lands for the Tribal Window,¹⁰ reflecting that its underlying purpose was “to address the communications needs of their communities and of residents on rural Tribal lands, including the deployment of advanced wireless services to unserved or underserved areas.”¹¹

4. In 2020, the Commission also denied a petition for reconsideration seeking adoption of the broader definition of Tribal lands contained in part 73 of our rules, which includes off-reservation trust lands, for purposes of the Tribal Window.¹² Specifically, “[t]he Commission required the direct participation of Tribal governments, or entities owned and controlled by such Tribes, in the 2.5 GHz context to ensure that licensees would have the requisite authority over the deployment of facilities and service on their rural Tribal lands.”¹³ The Commission recognized, however, that there might be “exceptions to the general rule” where case-by-case waivers would be appropriate to allow for the licensing of off-reservation lands in the Tribal Window.¹⁴

5. Ho-Chunk filed multiple applications in the Tribal Window. One application was granted on May 12, 2021, as it sought a license only for the Tribe’s eligible lands in Wisconsin and did not require a waiver.¹⁵ A second application was previously dismissed by the Bureau as “moot due to the lack of available unassigned 2.5 GHz spectrum in the requested service areas.”¹⁶ In this *Memorandum Opinion and Order*, we also direct the licensing staff of the Broadband Division to dismiss ULS File No. 0009210488 as duplicative.¹⁷ The five remaining applications seek to obtain licenses for various areas

⁷ *Id.* § 27.1204(b)(3).

⁸ *Id.* § 27.1204(b)(4). On January 6, 2020, the Wireless Telecommunications Bureau (Bureau) released a Public Notice setting forth the process for submitting applications in the Tribal Window, including details regarding how applicants could demonstrate compliance with the eligibility requirements or file requests for waiver. *Wireless Telecommunications Bureau Announces Procedures for 2.5 GHz Rural Tribal Priority Window*, Public Notice, 35 FCC Rcd 308 (WTB 2020) (*Bureau Procedures Public Notice*).

⁹ 47 CFR § 27.1204(b)(3). *See also Bureau Procedures Public Notice*, 35 FCC Rcd at 313, para. 20.

¹⁰ *See Transforming the 2.5 GHz Band*, Order on Reconsideration, 35 FCC Rcd 15074, 15079-80, paras. 18-21 (2020) (*Reconsideration Order*).

¹¹ *Id.* at 15080, para. 19 (citing *2.5 GHz Report & Order*, 34 FCC Rcd at 5463, para. 47).

¹² *See Reconsideration Order*, 35 FCC Rcd at 15080-81, para. 22.

¹³ *Id.* at 15081, para. 22.

¹⁴ *Id.* at 15081, para. 23.

¹⁵ File No. 0009209624 (granted May 12, 2021) (WRMP552).

¹⁶ *Ho-Chunk Nation, Lummi Indian Business Council, Muscogee (Creek) Nation, Salt River Pima-Maricopa Indian Community, San Felipe Pueblo, Shoshone-Bannock Tribes, Table Mountain Rancheria, Requests for Waiver of the 2.5 GHz Rural Tribal Priority Window Rules*, Memorandum Opinion and Order, 35 FCC Rcd 13061, 13062-63, para. 1 (WTB 2020) (directing the Broadband Division to dismiss File No. 0009210653).

¹⁷ File No. 0009210488 contains the same shapefile as File No. 0009210647 (Beloit), but the attached waiver request discusses land in the Black River Falls area (although the waiver is titled Beloit), which is the subject of File No. 0009210636. Ho-Chunk’s requests for waivers with respect to the Beloit and Black River Falls areas are being fully considered in connection with File Nos. 0009210647 and 0009210636 in the instant *Memorandum Opinion and Order*.

including trust land, Tribally-owned fee lands, and allotments.¹⁸ The Tribe expresses its intent to use the 2.5 GHz licenses to address its broadband service needs across all of the Tribal land areas for which it has sought licenses.¹⁹

6. The five remaining Ho-Chunk applications were accepted for filing on April 8, 2021.²⁰ No petitions to deny or oppositions were filed against the applications in response to the Bureau's Public Notice.

III. DISCUSSION

7. A request for a waiver may be granted if it is shown that: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.²¹ Here, we find that, with limited exceptions noted below, Ho-Chunk's showings with respect to its trust lands and Tribally-owned fee lands meet the first prong of the Commission's waiver standard. To the extent necessary, we find that Ho-Chunk's showings with respect to various allotments meet the second prong of the Commission's waiver standard. Accordingly, with the limited exceptions noted below, we grant waivers of section 27.1204(b)(2) of the Commission's rules to Ho-Chunk to allow licensing of the trust lands, Tribally-owned fee lands, and allotments specified in its applications.

8. The Commission established the Tribal Window to address the acute problem of lack of access to wireless communications services in rural Tribal areas.²² In these instances, we find that strictly applying the Tribal lands definition would be inconsistent with the Tribal Window's purpose of providing wireless communications services in rural Tribal areas. First, we find that Ho-Chunk has shown that its trust and Tribally-owned fee lands are either held for the specific benefit of the Tribe or are directly owned by the Tribe, and the Tribe has adequately demonstrated its authority over the trust and Tribally-owned fee lands. We find, based upon the showings made by Ho-Chunk, that treating the rural portions of this land as eligible Tribal land under the Tribal Window would be consistent with the Tribal Window's purpose.²³ We note that the trust and Tribally-owned fee lands in question are areas subject to the Tribe's current, demonstrated authority. In addition, we find that waivers would be in the public interest because Ho-Chunk has plans to use the 2.5 GHz spectrum to provide service on rural lands either specifically held in trust for the Tribe's benefit or directly owned by the Tribe. As such, we find that it has adequately demonstrated that it has "the requisite authority over the deployment of facilities and service[s]"²⁴ over the lands at issue, and it has therefore demonstrated that strictly applying the Tribal lands definition would be inconsistent with its purpose.

¹⁸ See File Nos. 0009210316, 0009210636, 0009210647, 0009225560, and 0009225561.

¹⁹ See Waiver Requests at 5.

²⁰ *Wireless Telecommunications Bureau Announces Additional 2.5 GHz Rural Tribal Priority Window License Applications Accepted for Filing*, Public Notice, 36 FCC Rcd 7124, 7128-29, 7130, Attachs. A, B (WTB 2021).

²¹ 47 CFR § 1.925(b)(3).

²² *Reconsideration Order*, 33 FCC Rcd at 15075, para. 4.

²³ The Commission has noted that the problem of lack of communications is particularly acute on rural Tribal lands. See *2.5 GHz Report & Order*, 34 FCC Rcd at 5466, para. 56; see also *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 2020 Broadband Deployment Report, 35 FCC Rcd 8986, 9013, para. 47 (2020) ("Rural Tribal lands continue to lag behind urban Tribal lands, with only 52.9% of all Tribal lands in rural areas having deployment of both [fixed and mobile broadband] services, as compared to 93.1% of Tribal lands in urban areas.").

²⁴ *Reconsideration Order*, 35 FCC Rcd at 15081, para. 22.

9. Ho-Chunk also references allotments in three of its Waiver Requests.²⁵ While our rules include “Indian Allotments” in the definition of eligible Tribal lands,²⁶ allotments are not otherwise specifically defined for purposes of the Tribal Window. To the extent necessary, and in light of the unique factual circumstances of the instant case, we find that grant of a waiver to permit the Tribe to license the rural portions of the allotments specified in its applications will promote the Tribe’s ability to provide broadband service to its reservation, trust, and Tribally-owned fee lands, in furtherance of the Commission’s objective in establishing the Tribal Window.²⁷ Our determination relies on the fact that Ho-Chunk is requesting to license relatively small allotment areas that are rural and nearby or adjacent to the Tribe’s eligible land areas, trust, and Tribally-owned fee lands.

10. We note that the scope of these waivers does not extend to the limited circumstances in which any requested land areas are urban. The *Reconsideration Order* and the *Bureau Procedures PN* reviewed that the Tribal Window was limited to rural areas and urban areas were not eligible.²⁸ Our review of the applications shows that portions of the shapefiles of two applications are within urbanized areas, as determined by United States Census Bureau.²⁹ While Ho-Chunk requests a waiver of that rule,³⁰ it does not offer a separate justification in support that affords a basis for concluding that application of the rule would not be inconsistent with its purpose, or that any unique or unusual factual circumstances exist in this case.³¹ As such, the two Waiver Requests with respect section 27.1204(b)(3) of the Commission’s rules are denied.³²

11. We note that Ho-Chunk must ensure that any system it deploys complies with our technical rules. In particular, our rules for the 2.5 GHz band limit the field strength that can be radiated at the border of a licensee’s service area.³³ Also, a licensee’s entitlement to interference protection is

²⁵ File Nos. 0009210636, 0009225560, and 0009225561.

²⁶ See 47 CFR § 27.1204(b)(2).

²⁷ See *Reconsideration Order*, 33 FCC Rcd at 15075, para. 4.

²⁸ See *Reconsideration Order*, 34 FCC Rcd at 5469, para. 65; *Bureau Procedures PN*, 35 FCC Rcd at 313, para. 20.

²⁹ See *Bureau Procedures Public Notice*, 35 FCC Rcd at 313, para. 20 (citing <https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural/2010-urban-rural.html>). Our review of File No. 0009210647 shows that the property in Beloit bounded by Interstate 39/90 and East Cooley Road is within the Beloit, Wisconsin urbanized area. File No. 0009210647, Shapefile. With respect to File No. 0009210316, the Madison Branch Office and Cottage Grove properties are within the Madison, Wisconsin urbanized area. File No. 0009210316, Shapefile.

³⁰ Beloit Waiver Request at 7; Madison Waiver Request at 7.

³¹ See 47 CFR § 1.925(b)(3); Beloit Waiver Request; Madison Waiver Request. Accordingly, we will not issue licenses for the property in Beloit bounded by Interstate 39/90 and East Cooley Road, nor for the Madison Branch Office and Cottage Grove properties in or near Madison, Wisconsin. *Id.* Also, the shapefiles of File Nos. 0009210316, 0009210636, 0009225560, and 0009225561 overlap with the Tribe’s previously granted license (callsign WRMP552). The Commission cannot grant two applications for the same channels and the same area, even if the applicant is the same. Broadband Division staff is directed to grant licenses for all other rural land areas in the Waiver Requests to the extent they do not overlap with the Tribe’s existing license. Further, two of the applications seek to license channel blocks where no spectrum is available in any portion of the proposed license area. Our analysis shows that no spectrum is available in channel block 3 in File Nos. 0009210316 and 0009210647. Accordingly, any license resulting from a grant of File Nos. 0009210316 and 0009210647 will be limited to channel blocks 1 and 2.

³² Before the Broadband Division is able to process those applications, Commission staff will create revised shapefiles to exclude the overlap areas, as well as any urban areas referenced in File Nos. 0009210647 and 0009210316 (i.e., the property in Beloit bounded by Interstate 39/90 and East Cooley Road, the Madison Branch Office, and Cottage Grove properties). See *supra*. The final shapefiles will be reflected in the licenses granted by the Broadband Division in lieu of the application records. Bureau staff will be available to respond to any questions about either the final shapefiles or the Ho-Chunk’s license records.

³³ See 47 CFR § 27.55(a)(4).

dependent on its compliance with the height benchmark, which is dependent on the height of the antenna and the distance to another licensee's geographic service area.³⁴ Absent agreements with neighboring licensees or a waiver of those rules, Ho-Chunk must comply with those rules.

12. We note that our decision here is limited to the suitability of these specific trust, Tribally-owned fee, and allotment lands, excluding urban areas, to be licensed under the Tribal Window. We make no determination as to the status of these trust, Tribally-owned fee, and allotment lands with respect to other Commission rules or programs, nor for any other purpose. In particular, our decision to partially grant the Waiver Requests is based on the unique circumstances of the individual applicants and the specific situation present in the 2.5 GHz band at this point in time, and the presence of any one particular fact should not be viewed as supporting a waiver or other form of relief in a different context at a different point in time.

IV. ORDERING CLAUSES

13. Accordingly, IT IS ORDERED, pursuant to sections 4(i) and 309(a) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 309(a), and section 1.925(b)(3) of the Commission's rules, 47 CFR § 1.925(b)(3), that the waiver requests filed by the Ho-Chunk Nation on September 2, 2020, ARE GRANTED IN PART, and section 27.1204(b)(2) of the Commission's rules IS WAIVED IN PART to allow licensing of the trust and Tribally-owned fee lands and allotments specified in the applications, to the extent they are not otherwise considered urban lands. Otherwise, the waiver requests ARE DENIED.

14. IT IS FURTHER ORDERED, pursuant to sections 4(i) and 309 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 309, and section 1.934 of the Commission's rules, 47 CFR § 1.934, that the licensing staff of the Broadband Division SHALL DISMISS as duplicative the application filed by the Ho-Chunk Nation for a new 2.5 GHz license (ULS File No. 0009210488).

15. IT IS FURTHER ORDERED, pursuant to sections 4(i), and 309 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 309, and section 27.1204 of the Commission's rules, 47 CFR § 27.1204, that the licensing staff of the Broadband Division SHALL PROCESS the applications filed by the Ho-Chunk Nation for new 2.5 GHz licenses (ULS File Nos. 0009210316, 0009210636, 0009210647, 0009225560, and 0009225561) in accordance with this *Memorandum Opinion and Order* and the Commission's rules and policies.

16. These actions are taken under delegated authority pursuant to sections 0.131 and 0.331 of the Commission's rules, 47 CFR §§ 0.131, 0.331. This *Memorandum Opinion and Order* is effective upon adoption.

FEDERAL COMMUNICATIONS COMMISSION

Joel Taubenblatt
Chief, Wireless Telecommunications Bureau

³⁴ See 47 CFR § 27.1221.



Federal Communications Commission
Washington, D.C. 20554

March 19, 2024

DA 24-273

CC Docket No. 02-6

Craig Davis
Vice President
Schools and Libraries Division
Universal Service Administrative Company
700 12th St., N.W., Suite 900
Washington, DC 20005

Dear Mr. Davis:

The purpose of this letter is to notify the Universal Service Administrative Company that the Wireline Competition Bureau approves the Schools and Libraries Funding Year 2024 Program Integrity Assurance (PIA) FCC Form 471 Review Procedures, subject to any further modifications and/or instruction from the Commission.

Thank you for your attention to this matter.

Sincerely,

/s/ Johnnay D. Schrieber

Johnnay D. Schrieber

Deputy Division Chief

Telecommunications Access Policy Division

Wireline Competition Bureau

cc: Trent B. Harkrader, Chief, WCB
Allison Baker, Associate Bureau Chief, WCB
Jodie Griffin, Chief, TAPD
Mark Stephens, Managing Director, OMD



PUBLIC NOTICE

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DA 24-274

Released: March 19, 2024

WIRELINE COMPETITION BUREAU ANNOUNCES REIMBURSEMENT RATE ESTIMATES FOR MAY 2024 AFFORDABLE CONNECTIVITY PROGRAM BENEFITS

WC Docket No. 21-450

In this Public Notice, the Wireline Competition Bureau (Bureau) reminds providers that May 2024 will be the last month for which providers will be able to seek reimbursement for the Affordable Connectivity Program (ACP) benefits passed through to ACP households.¹ We further remind providers that, absent additional funding from Congress, the ACP will not be able to reimburse providers for the full statutory benefit amount for service and device benefits applied to ACP service bills in May 2024.² To allow providers to plan for May service month offerings and to provide notice to their ACP households regarding May 2024 ACP service, we list below an estimated reimbursement range for each benefit type, within which the partial reimbursement amount may fall.

| Benefit Type | Statutory Maximum | Estimated Maximum Reimbursement Range for May 2024 |
|------------------------------|-------------------------------|--|
| Non-Tribal Service Benefit | \$30 per month ³ | \$7 - \$16 |
| Tribal Lands Service Benefit | \$75 per month ⁴ | \$18 - \$39 |
| ACP Connected Device Benefit | \$100 per device ⁵ | \$24 - \$53 |

The estimates presented in the above table take into account factors such as open claims for past service months, recent program activity, and claims trends. These are estimated ranges and the final maximum reimbursement amounts announced in April may fall outside this range. The Antideficiency

¹ *Wireline Competition Bureau Announces the Final Month of the Affordable Connectivity Program*, Public Notice, DA 24-195, at 1 (WCB Mar. 4, 2024) (*March 4th Public Notice*) (explaining that April 2024 would be the last fully funded month for the ACP benefit and that May 2024 would only be a partially funded month for the ACP benefit).

² *March 4th Public Notice* at 1-2.

³ 47 U.S.C. § 1752(a)(7)(A).

⁴ *Id.*

⁵ 47 U.S.C. § 1752(b)(5). Providers seeking to claim reimbursement for ACP devices provided to ACP households in May 2024 shall satisfy all Commission requirements related to device reimbursement, including that the provider shall “shall charge and collect from the eligible household than \$10.00 but less than \$50.00 for such connected device.” 47 CFR § 54.1803(b).

Act precludes an agency from making or authorizing an expenditure from, or creating or authorizing an obligation under, any appropriation or fund in excess of the amount available in the appropriation.⁶ Accordingly, we present this estimate as a range solely to assist providers in preparing for the May service month. It is not being shared for the purpose of communicating the minimum or maximum possible reimbursement amounts for May 2024.

We anticipate that after the closing of the September 2023-January 2024 claims window on April 1, 2024,⁷ the Bureau, in coordination with the Office of Economics and Analytics and Office of the Managing Director, will have sufficient data to provide final maximum reimbursement amounts for May 2024. The final maximum reimbursement amount will be announced by the Bureau in April 2024.

Providers are not required to pass through any benefits to ACP households after April 2024.⁸ Providers can choose whether to pass on and claim the partial reimbursement for May service. Providers may also, but are not required to, offer a discount larger than the estimated reimbursement rate announced by the Bureau. Providers are prohibited from billing ACP households for more than what they would pay had the full ACP benefit been applied to the bill if the household has not opted in to paying a higher amount.⁹ Moreover, providers offering ACP-supported service and devices in May 2024 are expected to fully comply with the ACP rules. Providers must provide service to ACP households subject to the same terms as non-ACP households,¹⁰ and they may claim only those households to which they provided service at the time of the snapshot date.¹¹

Finally, we direct providers to notify the Universal Service Administrative Company (USAC) of their intent to participate during the May 2024 service month by filling out the survey that USAC will distribute to providers. USAC will distribute the survey to providers within a week of release of this public notice. Providers will have two weeks from distribution of the survey to respond. Timely responses to the survey will aid our administration of the wind-down.

For further information about the Public Notice, contact Negheen Sanjar, Attorney Advisor, Telecommunications Access Policy Division, Wireline Competition Bureau by email at Negheen.Sanjar@fcc.gov.

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⁶ 31 U.S.C. § 1341(a)(1)(A).

⁷ *Affordable Connectivity Program*, WC Docket No. 21-450, Order, DA 24-23, at 11, paras. 28-29 (WCB Jan. 11, 2024) (*ACP Wind-Down Order*); see also USAC, *ACP Enrollment Freeze Begins February 8* (Feb. 5, 2024), <https://www.usac.org/wp-content/uploads/about/documents/acp/bulletins/ACP-Enrollment-Freeze-Begins-February-8.pdf>; USAC, *ACP Newsletter - January 2024* (Jan. 30, 2024), <https://www.usac.org/wp-content/uploads/about/documents/acp/bulletins/ACP-Newsletter-January-2024.pdf>.

⁸ *ACP Wind-Down Order* at 12, para. 31.

⁹ See *ACP Wind-Down Order* at 6-8, paras. 15-19.

¹⁰ 47 U.S.C. § 1752(b)(7).

¹¹ 47 CFR § 54.1808(a).



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-275

Released: March 19, 2024

EFFECTIVE AND COMPLIANCE DATES FOR TELECOMMUNICATIONS RELAY SERVICES RULES SUBJECT TO THE PAPERWORK REDUCTION ACT

CG Docket Nos. 03-123, 10-51, 13-24, and WC Docket No. 12-375

On June 30, 2022, the Federal Communications Commission (Commission) released the *TRS-URD Grace Period Order*, which, among other things, adopted rules related to the registration of users in the Telecommunications Relay Services (TRS) User Registration Database for the Video Relay Service (VRS) and Internet Protocol Captioned Telephone Service (IP CTS).¹ On September 30, 2022, the Commission released the *2022 ICS Order*, which, among other things, established rules for access to all relay services eligible for TRS Fund support in certain carceral facilities.²

Certain of these rules resulted in modified information collection requirements under the Paperwork Reduction Act of 1995.³ On December 21, 2023, the Commission published a notice in the Federal Register announcing Office of Management and Budget approval of these modified information collection requirements, and establishing:

- December 21, 2023, for compliance with 47 CFR §§ 64.611(a)(4)(iii) and (iv) and 64.615(a)(6)(v) and (vi), for providers of VRS;
- December 21, 2023, as the effective date for amendments to 47 CFR § 64.611(k)(1)(i) through (iii); and,
- January 1, 2024, for compliance with 47 CFR § 64.6040(b)(2).⁴

To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at 202-418-0530 (voice).

For further information, please contact Michael Scott at (202) 418-1264 or Michael.Scott@fcc.gov, or the Commission's ASL Consumer Support Line at (844) 432-2275 (videophone).

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¹ *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service; Misuse of Internet Protocol (IP) Captioned Telephone Service; Petition for Rulemaking and Interim Waiver of Convo Communications, LLC*, CG Docket Nos. 03-123, 10-51, and 13-24, Report and Order, Notice of Proposed Rulemaking, and Declaratory Ruling, 37 FCC Rcd 8107 (2022) (*TRS-URD Grace Period Order*).

² *Rates for Interstate Inmate Calling Services*, WC Docket No. 12-375. Fourth Report and Order and Sixth Further Notice of Proposed Rulemaking, 37 FCC Rcd 11900 (2022) (*2022 ICS Order*).

³ Pub. L. No. 104-13, 109 Stat. 163 (1995) (codified at 44 U.S.C. §§ 3501-3520).

⁴ FCC, VRS and IP CTS—Commencement of Pending User Registration; Rates for Interstate Inmate Calling Services, 88 FR 88257 (Dec. 21, 2023).



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202 / 418-0500
Internet: <https://www.fcc.gov>

DA 24-276

Released: March 19, 2024

MEDIA BUREAU SEEKS COMMENT ON JOINT CLOSED CAPTIONING DISPLAY SETTINGS PROPOSAL

MB Docket No. 12-108

Comments Due: [20 days after publication in the Federal Register]
Reply Comments Due: [30 days after publication in the Federal Register]

With this Public Notice, the Media Bureau seeks comment on a Joint Proposal in the record of this proceeding addressing how the Commission should determine if specific closed captioning display settings are readily accessible. The Joint Proposal is supported by NCTA – The Internet & Television Association (NCTA), Communication Service for the Deaf, the Hearing Loss Association of America, the National Association of the Deaf, and TDIforAccess, Inc (the Organizations).¹

In 2015, the Commission proposed rules that would require manufacturers of covered apparatus and multichannel video programming distributors (MVPDs) to make closed captioning display settings readily accessible to individuals who are deaf and hard of hearing.² In January 2022, the Media Bureau released a Public Notice seeking to refresh the record on the proposals contained in the *Second Further Notice*.³ In January 2023, the Media Bureau released a Public Notice seeking comment on a proposal by a coalition of consumer groups that when the Commission determines if specific closed captioning display settings are readily accessible, it should consider the following factors: proximity, discoverability, previewability, and consistency and persistence.⁴ Comments were due March 3, 2023, and reply comments were due March 20, 2023.⁵ The Joint Proposal states that the Organizations subsequently worked together to develop solutions to concerns raised in the record, and the result is the Joint Proposal.

Under the Joint Proposal, all accessibility functions would be made available “in one area of the

¹ Letter from NCTA *et al.* to Marlene H. Dortch, Secretary, FCC, MB Docket No. 12-108 (Mar. 14, 2024) (Joint Proposal).

² *Accessibility of User Interfaces, and Video Programming Guides and Menus*, Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking, 30 FCC Rcd 13914, 13932-35, paras. 33-40 (2015) (*Second Further Notice*).

³ See *Media Bureau Seeks to Refresh the Record on Accessibility Rules for Closed Captioning Display Settings Under the Television Decoder Circuitry Act*, Public Notice, MB Docket No. 12-108, 37 FCC Rcd 95 (Jan. 10, 2022) (*2022 Closed Captioning Display Settings PN*).

⁴ See *Media Bureau Seeks Comment on Closed Captioning Display Settings Proposal*, Public Notice, MB Docket No. 12-108, 38 FCC Rcd 429 (Jan. 24, 2023) (*2023 Closed Captioning Display Settings PN*).

⁵ See *Announcement of Comment and Reply Comment Dates for Closed Captioning Display Settings Public Notice*, Public Notice, MB Docket No. 12-108, 38 FCC Rcd 1054 (Feb. 1, 2023).

settings . . . accessed via a means reasonably comparable to a button, key, or icon.”⁶ There would be consumer testing requirements “[f]or cable service and navigation devices used to access multichannel video programming that cable operators sell or lease,” as well as previewability requirements for cable service.⁷ For navigation devices, cable operators would commit to making closed caption display settings available by an application programming interface (API) that an over-the-top application provider could utilize.⁸ For a cable operator’s own application on a third-party device, the operator would “respect the operating system-level closed caption settings of the host device upon launch of the app on the device, provided the host device makes those settings available to applications via an API or similar method.”⁹ Finally, cable operators would commit to certain training requirements for customer care and support employees.¹⁰ All of these proposals would be “subject to being achievable and technically feasible,” and they would apply “on a going-forward basis” and “after a reasonable implementation period.”¹¹ While the proposals were framed in terms of NCTA’s cable operator members, the Organizations note that “the proposals could also serve as a model for other MVPDs and equipment manufacturers.”¹²

We believe that the Commission would benefit from further comment on the Joint Proposal, and accordingly, this Public Notice seeks comment on whether the Commission should adopt the proposed requirements discussed therein. Interested parties should focus their comments on the specific issue of whether, if the Commission adopts rules governing the accessibility of closed captioning display settings, it should adopt the Organizations’ proposals as rules. Although the Joint Proposal was focused on the cable context, should the requirements set forth in the Joint Proposal apply broadly to the devices covered by section 303(u) of the Communications Act of 1934, as amended,¹³ and to both manufacturers of covered apparatus and MVPDs? Commenters should provide any other information relevant to the Commission’s determination of whether and how to adopt the Joint Proposal.

Initial Regulatory Flexibility Analysis. The *Second Further Notice* included an Initial Regulatory Flexibility Analysis (IRFA) pursuant to 5 U.S.C. § 603, exploring the potential impact on small entities of the Commission’s proposals.¹⁴ We invite parties to file comments on the IRFA in light of this request for further comment.

Ex Parte Rules. This matter shall continue to be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.¹⁵ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the

⁶ Joint Proposal at 1.

⁷ *Id.* at 1-2.

⁸ *Id.* at 2.

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.* at 1, n.3.

¹³ 47 U.S.C. § 303(u)(1).

¹⁴ *Second Further Notice*, 30 FCC Rcd at 13936, para. 42.

¹⁵ *Id.* at 13936-37, para. 46. See 47 CFR § 1.1200 *et seq.*

presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.*, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

Filing Requirements. All filings responsive to this Public Notice must reference MB Docket No. 12-108. Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, DC 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, DA 20-304 (March 19, 2020).

People with Disabilities. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the FCC's Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice).

Availability of Documents. Comments, reply comments, and *ex parte* submissions will be available via ECFS. Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.

Additional Information. For additional information, contact Diana Sokolow, Diana.Sokolow@fcc.gov, of the Media Bureau, Policy Division, (202) 418-2120.

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PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-277

Released: March 20, 2024

ENFORCEMENT BUREAU REQUESTS INFORMATION ON THE STATUS OF PRIVATE-LED TRACEBACK EFFORTS OF SUSPECTED UNLAWFUL ROBOCALLS

EB Docket No. 20-195

Deadline to Submit Information: May 1, 2024

The Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence Act (TRACED Act) was signed into law on December 30, 2019.¹ Congress required the Federal Communications Commission (Commission) to issue a public notice annually to seek comment on private-led efforts to trace back the source of suspected unlawful robocalls and to issue an annual report on the status of such efforts and the participation of voice service providers in such efforts.² The Enforcement Bureau (Bureau) requests voice service providers and the registered consortium, USTelecom’s Industry Traceback Group (Traceback Group), to submit information concerning private-led efforts to trace back the origin of suspected unlawful robocalls necessary for the Commission’s annual report.³

The reporting period for this request is from January 1, 2023, to December 31, 2023. Submissions are due by May 1, 2024.

Background. Unlawful prerecorded or artificial voice message calls—robocalls—plague the American public. In many instances, unlawful robocalls include inaccurate or misleading caller identification information, known as spoofed caller ID. Spoofed caller ID makes it more difficult to identify the source of the call. In order to enforce the laws prohibiting illegal robocalls, government and industry work together to trace suspected unlawful spoofed robocalls to their origination—a process known as “traceback.” Congress acknowledged the beneficial collaboration between the Commission and the private sector on traceback issues and, in section 13(d) of the TRACED Act, required the Commission to establish a registration process for the registration of a single consortium to conduct private-led traceback efforts and to issue an annual notice seeking registrations. On July 27, 2020, the Bureau selected the Traceback Group as the registered consortium to conduct private-led traceback efforts, and it reselected the Traceback Group in August 2021, August 2022, and August 2023.⁴

¹ Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence Act, Pub. L. No. 116-105, 133 Stat. 3274 (2019) (TRACED Act).

² TRACED Act § 13(a), (c).

³ The Commission issued the previous annual report on December 27, 2023. See Federal Commc’ns Comm’n, *Report to Congress on Robocalls and Transmission of Misleading or Inaccurate Caller Identification Information*, 2023 WL 9022098, *3-20 (Dec. 27, 2023), <https://www.fcc.gov/document/fcc-submits-traced-act-annual-report-2023-congress>. Going forward, the Commission intends to issue the annual report earlier in the year, with the intention it will cover data from the prior calendar year.

⁴ *Implementing Section 13(d) of the Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence Act (TRACED Act)*, EB Docket No. 20-22, Report and Order, DA-23-719, 2023 WL 5358422, at *1, paras. 1, 5 (EB Aug. 18, 2023).

Section 13(c) of the TRACED Act requires the Commission to seek additional information annually from voice service providers and the registered consortium about the status of private-led traceback efforts and the participation of voice service providers in such efforts.⁵ Section 13(a) of the TRACED Act requires the Commission to publish an annual report on the status of those efforts.⁶ Congress mandated that the registered consortium selected to conduct private-led tracebacks and any voice service provider be given an opportunity to provide information to the Commission to be used in the annual report.⁷ At a minimum, the report must include the following information:⁸

1. A description of private-led efforts to trace back the origin of suspected unlawful robocalls by the registered consortium and the actions taken by the registered consortium to coordinate with the Commission;
2. A list of voice service providers identified by the registered consortium that participated in private-led efforts to trace back the origin of suspected unlawful robocalls through the registered consortium;
3. A list of each voice service provider that received a request from the registered consortium to participate in private-led efforts to trace back the origin of suspected unlawful robocalls and refused to participate, as identified by the registered consortium;
4. The reason, if any, each voice service provider identified by the registered consortium provided for not participating in private-led efforts to trace back the origin of suspected unlawful robocalls; and
5. A description of how the Commission may use the information provided to the Commission by voice service providers or the registered consortium that have participated in private-led efforts to trace back the origin of suspected unlawful robocalls in the enforcement efforts by the Commission.

Submission Process: Information may be filed via ECFS (www.fcc.gov/ecfs) in EB Docket No. 20-195.⁹ If filers wish to include confidential information as part of their submitted information, they must submit: (1) a redacted, public version via ECFS; and (2) a non-redacted, confidential version electronically to the Enforcement Bureau. Filers should contact Kristi Thompson by phone (at 202-418-1318) or e-mail (kristi.thompson@fcc.gov) to arrange electronic submission of the non-redacted version. Confidential material must be marked as such and requests for confidential treatment must conform to the requirements of section 0.459 of the Commission's rules.¹⁰

Parties may choose to file by paper; such filers must file an original and one copy of each filing. Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE Washington, DC 20554.

Deadline to Submit Information: May 1, 2024.

⁵ TRACED Act § 13(c).

⁶ *Id.* § 13(a)

⁷ *Id.* § 13(c).

⁸ *Id.* § 13(b).

⁹ See *Electronic Filing of Documents in Rulemaking Proceedings*, Report and Order, 13 FCC Rcd 11322 (1998).

¹⁰ 47 CFR § 0.459.

People with Disabilities. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at 202-418-0530 (voice) or 202-418-0432 (TTY).

Additional Information. For further information, contact Kristi Thompson, Chief, Telecommunications Consumers Division, Enforcement Bureau, at 202-418-1318, or via e-mail at kristi.thompson@fcc.gov.

– FCC –

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Amendment of Section 73.202(b)) MB Docket No. 24-83
Table of Allotments,)
FM Broadcast Stations.)
(Mattoon, Illinois))

NOTICE OF PROPOSED RULEMAKING

Adopted: March 19, 2024

Released: March 20, 2024

Comment Date: May 13, 2024

Reply Comment Date: May 28, 2024

By the Assistant Chief, Audio Division, Media Bureau:

I. INTRODUCTION

1. The Audio Division, on its own motion, proposes to amend the Table of FM Allotments, section 73.202(b) of the Commission’s rules,1 by downgrading the class of vacant Channel 245B to Channel 245B1 at Mattoon, Illinois. The existing vacant Channel 245B at Mattoon is not in compliance with the minimum distance separation requirements of section 73.207(b) of the Commission’s rules.2 In this Notice of Proposed Rule Making, we seek comment on that proposal.

II. BACKGROUND

2. Channel 245B at Mattoon is considered a vacant allotment resulting from the cancellation of the license for Station DWLBH-FM.3 A staff engineering analysis found that the vacant Mattoon channel is short-spaced to Station WHMS-FM by ten kilometers.4 The minimum distance spacing requirement is 74 kilometers. The staff engineering analysis indicates that there are no other Class B channels available at Mattoon.

III. DISCUSSION

3. We proposed the substitution of Channel 245B1 for vacant Channel 245B at Mattoon, Illinois. We find that the proposed Mattoon substitution results in the public interest under Priority (4).5 Notwithstanding that the proposed Channel 245B1 at Mattoon resolves the distance spacing conflict with

1 47 CFR § 73.202(b).

2 47 CFR § 73.207(b).

3 See Notice of License Expiration for Stations WLBH(AM) and WLBH-FM, Mattoon, IL to Mr. James R. Livesay II, from Albert Shuldiner, Chief, Audio Division, Letter Order, Ref. 1800B3-VM (MB April 9, 2018); see also, BROADCAST ACTIONS, Report No. 49214, Public Notice (MB April 13, 2018).

4 Station WHMS-FM is licensed on Channel 248B, Champaign, Illinois. See FCC Application File No. BLH-19911022KB.

5 See Revision of FM Assignment Policies and Procedures, BC Docket No. 80–130, Second Report and Order, 90 FCC 2d 88 (1982). The FM allotment priorities are: (1) First fulltime aural service, (2) Second fulltime aural service, (3) First local service and (4) Other public interest matters. Co-equal weight is given to Priorities (2) and (3).

Station WHMS-FM, it also maintains a second local FM service at Mattoon.⁶ A staff engineering analysis indicates that Channel 245B1 can be allotted to Mattoon, Illinois consistent with the minimum distance separation requirements of section 73.207(b) of the Commission's rules, with a site restriction of 12.2 kilometers (7.6 miles) southeast of the community.⁷ The reference coordinates are 39-23-17 NL and 88-17-21 WL.

4. Accordingly, we seek comment on the proposed amendment to the Table of FM Allotments, section 73.202(b) of the Commission's rules,⁸ as follows:

| <u>Community</u> | <u>Present</u> | <u>Proposed</u> |
|-------------------|-------------------|-----------------|
| Mattoon, Illinois | 245B ⁹ | 245B1 |

IV. PROCEDURAL MATTERS

5. *Showings Required.* Comments are invited on the proposal discussed in this Notice of Proposed Rulemaking (NPRM). Any party that expresses interest in the allotment will be expected to answer whatever questions are presented in initial comments. Any requests by a proponent for withdrawal or dismissal of an allotment request must be filed with the Commission in accordance with section 1.420(j) of the Rules.¹⁰

6. *Cut-off Protection.* The following procedures will govern the consideration of the filings in this proceeding:

- (a) Counterproposals advanced in this proceeding itself will be considered, if advanced in initial comments, so that parties may comment on them in reply comments. They will not be considered if advanced in reply comments.¹¹
- (b) The filing of a counterproposal may lead the Commission to allot a different channel than was requested in the NPRM.¹²

7. *Comments and Reply Comments.* Pursuant to sections 1.415, 1.419, and 1.420 of the Commission's rules,¹³ interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS).¹⁴

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing the ECFS: <https://www.fcc.gov/ecfs/filings/standard>. Parties that choose to file electronically only need to submit one copy of each filing so long as the submission conforms to all procedural and filing requirements. Online filing is optional.

⁶ Noncommercial educational station WLKL(FM) is currently licensed at Mattoon, Illinois. The community has a 2020 US Census population of 16,870 persons. United States Census Bureau, <https://data.census.gov/all?q=Mattoon%20city,%20Illinois>

⁷ 47 CFR § 73.207(b).

⁸ 47 CFR § 73.202(b).

⁹ Channel 245B at Mattoon, Illinois is not currently listed in the Table of FM Allotments.

¹⁰ 47 CFR § 1.420(j).

¹¹ 47 CFR § 1.420(d).

¹² 47 CFR § 1.420(g)(2).

¹³ 47 CFR §§ 1.415, 1.419, and 1.420.

¹⁴ See *Electronic Filing of Documents in Rulemaking Proceedings*, GC Docket No. 97-113, Report and Order, 13 FCC Rcd 11322 (1998); *recon. granted*, 13 FCC Rcd 21517 (1998).

- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
 - U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington DC 20554.
 - Currently, the Commission does not accept any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. In the event that the Commission announces the lifting of COVID-19 restrictions, a filing window will be opened at the Commission's office located at 9050 Junction Drive, Annapolis Junction, MD 20701.¹⁵

8. *Service.* Pursuant section 1.420 of the Rules,¹⁶ all submissions by parties to this proceeding or by persons acting on behalf of such parties must be made in written comments, reply comments, or other appropriate pleadings. The person filing the comments shall serve comments on the petitioners. Reply comments shall be served on the person(s) who filed comments to which the reply is directed. A certificate of service shall accompany such comments and reply comments.¹⁷

9. *Ex Parte Notices– Restricted.* The proceeding this Notice initiates shall be treated as a “restricted” proceeding in accordance with the Commission’s *ex parte* rules.¹⁸ For purposes of this restricted notice and comment rulemaking proceeding, members of the public are advised that no *ex parte* presentations are permitted from the time the Commission adopts a notice of proposed rulemaking until the proceeding has been decided and such decision in the applicable docket is no longer subject to reconsideration by the Commission or review by any court.¹⁹ An *ex parte* presentation is not prohibited if specifically requested by the Commission or staff for the clarification or adduction of evidence or resolution of issues in the proceeding.²⁰ However, any new written information elicited from such a request or any summary of any new information shall be served by the person making the presentation upon the other parties to the proceeding in a particular docket unless the Commission specifically waives this service requirement.²¹ Any comment that has not been served on the petitioner constitutes an *ex parte*

¹⁵ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (2020).

¹⁶ 47 CFR § 1.420.

¹⁷ See 47 CFR § 1.420(a), (b) and (c).

¹⁸ 47 CFR §§ 1.1200 *et seq.*

¹⁹ 47 CFR § 1.1208.

²⁰ 47 CFR § 1.1204(a)(10).

²¹ 47 CFR § 1.1204(a)(10)(ii). In addition, an oral presentation in a restricted proceeding not designated for hearing requesting action by a particular date or giving reasons that a proceeding should be expedited other than the need to avoid administrative delay is permitted. A detailed summary of the presentation must be filed in the record and served by the person making the presentation on the other parties to the proceeding, who may respond in support or opposition to the request for expedition, including by oral *ex parte* presentation, subject to the same service requirement. 47 CFR § 1.1204(a)(11).

presentation and shall not be considered in the proceeding. Any reply comment which has not been served on the person(s) who filed the comment, to which the reply is directed, constitutes an *ex parte* presentation and shall not be considered in the proceeding.

10. *Availability of Documents.* Comments, reply comments, and *ex parte* submissions will be available for public inspection via ECFS (<https://www.fcc.gov/ecfs/search/search-filings>). Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.

11. *Paperwork Reduction and Regulatory Flexibility.* The Commission has determined that the relevant provisions of the Regulatory Flexibility Act of 1980, as amended,²² do not apply to a rulemaking proceeding to amend the FM Table of Allotments, section 73.202(b) of the Rules.²³ This document does not contain proposed information collection requirements subject to the Paperwork Reduction Act of 1995.²⁴ In addition, therefore, it does not contain any proposed information collection burden “for small business concerns with fewer than 25 employees,” pursuant to the Small Business Paperwork Relief Act of 2002.²⁵

12. *People with Disabilities.* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530.

13. *Additional Information.* For further information concerning this proceeding, contact Rolanda F. Smith, Audio Division, Media Bureau, at (202) 418-2054, Rolanda-Faye.Smith@fcc.gov.

FEDERAL COMMUNICATIONS COMMISSION

Nazifa Sawez
Assistant Chief, Audio Division
Media Bureau

²² See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et seq.*, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996). The SBREFA was enacted as Title II of the Contract with America Advancement Act of 1996 (CWAAA).

²³ 47 CFR § 73.202(b).

²⁴ See 44 U.S.C. §§ 3501-3520.

²⁵ See 44 U.S.C. § 3506(c)(4).



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-280

Released: March 20, 2024

OET ANNOUNCES PERMIT-BUT-DISCLOSE EX PARTE STATUS FOR EXPERIMENTAL LICENSE WW9XPI

By the Chief, Office of Engineering and Technology:

1. The Office of Engineering and Technology has designated matters pertaining to Space Exploration Holdings, LLC (SpaceX) experimental Special Temporary Authority (STA) to operate on an experimental basis, Call Sign WW9XPI; file number 2479-EX-ST-2023 as "permit-but-disclose" for purposes of the Commission's rules governing ex parte communications, effective March 20, 2024. Pursuant to the authority granted under this STA, SpaceX has been testing its satellites' capabilities to provide Supplemental Coverage from Space. We find that designating this proceeding as "permit-but-disclose" will serve the public interest by facilitating the resolution of broad policy issues associated with SpaceX's operations.¹

-OET-

¹ See 47 CFR §§ 1.1200(c)



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-281

Released: March 20, 2024

EXTENSION OF CONDITIONAL CERTIFICATIONS OF CAPTIONCALL, LLC, AND SORENSON COMMUNICATIONS, LLC, TO PROVIDE TELECOMMUNICATIONS RELAY SERVICES

CG Docket Nos. 03-123 and 10-51

By the Chief, Consumer and Governmental Affairs Bureau:

By this Public Notice, the Consumer and Governmental Affairs Bureau (Bureau) extends until December 31, 2024, the conditional certification for CaptionCall, LLC (CaptionCall), to provide Internet Protocol Captioned Telephone Service (IP CTS) supported by the Interstate Telecommunications Relay Service Fund (TRS Fund).¹ The Bureau also extends until December 31, 2024, the conditional certification for Sorenson Communications, LLC (Sorenson), to provide Video Relay Service (VRS) supported by the TRS Fund.²

On March 23, 2022, the Bureau granted conditional certifications to CaptionCall and Sorenson for the provision of IP CTS and VRS, respectively, following the acquisition of majority ownership of both CaptionCall and Sorenson by Ariel GP Holdco, LLC (Ariel).³ Both conditional certifications were granted for a period of two years, until March 23, 2024. On April 18, 2022, Ariel filed separate applications for full certification of CaptionCall and Sorenson as providers of IP CTS and VRS, respectively, eligible for compensation from the TRS Fund under the new ownership.⁴

¹ See *Structure and Practices of the Video Relay Service Program*, CG Docket No. 10-51, Second Report and Order and Order, 26 FCC Rcd 10898, 10914-15, para. 37 (2011) (*2011 Internet-based TRS Certification Order*) (authorizing conditional certification). IP CTS is a form of Internet-based TRS that permits an individual who can speak but who has difficulty hearing over the telephone to use a telephone and an internet Protocol-enabled device via the internet to simultaneously listen to the other party and read captions of what the other party is saying. See 47 CFR § 64.601(a)(23) (defining IP CTS). Captions may be displayed on a specialized IP CTS device or an off-the-shelf computer, tablet, or smartphone. Internet-based TRS providers obtain certification from the Federal Communications Commission to be eligible to receive compensation from the TRS Fund. *Id.* § 64.606.

² VRS is a form of Internet-based TRS that uses a broadband Internet connection between the VRS user and the communications assistant (CA) to enable a person using American Sign Language to communicate over video with another party through a CA. During a VRS call, the CA relays the communications between the two parties, signing what the other party says to the deaf or hard of hearing user and responding in voice to the other party to the call. See 47 CFR § 64.601(a)(51) (defining VRS).

³ See *Grant of Conditional Certification for CaptionCall, LLC, to Provide Internet Protocol Captioned Telephone Services After Its Acquisition by Ariel GP Holdco, LLC*, CG Docket No. 03-123, 37 FCC Rcd 3995 (CGB 2022); *Grant of Conditional Certification for Sorenson Communications, LLC, to Provide Video Relay Service After Its Acquisition by Ariel GP Holdco, LLC*, CG Docket No. 03-123, 37 FCC Rcd 3990 (CGB 2022).

⁴ See *Application of CaptionCall, LLC, as Majority-Owned and Controlled by Ariel GP Holdco, LLC, for Certification to Provide Internet Protocol Captioned Telephone Service*, CG Docket No. 03-123 (filed Apr. 18, 2022), <https://www.fcc.gov/ecfs/document/10419090393403/1>; *Application of Sorenson Communications, LLC, as* (continued....)

The Federal Communications Commission requires additional time to evaluate CaptionCall's and Sorenson's applications for full certification. Therefore, we extend until December 31, 2024, CaptionCall's and Sorenson's conditional certifications to provide IP CTS and VRS, respectively. These extensions are without prejudice to the Commission's final determination on the full certification applications.

The extensions are effective upon release of this Public Notice.

To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at 202-418-0530 (voice).

For further information regarding this item, please contact Joshua Mendelsohn, Disability Rights Office, Consumer and Governmental Affairs Bureau, at 202-559-7304 or by e-mail to Joshua.Mendelsohn@fcc.gov.

- FCC -

(Continued from previous page) _____
Majority-Owned and Controlled by Ariel GP Holdco, LLC, for Certification to Provide Video Relay Service, CG Docket Nos. 10-51 and 03-123 (filed Apr. 18, 2022), <https://www.fcc.gov/ecfs/document/10419173414237/1>.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Vero Broadband, LLC) File No.: EB-IHD-22-00033591
) NAL/Acct. No.: 202432080007
) FRN: 0031708613
)
)

NOTICE OF APPARENT LIABILITY FOR FORFEITURE

Adopted: March 22, 2024

Released: March 22, 2024

By the Chief, Enforcement Bureau:

I. INTRODUCTION

1. In this Notice of Apparent Liability for Forfeiture (NAL), we find that Vero Broadband, LLC (Vero or Company) apparently violated sections 214(a) and 310(d) of the Communications Act of 1934, as amended (the Act)1 and sections 1.948, 63.03, 63.04, and 63.24 of the Federal Communication Commission’s (Commission or FCC) rules by willfully and repeatedly failing to obtain the Commission’s approval prior to the acquisition of the assets of San Isabel Telecom, Inc. (San Isabel), Futurum Communications Corporation d/b/a Forethought.net (Futurum), Brainstorm Internet, Inc. (Brainstorm), and Fundamental Holdings Corp., formerly d/b/a Peak Internet (Peak Internet).2 Based on our review of the facts and circumstances surrounding this matter, and for the reasons discussed below, we propose a forfeiture penalty of \$48,000 for Vero’s apparent violations.

2. While the facts in this case are complex, as reflected in the numerous revisions that the Company filed for its transfer applications over an extended period of time, the violations are straight-forward: there were three section 214 authorizations and three sets of wireless licenses that required prior FCC approval before their transfer and assignment, but the Company never sought FCC approval, despite being advised to do so by the U.S. Bankruptcy Court for the District of Colorado. Accordingly, we propose a forfeiture of \$48,000 for apparent violations of our rules.

II. BACKGROUND

3. Legal Background. Section 214(a) of the Act requires telecommunications carriers to obtain a certificate of public convenience and necessity from the Commission before constructing, extending, acquiring, or operating any line, or engaging in transmission over that line.3 The Commission granted all domestic carriers blanket authority under section 214(a) to provide domestic interstate services and construct, acquire, and operate any domestic transmission line, meaning that such carriers need not apply to the Commission for such authority before providing domestic service.4 However, section 63.03 of the Commission’s rules requires that any domestic carrier seeking to transfer control of its lines or

1 47 U.S.C. §§ 214(a), 310(d).

2 47 CFR §§ 1.948, 63.03, 63.04, 63.24.

3 47 U.S.C. § 214(a).

4 47 CFR § 63.01; see Implementation of Section 402(b)(2)(A) of the Telecommunications Act of 1996; Petition for Forbearance of the Independent Telephone & Telecommunications Alliance, CC Docket No. 97-11; AAD File No. 98-43, Report and Order and Second Memorandum Opinion and Order, 14 FCC Rcd 11364 (1999) (Implementation of Section 402(b)(2)(A) Report and Order).

authorization to operate under section 214(a) of the Act resulting from an acquisition of corporate control or acquisition of assets must obtain prior approval from the Commission.⁵ Section 63.04 sets forth the filing procedures for domestic transfer of control applications.⁶

4. While the Commission has granted blanket section 214(a) authority to carriers of domestic services, meaning that such carriers need not apply to the Commission for such authority before providing domestic service, it has not done so for providers of international telecommunications services.⁷ Any carrier that seeks section 214(a) authority to provide common carrier services between the United States and a foreign point, must request and receive such authority by application to the Commission pursuant to section 63.18 of the Commission's rules.⁸ Through this process, the applicant provides the Commission with, among other things, contact information, ownership information, information on any affiliations it may have with foreign carriers, certification that it will comply with Commission rules, and certification that the applicant is not subject to denial of federal benefits pursuant to the Anti-Drug Abuse Act of 1988.⁹ Under section 63.24 of the Commission's rules, control of an international section 214(a) authorization, other than a *pro forma* transfer of control, may be transferred to another party only by application and prior Commission approval.¹⁰ A carrier may apply for Special Temporary Authority (STA) relating to temporary or emergency services under a section 214(a) authorization pursuant to section 63.25 of the Commission's rules.¹¹

5. Section 1.948 of the rules similarly requires that Commission consent be obtained prior to consummating any substantial transfer of control or assignment of wireless radio licenses to another party.¹² Section 310(d) of the Act provides that

[n]o construction permit or station license, or any rights thereunder, shall be transferred, assigned, or disposed of in any manner, voluntarily or involuntarily, directly or indirectly, or by transfer of control of any corporation holding such permit or license, to any person

⁵ 47 CFR § 63.03 (prescribing procedures for domestic transfers of control); 47 CFR 63.24 (prescribing procedures for transfers of control of international section 214(a) authorizations); see *Implementation of Further Streamlining Measures for Domestic Section 214 Authorizations*, CC Docket No. 01-150, Report and Order, 17 FCC Rcd 5517, 5521, 5547-48, paras. 5, 59, 63 (2002) (*2002 Streamlining Order*).

⁶ 47 CFR § 63.04.

⁷ *Implementation of Section 402(b)(2)(A) Report and Order* at 11364, para. 2 & n.8 (grant of blanket authority is only for domestic interstate services and does not extend to the provision of international services).

⁸ See 47 CFR §§ 63.04, 63.18. The Commission has explained that the international section 214(a) review process enables the Commission to review applications for risks to competition, particularly in situations where the applicant has an affiliation with a foreign carrier with market power on the foreign end of the route that may be able to leverage that market power to discriminate against U.S. competitors to the detriment of U.S. consumers. *Rules and Policies on Foreign Participation in the U.S. Telecommunications Market*, IB Docket Nos. 97-142, 95-22, Report and Order and Order on Reconsideration, 12 FCC Rcd 23891 (1997); Order on Reconsideration, 15 FCC Rcd 18158 (2000). The Commission also considers national security, law enforcement, foreign policy, and trade policy concerns in its public interest review of an application and will seek input from the Executive Branch on these issues. *Id.* at 23918-21, paras. 61-66; see also *Process Reform for Executive Branch Review of Certain FCC Applications and Petitions Involving Foreign Ownership*, IB Docket 16-155, Report and Order, 35 FCC Rcd 10927 (2020).

⁹ See 47 CFR § 63.18.

¹⁰ *Id.* § 63.24(a). A *pro forma* transfer of control does not require Commission approval, but the carrier is required to notify the Commission of the transfer within 30 days of the transfer. *Id.* § 63.24(d), (f).

¹¹ *Id.* § 63.25.

¹² *Id.* § 1.948. See also *FCC Application for Assignments of Authorization or Transfer of Control: Wireless Telecommunications Bureau, Public Safety and Homeland Security Bureau*, FCC Form 603 (2016) (Form 603).

except upon application to the Commission and upon finding by the Commission that the public interest, convenience, and necessity will be served thereby.¹³

6. Violations of these filing requirements are significant because they impede the Commission's ability to keep track of the ownership of licenses and authorizations it has issued, as well as ascertaining whether to refer the transaction to the Executive Branch for further review to assess any national security, law enforcement, foreign policy, or trade policy concerns. In the *Evolving Risks Order and NPRM*, the Commission discussed the importance of having accurate ownership information when considering the public interest and national security implications of Commission authorizations.¹⁴ Indeed the Commission directed the Office of International Affairs (OIA) to conduct a one-time information collection from international section 214 authorization holders to provide foreign ownership information.¹⁵

7. *Factual Background.* Vero is a Colorado limited liability company that is wholly owned by Vero Broadband Holdings, Inc. (Vero Holdings).¹⁶ Vero Holdings is a Delaware corporation and is a wholly-owned subsidiary of VFN Holdings, Inc. (VFN Holdings). VFN Holdings is a privately held company incorporated in the state of Delaware.¹⁷ Vero was created for the purpose of purchasing the assets of Futurum and San Isabel.¹⁸

8. Futurum d/b/a Forethought.net is a privately held Colorado corporation,¹⁹ and prior to the transactions outlined herein, held a domestic section 214(a) authorization²⁰ and 32 wireless radio licenses.²¹ Futurum is the 100 percent owner of the following entities: 1) Forethought Acquisition LLC (Forethought Acquisitions), a Colorado limited liability company which in turn is the owner of all the

¹³ 47 U.S.C. § 310(d).

¹⁴ *Review of International Section 214 Authorizations to Assess Evolving National Security, Law Enforcement, Foreign Policy, and Trade Policy Risks; Amendment of the Schedule of Application Fees Set Forth in Sections 1.1102 through 1.109 of the Commission's Rules*, IB Docket No. 23-119; MD Docket No. 23-134, Order and Notice of Proposed Rulemaking, FCC 23-28, 2023 WL 3152050, at *1, para. 103 (Apr. 25, 2023) (*Evolving Risks Order and NPRM*).

¹⁵ *Evolving Risks Order and NPRM* at paras. 16-23; see also *The Office of International Affairs Announces the Opening of the One-Time Information Collection Filing Window For International Section 214 Authorization Holders to Provide Foreign Ownership Information*, IB Docket No. 23-119, MD Docket No. 23-134, Public Notice, DA 23-1146, 2023 WL 8546707 (OIA Dec. 13, 2023).

¹⁶ Response to Letter of Inquiry (LOI) from Vero Broadband, LLC, to Investigations and Hearing Division, at 1 and 4, Responses to Question 1 and 4, Exhibit 14, Response to Question 14 (Sept. 9, 2022) (on file in EB-IHD-22-00033591) (Vero LOI Response).

¹⁷ *Id.* at 1,4, Responses to Question 1 and 4, Exhibit 14.

¹⁸ *Id.* at 7, Response to Question 12. Denver VoIP LLC was the original name of Vero Broadband, LLC at the time of incorporation on October 11, 2021. The name was changed to Vero Broadband, LLC as of December 2, 2021. See Vero LOI Response at 7, Response to Question 11.

¹⁹ Response to Letter of Inquiry, from Lance Steinhart, Esq., to Jeffrey J. Gee, Chief, Investigations and Hearings Division, at 1, Response to Question 1 and Exhibit 12 (May 18, 2022) (on file in EB-IHD-22-00033591) (Futurum/San Isabel LOI Response). On January 31, 2022, Futurum changed its name to Revenant Denver Inc. Futurum sold all of its trade names (including Forethought.net, to Vero Broadband). *Id.* at 1, 4-5. Forethought.net does not hold any licenses.

²⁰ See 47 CFR § 63.01(a); *Notice of Domestic Section 214 Authorization Granted*, WC Docket No. 18-50, Public Notice, 33 FCC Red 2956 (WCB 2018).

²¹ Vero LOI Response at 11, Response to Question 14(b); Futurum/San Isabel LOI Response at 2-4, Response to Questions 7, 10. See ULS File No. 0009907362 (filed Feb. 28, 2022).

common stock of San Isabel²² which at the time of the transaction held an international section 214(a) authorization,²³ a domestic section 214(a) authorization,²⁴ and four wireless radio licenses;²⁵ 2) Brainstorm²⁶ which held 31 wireless radio licenses;²⁷ and 3) Fundamental Holdings Corp, a Delaware corporation, formerly d/b/a Peak Internet.

9. On March 21, 2021, Futurum filed a voluntary petition for relief under Chapter 11 of Title 11 of the United States Code, 11 U.S.C. §§ 101, et seq. (Bankruptcy Code) in the United States Bankruptcy Court for District of Colorado (Bankruptcy Court) (Case No. 21-11331-KHT).²⁸ On May 12, 2021, San Isabel and Brainstorm each filed a voluntary petition for relief under Chapter 11 of the Bankruptcy Code in the Bankruptcy Court (Case No. 21-12534-KHT and Case No. 21-12549-KHT, respectively).²⁹ The bankruptcy filings did not otherwise change the ownership or control of Futurum and its subsidiaries.³⁰

10. On October 15, 2021, Futurum, Brainstorm, and San Isabel filed a motion with the Bankruptcy Court for an order authorizing them to employ counsel “to assist Debtors with identifying and

²² Futurum/San Isabel LOI Response at 1, Response to Question 2. San Isabel underwent a name change and is now known as Revenant Eagle Inc. *See id.*

²³ File No. ITC-214-20060320-00162; *see also* File No. ITC-T/C-20180207-00029 (Granting application filed for consent to the transfer of control of San Isabel, which holds international section 214(a) authorization ITC-214-20060320-00162, to Futurum Communications Corp. that occurred on December 19, 2016, without prior Commission consent).

²⁴ 47 CFR § 63.01(a) (blanket authority for domestic interstate communications common carriers); *see also Notice of Domestic Section 214 Authorization Granted*, WC Docket No. 18-50, Public Notice, 33 FCC Rcd 2956 (WCB 2018).

²⁵ Vero LOI Response, *supra* note 16, at 11, Response to Question 14(b); Futurum/San Isabel LOI Response, *supra* note 19, at 3-4, Response to Questions 7, 10. *See* File No. ITC-214-20060320-00162 authority to provide global or limited global facilities-based and resale services granted December 10, 2010. *See* ULS File No. 0009911274 (filed Feb. 28, 2022).

²⁶ Brainstorm is now known as Revenant Durango, Inc. *See* Futurum/San Isabel LOI Response, *supra* note 19, at 1. Futurum also wholly owns Peak Internet. Fundamental Holdings, formerly d/b/a Peak Internet is now known as Revenant Teller, Inc. *See id.* Peak Internet held 14 wireless radio licenses. Due to our statute of limitations, these licenses are not the subject of this NAL. *See* ULS File No. 0009919730 (filed Feb. 18, 2022). This application was placed on Public Notice as accepted on November 4, 2022. *See Wireless Telecommunications Bureau. Assignment of License Authorization Applications, Transfer of Control of Licensee Applications, Action De Facto Transfer Lease Applications and Spectrum Manager Lease Notifications, Designated Entity Reportable Eligibility Event Applications, and Designated Entity Annual Reports*, Public Notice, Report No. 17257, at 2 (WTB Nov. 9, 2022) (WTB November 9, 2022 PN).

²⁷ *See* ULS File No. 0009911680 (filed Sept. 27, 2022).

²⁸ Vero LOI Response, *supra* note 16, Response to Question 13(a); Futurum/San Isabel LOI Response, *supra* note 19, at 4-5, Response to Question 11(a); *see also* Joint Application for Consent to Transfer Assets And Assignment of 214 Authority of Revenant Denver, Inc. Debtor in Possession f/k/a Futurum Communications Corporation dba Forethought.net and Revenant Eagle, Inc. Debtor in Possession f/k/a San Isabel Telecom, Inc. (Assignors) and Vero Broadband, LLC f/k/a Denver VoIP LLC (Assignee), WC Docket No. 22-23, File No. ITC-STA-20220321-00047, at 4 (filed Mar. 21, 2022) (March 2022 Joint Application).

²⁹ Vero LOI Response, *supra* note 16, at 8, Response to Question 13(a); Futurum/San Isabel LOI Response, *supra* note 19, at 4-5, Response to Question 11(a); March 2022 Joint Application at 4.

³⁰ Vero LOI Response, *supra* note 16, at 8, Response to Question 13(a); Futurum/San Isabel LOI Response, *supra* note 19, Response at 5, Response to Question 11(a).

obtaining approvals from governmental units to transfer Debtors' telecommunications-related licenses, permits, and authorizations."³¹ The Bankruptcy Court granted this motion on November 12, 2021.³²

11. On November 8, 2021, Denver VoIP, LLC (Denver VoIP), now known as Vero, entered into an Asset Purchase Agreement (Asset Purchase Agreement), whereby Denver VoIP, purchased all of the rights, title, and interest in and to all of the properties and assets, including the FCC licenses, of Futurum and its subsidiaries, San Isabel, Brainstorm, and Peak Internet (November Transaction).³³ On November 30, 2021, the Bankruptcy Court entered an order approving the Asset Purchase Agreement and the sale of substantially all of the assets of the Assignors to Denver VoIP,³⁴ which changed its name to Vero on December 2, 2021.³⁵ In accordance with the terms of the Asset Purchase Agreement, the November Transaction closed on December 31, 2021, and was effective January 1, 2022.³⁶ The parties to the November Transaction did not receive (or even request) prior Commission approval, as required by our rules, to consummate the November Transaction and Vero's acquisition of Futurum, San Isabel, Peak Internet, and Brainstorm's FCC licenses and authorizations.³⁷

12. On January 4, 2022, Futurum, San Isabel, and Vero filed a joint application seeking Commission consent to transfer the assets and section 214 authorizations of Futurum and San Isabel to Vero Broadband.³⁸ Subsequently, on February 10, 2022, Futurum filed an FCC Form 603 for the

³¹ Application to Employ Lance J.M. Steinhart, P.C. as Attorneys for a Special Purpose Under 11 U.S.C. 327(e) at para. 5, *In re Futurum Comm'ns. Corp.*, Case No. 21-11331-KHT (Bankr. D. Colo. Oct. 15, 2021).

³² *In re Futurum Comm'ns. Corp.*, Case No. 21-11331-KHT (Bankr. D. Colo. Nov. 12, 2021) (Order Granting Application to Employ J. M. Steinhart as Special Counsel).

³³ Vero LOI Response, *supra* note 16, at 8, Response to Question 13(a); Futurum/San Isabel LOI Response, *supra* note 19, at 5, Response to Question 11(a). While the Asset Purchase Agreement also sold the properties and assets of Forethought Acquisition, that entity did not hold any FCC licenses.

³⁴ Vero LOI Response, *supra* note 16, at 8, Response to Question 13(a); Futurum/San Isabel LOI Response, *supra* note 19, at 5, Response to Question 11(a). Furthermore, paragraph 44 of the Bankruptcy Court's order approving the sale provides as follows: "Notwithstanding any other provision of this Order or any other order of this Court, no sale, transfer or assignment of any rights and interests of the Debtors in any federal license or authorization issued by the Federal Communications Commission ("FCC") shall take place prior to the issuance of FCC regulatory approval for such sale, transfer or assignment pursuant to the Communications Act of 1934, as amended, and the rules and regulations promulgated under such statutes. The FCC's rights and powers to take any action pursuant to its regulatory authority, including, but not limited to, imposing any regulatory conditions on such sales, transfers and assignments and setting any regulatory fines or forfeitures, are fully preserved, and nothing herein shall proscribe or constrain the FCC's exercise of such power or authority to the extent provided by law." *In re Futurum Comm'ns. Corp.*, Case No. 21-11331-KHT (Bankr. D. Colo. Nov. 30, 2021) (Order (A) Approving Asset Purchase Agreement and Authorizing the Sale of Substantially All Debtors' Assets; (B) Authorizing the Sale of Assets Free and Clear of All Liens, Claims, Rights, Encumbrances and Other Interests Pursuant to Bankruptcy Code sections 363(b), 363(f) and 363(m); (C) Assuming and Assigning Certain Executory Contracts and Unexpired Leases Pursuant to Bankruptcy Code section 365; (D) Authorizing Futurum to Consent to and Implement the Sale of Peak Internet's Assets; and (E) Granting Related Relief).

³⁵ See Vero LOI Response, *supra* note 16, at 7, Response to Question 11.

³⁶ Vero LOI Response, *supra* note 16, at 8, Response to Question 13(a), Exhibit 13(a); Futurum/San Isabel LOI Response, *supra* note 19, at 5, Response to Question 11(a), Exhibit 11.a.(4); March 2022 Joint Application, *supra* note 28, at 4.

³⁷ Vero LOI Response, *supra* note 16, at 8-9, Response to Question 13(a); Futurum/San Isabel LOI Response, *supra* note 19, at 5, Response to Question 11(a).

³⁸ See Joint Application of Futurum Communications Corporation dba Forethought.net, San Isabel Telecom, Inc. and Vero Broadband, LLC for Consent to Transfer Assets And Assignment of 214 Authority of Companies Holding International Section 214 Authority and Blanket Domestic Section 214 Authority Pursuant to the Communications Act of 1934, as Amended, WC Docket No. 22-23, File No: ITC-STA-20220112-00046 (filed Jan. 4, 2022) (January (continued...))

involuntary assignment and acquisition of 32 wireless radio licenses to Futurum Communications Corporation d/b/a Forethought.net Debtor in Possession (Futurum DIP).³⁹ On February 11, 2022, Futurum and San Isabel filed a notification for the involuntary transfer of control of San Isabel's domestic and assignment of international section 214(a) authority to San Isabel Telecom, Inc. Debtor In Possession (San Isabel DIP).⁴⁰ On February 14, 2022, San Isabel filed an FCC Form 603 requesting Commission authorization for the involuntary assignment and acquisition of its four wireless radio licenses on May 12, 2021, to San Isabel DIP.⁴¹ Also on February 14, 2022, Brainstorm filed an FCC Form 603 requesting Commission authorization for the involuntary assignment and acquisition of 31 wireless radio licenses on May 12, 2021, to Brainstorm Internet, Inc. Debtor in Possession (Brainstorm DIP).⁴²

13. On March 21, 2022, Forethought.net, on behalf of Futurum, San Isabel, and Vero, filed an updated request for an STA⁴³ and an updated Joint Application seeking Commission consent to transfer the assets and section 214 authorizations of Futurum and San Isabel to Vero Broadband.⁴⁴ On March 25, 2022, Applicants filed a supplement to the March 2022 Joint Application.⁴⁵ The March 2022 Joint Application and STA remain pending.

2022 Joint Application). The January 2022 Joint Application was dated December 27, 2021, but was not received until January 4, 2022.

³⁹ Vero LOI Response, *supra* note 16, at 11-12, Response to Question 14(b), Futurum/San Isabel LOI Response, *supra* note 19, at 6; Response to Question 11(e). This application was amended on February 14, 2022 and again on February 28, 2022. See ULS File No. 0009907362 (filed Feb. 28, 2022). See *Public Safety and Homeland Security Bureau, Assignment of License Authorization Applications, Transfer of Control of Licensee Applications, Action De Facto Transfer Lease Applications and Spectrum Manager Lease Notifications, Designated Entity Reportable Eligibility Event Applications, and Designated Entity Annual Reports*, Public Notice, Report No. 17258, at 1 (PSHSB Nov. 9, 2022).

⁴⁰ Letter from Lance Steinhart, Esq., to Marlene H. Dortch, Secretary, Fed. Commc'ns Comm'n (Feb. 11 2022) (on file in WC Docket No. 22-23, File No. ITC-ASG-20220211-00029); see also International Authorizations Granted, File No. ITC-ASG-20220211-00029, Public Notice, DA 22-166 (IB Feb 17, 2022).

⁴¹ Vero LOI Response, *supra* note 16, at 11-12, Response to Question 14(b); Futurum/San Isabel LOI Response, *supra* note 19, at 6, Response to Question 11(e). This application was amended on February 15, 2022 and again on February 28, 2022. See ULS File No. 0009911274 (filed Feb. 28, 2022). This application was on Public Notice as accepted on November 4, 2022. See *WTB November 9, 2022 PN*, *supra* note 26, at 2.

⁴² Vero LOI Response, *supra* note 16, at 11-12, Response to Question 14(b); Futurum/San Isabel LOI Response, *supra* note 19, at 6, Response to Question 11(e). See ULS File No. 0009911680 (filed Sept. 27, 2022). This application was amended on February 28, 2022 and again on September 27, 2022. This application was on Public Notice as accepted on November 4, 2022. See *WTB November 9, 2022 PN*, *supra* note 26, at 2-3. At the time the applications were filed to transfer the licenses to Brainstorm DIP there were 31 licenses, but due to cancellation for non-construction, there are currently only 27 licenses.

⁴³ Vero LOI Response, *supra* note 16, at 9-10, Response to Questions 13(d)-(e), Exhibit 13(e); Futurum/San Isabel LOI Response, *supra* note 19, at 6, Response to Question 11(e); see also Letter from Lance J.M. Steinhart, counsel for Revenant Eagle Inc., to Marlene H. Dortch, Secretary, Fed. Commc'ns Comm'n, WC Docket No. 22-23 (filed Mar. 21, 2023) (Futurum 214 STA).

⁴⁴ See March 2022 Joint Application, *supra* note 28, at 1. This application superseded the January 2022 Joint Application; see also Vero LOI Response, *supra* note 16, at 9-10, Response to Questions 13(d)-(e), Exhibit 13(e); Futurum/San Isabel LOI Response, *supra* note 19, at 6, Response to Question 11(e).

⁴⁵ Vero LOI Response, *supra* note 16, at 10, Response to Question 13(e); Futurum/San Isabel LOI Response, *supra* note 19, at 6, Response to Question 11(e); see also Supplement to Joint Application for Consent to Transfer Assets and Assignment of 214 Authority of Revenant Denver, Inc. Debtor in Possession f/k/a Futurum Communications Corporation dba Forethought.net and Revenant Eagle, Inc. Debtor in Possession f/k/a San Isabel Telecom, Inc. and Vero Broadband, LLC f/k/a Denver VoIP LLC, WC Docket No. 22-23 (filed Mar. 25, 2022), <https://www.fcc.gov/ecfs/document/1032583960668/>. After the creation of the Space Bureau, the new Office of

(continued...)

14. In light of the foregoing circumstances, on April 19, 2022, the Commission's Enforcement Bureau (Bureau) issued an LOI, initiating an investigation into whether Futurum and San Isabel may have violated section 214(a) of the Act and the Commission's rules pertaining to the ownership and operation of domestic and international telecommunications service authorizations and section 301(d) of the Act and the Commission's rules pertaining to ownership of licenses in the wireless radio services.⁴⁶ Futurum and San Isabel responded to the LOI on May 18, 2022.⁴⁷ The Bureau also issued an LOI to Vero August 11, 2022.⁴⁸ Vero responded to the LOI on September 9, 2022.⁴⁹ On December 9, 2022, the Bureau issued a supplemental LOI to Futurum and San Isabel.⁵⁰ Futurum and San Isabel responded to the supplemental LOI on January 5, 2023.⁵¹

15. On January 18, 2023, Futurum DIP,⁵² San Isabel DIP,⁵³ and Brainstorm DIP⁵⁴ (collectively the Debtors in Possession) each filed an application to assign their respective wireless radio licenses into bankruptcy. The Debtors in Possession amended their respective applications on June 5, 2023; July 19, 2023; and October 12, 2023.⁵⁵ The October 12, 2023 amendment included the Debtors in Possession's assignments of their wireless radio licenses to Vero.⁵⁶ Specifically, Futurum DIP filed an FCC Form 603 for the involuntary assignment and acquisition of 32 wireless radio licenses to Vero.⁵⁷ In addition, San Isabel DIP filed an FCC Form 603 requesting Commission authorization for the involuntary assignment and acquisition of four wireless radio licenses to Vero.⁵⁸ Finally, Brainstorm DIP filed an FCC Form 603 requesting Commission authorization for the involuntary assignment and acquisition of 27 wireless radio licenses.⁵⁹ In their applications, the Debtors in Possession each requested a waiver of section 1.948 of the Commission's rules requiring licensees to file an FCC Form 603 no later than 30

International Affairs has been delegated authority to act on applications for international telecommunications and services. *See* 47 CFR § 0.351(a)(8).

⁴⁶ Letter of Inquiry from Jeffrey J. Gee, Chief, Investigations and Hearings Division, to Jawaid Bazyar, President, Futurum Communications Corporation d/b/a Forethought.net (Apr. 19, 2022) (on file in EB-IHD-22-00033591).

⁴⁷ *See* Futurum/San Isabel LOI Response, *supra* note 19.

⁴⁸ Letter of Inquiry, from Jeffrey J. Gee, Chief, Investigations and Hearings Division, to Gregg Strumberger, Chief Legal Officer, Vero Broadband, LLC (Aug. 11, 2022) (on file in EB-IHD-22-00033591).

⁴⁹ *See* Vero LOI Response, *supra* note 16.

⁵⁰ Supplemental Letter of Inquiry from Kalun Lee, Deputy Chief, Investigations and Hearings Division, to Lance Steinhart, Esq. (Jan. 5, 2023) (on file in EB-IHD-22-00033591).

⁵¹ Response to Supplemental Letter of Inquiry, from Lance Steinhart, Esq., to Kalun Lee, Deputy Chief, Investigations and Hearings Division (Sept. 9, 2022) (on file in EB-IHD-22-00033591) (San Isabel SLOI Response).

⁵² *See* ULS File No. 0010378751 (filed Jan. 18, 2023).

⁵³ *See* ULS File No. 0010378730 (filed Jan. 18, 2023).

⁵⁴ *See* ULS File No. 0010378808 (filed Jan. 18, 2023).

⁵⁵ *See* ULS File No. 0010378751 (filed June 5, 2023, Jul. 19, 2023, and Oct. 12, 2023); ULS File No. 0010378730 (filed June 5, 2023, July 19, 2023 and Oct. 12, 2023); ULS File No. 0010378808 (filed June 5, 2023; July 19, 2023; and Oct. 12, 2023). These applications remain pending.

⁵⁶ ULS File No. 0010378751, Attach. 2 (filed Oct. 12, 2023); ULS File No. 0010378730, Attach. 2 (filed Oct. 12, 2023); ULS File No. 0010378808, Attach. 2 (filed Oct. 12, 2023).

⁵⁷ ULS File No. 0010378751, Attach. 2 (filed Oct. 12, 2023).

⁵⁸ ULS File No. 0010378730, Attach. 2 (filed Oct. 12, 2023).

⁵⁹ ULS File No. 0010378808, Attach. 2 (filed Oct. 12, 2023).

days after the event causing the assignment.⁶⁰ The waiver requests state that the Debtors in Possession did not file FCC Form 603 within the required 30-day period.⁶¹

III. DISCUSSION

16. The consummated November Transaction involved the transfer of control of three section 214 authorizations and the assignment of three sets of wireless licenses out of bankruptcy. Each of these transfers and assignments required prior FCC approval, but the Company did not request, let alone obtain, FCC approval despite being advised to do so by the Bankruptcy Court. Accordingly, we propose a forfeiture of \$48,000 for these six violations.

A. Vero Failed to Request or Obtain Prior Commission Approval of its Acquisition of FCC Licenses and Authorizations

17. Vero admits that “the parties did not timely seek permission to close the November Transaction. The oversight was inadvertent and unintentional. At the time of the bankruptcy filings, the parties did not have advice from federal communications counsel on the petitions and was not aware of the obligation to notify the Commission.”⁶² Vero, however, was previously apprised of the Commission’s requirements. To wit, the Bankruptcy Court’s November 30, 2021 Order approving the Asset Purchase Agreement and authorizing the sale to Vero stated:

Notwithstanding any other provision of this Order or any order of this Court, no sale, transfer or assignment of any rights and interests of the Debtors in any federal license or authorization issued by the Federal Communications Commission (“FCC”) shall take place prior to the issuance of FCC regulatory approval for such sale, transfer or assignment pursuant to the Communications Act of 1934, as amended, and the rules and regulations promulgated under such statutes. The FCC’s rights and powers to take any action pursuant to its regulatory authority, including, but not limited to, imposing any regulatory conditions on such sales, transfers and assignments and setting any regulatory fines or forfeitures, are fully preserved, and nothing herein shall proscribe or constrain the FCC’s exercise of such power or authority to the extent provided by law.⁶³

Furthermore, prior to the entry of the sale order, the Bankruptcy Court had authorized Futurum DIP, San Isabel DIP, and Brainstorm DIP to retain counsel to assist in obtaining government approvals related to their licenses and authorizations.⁶⁴

⁶⁰ See ULS File No. 0010378751, Attach. 2 (filed Oct. 12, 2023); ULS File No. 0010378730, Attach. 2 (filed Oct. 12, 2023); ULS File No. 0010378808, Attach. 2 (filed Oct. 12, 2023); *see also* 47 CFR § 1.948(c)(2).

⁶¹ See ULS File No. 0010378751, Attach. 2 (filed Oct. 12, 2023); ULS File No. 0010378730, Attach. 2 (filed Oct. 12, 2023); ULS File No. 0010378808, Attach. 2 (filed Oct. 12, 2023).

⁶² Vero LOI Response, *supra* note 16, at 8-9, Response to Question 13(a).

⁶³ San Isabel SLOI Response, *supra* note 51, Response to Question 27, Exhibit 27(b); *In re Futurum Comm ’ns. Corp.*, Case No. 21-11331-KHT (Bankr. D. Colo. Nov. 30, 2021)(Order (A) Approving Asset Purchase Agreement and Authorizing the Sale of Substantially All Debtors’ Assets; (B) Authorizing the Sale of Assets Free and Clear of All Liens, Claims, Rights, Encumbrances and Other Interests Pursuant to Bankruptcy Code sections 363(b), 363(f) and 363(m); (C) Assuming and Assigning Certain Executory Contracts and Unexpired Leases Pursuant to Bankruptcy Code section 365; (D) Authorizing Futurum to Consent to and Implement the Sale of Peak Internet’s Assets; and (E) Granting Related Relief).

⁶⁴ See *In re Futurum Comm ’ns. Corp.*, Case No. 21-11331-KHT (Bankr. D. Colo. Nov. 12, 2021) (Order Granting Application to Employ Lance J. M. Steinhart as Special Counsel); Application to Employ Lance J.M. Steinhart, P.C., (continued...)

18. Pursuant to sections 63.03 and 63.04 of the Commission's rules,⁶⁵ a domestic carrier seeking to transfer control of its section 214(a) authorization or associated assets must file a domestic transfer of control application prior to the transaction. Similarly, under section 63.24 of the Commission's rules, control of an international section 214(a) authorization, other than a *pro forma* transfer of control, may be transferred or assigned to another party only by application and prior Commission approval.⁶⁶ Section 1.948 of the Commission's rules similarly requires Commission consent prior to the transfer of control or assignment of a wireless radio license.⁶⁷

19. In accordance with the terms of the Asset Purchase Agreement, the acquisition by Vero of the international and domestic section 214(a) authorizations held by Futurum and San Isabel was consummated on December 31, 2021, and effective on January 1, 2022.⁶⁸ It was not until March 21, 2022, that the modified March 2022 Joint Application for the transfer of control and STA was submitted, notifying the Commission of the completion of the November Transaction.⁶⁹ We therefore conclude that Vero apparently violated section 214(a) of the Act and sections 63.03, 63.04, and 63.24 of the Commission's rules by acquiring control of the domestic and international section 214(a) authorizations held by San Isabel, and the domestic section 214(a) authorization held by Futurum, without obtaining prior Commission approval.⁷⁰

20. Additionally, Vero failed to request prior Commission approval for the assignment of wireless radio licenses from each of the three Debtors in Possession. Pursuant to the Asset Purchase Agreement, the acquisition of the wireless radio licenses from the Debtors in Possession by Vero was consummated on December 31, 2021, and was effective as of January 1, 2022.⁷¹ The acquisition of these licenses, however, was completed and consummated without prior Commission approval. It was not until January 18, 2023, over a year after the acquisition of the licenses was completed, that three separate applications were first filed for the assignment of the Debtors in Possession's wireless radio licenses to Vero (and subsequently amended on June 5, 2023; July 19, 2023; and October 12, 2023).⁷²

21. As a result of the Bureau's investigation, the record shows that Vero consummated the acquisition of 64 wireless radio licenses from the three Debtors in Possession, and one international and two domestic section 214(a) authorizations, without obtaining prior Commission consent. Vero concedes that it did not seek or obtain prior Commission consent for the authorization and license acquisitions prior to the November Transaction closing.⁷³

as Attorneys for a Special Purpose Under 11 U.S.C. § 327(e), at para. 5, *In re Futurum Comm'ns. Corp.*, Case No. 21-11331-KHT (Bankr. D. Colo. Oct. 15, 2021).

⁶⁵ 47 CFR §§ 63.03, 63.04.

⁶⁶ *Id.* § 63.24(a).

⁶⁷ *Id.* § 1.948.

⁶⁸ Vero LOI Response, *supra* note 16, at 8, Response to Question 13(a), Exhibit 13(a).

⁶⁹ Vero LOI Response, *supra* note 16, at 9 Response to Question 13(d), 10 Response to Question 13(e), Exhibit 13(e). See Futurum 214 STA, *supra* note 43.

⁷⁰ 47 U.S.C. § 214(a); 47 CFR §§ 63.03, 63.04; *WDT World Discount Telecommunications Co., Inc.*, Notice of Apparent Liability for Forfeiture and Admonishment, 31 FCC Rcd 12571 (EB 2016) (*WDT NAL*); *Stanacard, LLC*, Notice of Apparent Liability for Forfeiture, 28 FCC Rcd 82 (EB 2013).

⁷¹ Vero LOI Response, *supra* note 16, at 8, Response to Question 13(a), Exhibit 13(a).

⁷² ULS File No. 0010378751, Attach. 2 (filed Jan. 18, 2023, and amended on June 5, 2023; July 19, 2023; and Oct. 12, 2023); ULS File No. 0010378730, Attach. 2 (filed Jan. 18, 2023, and amended on June 5, 2023; July 19, 2023; and Oct. 12, 2023); ULS File No. 0010378808, Attach. 2 (filed Jan. 18, 2023, and amended on June 5, 2023; July 19, 2023; and Oct. 12, 2023).

⁷³ See *id.*

22. We find that Vero apparently willfully and repeatedly violated sections 214(a) and 310(d) of the Act,⁷⁴ and sections 1.948, 63.03, 63.04, and 63.24 of the Commission's rules⁷⁵ by willfully and repeatedly failing to obtain Commission approval prior to the sale and acquisition of all of the membership interests and FCC licenses and authorizations held by Futurum, San Isabel, and Brainstorm, to Vero.

B. Proposed Forfeiture

23. Section 503(b)(1) of the Act authorizes the Commission to impose a forfeiture against any entity that "willfully or repeatedly fail[s] to comply substantially with the terms and conditions of any license, permit, certificate or other instrument or authorization issued by the Commission" as well as or against an entity that "willfully or repeatedly fail[s] to comply with any of the provisions of the [Act] or of any rule, regulation, or order issued by the Commission."⁷⁶ In exercising the Commission's forfeiture authority, we must consider the "the nature, circumstances, extent and gravity of the violation, and with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, and such other matters as justice may require."⁷⁷ In addition, the Commission has established forfeiture guidelines; they establish base penalties for certain violations and identify criteria that we consider when determining the appropriate penalty in any given case.⁷⁸ Under these guidelines, we may adjust a forfeiture upward for violations that are egregious, intentional, or repeated, or that cause substantial harm or generate substantial economic gain for the violator.⁷⁹

24. We conclude that Vero apparently failed to obtain Commission authorization before acquiring the domestic and international section 214(a) authorizations previously held by San Isabel and the domestic section 214(a) authorization held by Futurum. Vero was required by section 214(a) of the Act and sections 63.03, 63.04 and 63.18 of the rules to file applications and seek prior Commission approval before it acquired domestic and international section 214(a) authorizations from San Isabel and Futurum, resulting in three apparent unauthorized transfers of control. Section 1.80(b) of the Commission's rules establishes a base forfeiture of \$8,000 for an unauthorized substantial transfer of control.⁸⁰ Accordingly, we propose a forfeiture of \$24,000: 1) \$8,000 for Vero's apparent unauthorized acquisition San Isabel's domestic section 214(a) authorization;⁸¹ 2) \$8,000 for Vero's apparent unauthorized acquisition of Futurum's domestic section 214(a) authorization;⁸² and 3) \$8,000 for Vero's apparent unauthorized acquisition of San Isabel's international section 214(a) authorization.⁸³

25. We also conclude that Vero apparently failed to obtain Commission approval for the assignment of the wireless radio licenses held by the Debtors in Possession to Vero as required by section

⁷⁴ 47 U.S.C. §§ 214(a), 310(d); *see also Satamatics, Inc.*, Notice of Apparent Liability for Forfeiture, 22 FCC Rcd 21011, 21015, para. 11 (EB 2007) (NAL paid) (proposing a \$24,000 forfeiture for violation of sections 214(a), 310(b)(4), 310(d) of the Act).

⁷⁵ 47 CFR §§ 1.948, 63.03, 62.04, 63.24.

⁷⁶ 47 U.S.C. § 503(b).

⁷⁷ *Id.* § 503(b)(2)(E).

⁷⁸ 47 CFR § 1.80(b)(11), Table 2 to Paragraph (b)(11).

⁷⁹ *Id.*

⁸⁰ 47 CFR § 1.80(b), Table 1 to Paragraph (b)(11); *see also WDT NAL*, *supra* note 70, at 12577, para. 17.

⁸¹ *See* 47 U.S.C. § 214(a); 47 CFR §§ 63.03, 63.04.

⁸² *See* 47 U.S.C. § 214(a); 47 CFR §§ 63.03, 63.04.

⁸³ *See* 47 U.S.C. § 214(a); 47 CFR § 63.24.

1.948 of the rules.⁸⁴ As discussed above, section 1.80(b) of the Commission's rules establishes a base forfeiture of \$8,000 for an unauthorized substantial transfer of control or assignment.⁸⁵ Accordingly, we propose a base forfeiture of \$24,000 for Vero's three separate apparent unauthorized substantial assignments of wireless radio licenses:⁸⁶ 1) \$8,000 for the Company's unauthorized assignment of 32 licenses from Futurum DIP; 2) \$8,000 for the Company's unauthorized assignment of four licenses from San Isabel DIP; and 3) \$8,000 for the Company's unauthorized assignment of 27 licenses from Brainstorm DIP.

26. Accordingly, we propose a total forfeiture of \$48,000 for Vero's apparently unauthorized acquisition of San Isabel's and Futurum's domestic and international section 214(a) authorizations, and Vero's failure to obtain timely Commission authorization for its assignment of Futurum, San Isabel, and Brainstorm's wireless radio licenses to Vero⁸⁷

IV. CONCLUSION

27. We have determined that Vero apparently willfully and repeatedly violated sections 214(a) and 310(d) of the Act and sections 1.948, 63.03, 63.04, and 63.24 of the Commission's rules. Accordingly, Vero is apparently liable for a \$48,000 forfeiture.

V. ORDERING CLAUSES

28. Accordingly, **IT IS ORDERED** that, pursuant to section 503(b) of the Act, 47 U.S.C. § 503(b), and section 1.80 of the Commission's rules, 47 CFR § 1.80, Vero Broadband, LLC hereby **NOTIFIED** of this **APPARENT LIABILITY FOR A FORFEITURE** in the amount of forty-eight thousand dollars (\$48,000) for willful and repeated violations of sections 214(a) and 310(d) of the Act, 47 U.S.C. §§ 214(a), 310(d); sections 1.948, 63.03, 63.04, and 63.24 of the Commission's rules, 47 CFR §§ 1.948, 63.03, 63.04, 63.24.

29. **IT IS FURTHER ORDERED** that, pursuant to section 1.80 of the Commission's rules, 47 CFR § 1.80, within thirty (30) calendar days of the release date of this Notice of Apparent Liability for Forfeiture, Vero Broadband, LLC **SHALL PAY** the full amount of the proposed forfeiture or **SHALL FILE** a written statement seeking reduction or cancellation of the proposed forfeiture consistent with paragraph 32 below.

30. In order for Vero Broadband, LLC to pay the proposed forfeiture, Vero Broadband, LLC shall notify Patrick McGrath, Kalun Lee, Georgina Feigen, and Pam Slipakoff at, Patrick.McGrath@fcc.gov, Kalun.Lee@fcc.gov, Georgina.Feigen@fcc.gov, Pam.Slipakoff@fcc.gov, and EnforcementBureauIHD@fcc.gov of its intent to pay, whereupon an invoice will be posted in the Commission's Registration System (CORES) at <https://apps.fcc.gov/cores/userLogin.do>. Upon payment, Vero Broadband, LLC shall send electronic notification of payment to Patrick McGrath, Kalun Lee,

⁸⁴ Proposed forfeitures for the unauthorized assignment of wireless licenses are calculated based on the number of transactions. Proposed forfeitures related to the unauthorized assignment or transfer of section 214(a) and similar authorizations are calculated based on the number of authorizations.

⁸⁵ 47 CFR § 1.80(b), Table 1 to Paragraph (b)(11); *see also* *WDT NAL*, *supra* note 70, at 12577, para. 17.

⁸⁶ *See Constellium Rolled Products Ravenswood, LLC*, Notice of Apparent Liability for Forfeiture, 29 FCC Rcd 6277, 6286 para 16 (2014) (*Constellium*). (Explaining that, as a general matter, the base forfeiture for engaging in an unauthorized transfer of substantial control of a Commission license is \$8,000. In *Constellium*, there were apparently 12 unauthorized transfers of control of PLMRS authorizations resulting from a single transaction. The Commission previously determined that a strict mathematical exercise of multiplying a base forfeiture amount for a violation times the number of licenses involved could result in an excessive forfeiture amount. Thus, in *Constellium*, for purposes of calculating the forfeiture penalty, the Commission decided to multiply the base amount of \$8,000 times the number of transactions at issue (as opposed to the number of licenses transferred without authorization). *See also Constellium Rolled Products Ravenswood, LLC*, Order and Consent Decree, 30 FCC Rcd 15643 (2015).

⁸⁷ 47 CFR § 1.80(b), Table 1 to Paragraph (b)(11); *see also WDT NAL*, *supra* note 70, at 12577, para. 17.

Georgina Feigen, and Pam Slipakoff Enforcement Bureau, Federal Communications Commission, at Patrick.McGrath@fcc.gov, Kalun.Lee@fcc.gov, Georgina.Feigen@fcc.gov, Pam.Slipakoff@fcc.gov, and EnforcementBureauHD@fcc.gov on the date said payment is made. Payment of the forfeiture must be made by credit card using CORES at <https://apps.fcc.gov/cores/userLogin.do>, ACH (Automated Clearing House) debit from a bank account, or by wire transfer from a bank account. The Commission no longer accepts forfeiture payments by check or money order. Below are instructions that payors should follow based on the form of payment selected:⁸⁸

- Payment by wire transfer must be made to ABA Number 021030004, receiving bank TREAS/NYC, and Account Number 27000001. In the OBI field, enter the FRN(s) captioned above and the letters “FORF”. In addition, a completed Form 159⁸⁹ or printed CORES form⁹⁰ must be faxed to the Federal Communications Commission at 202-418-2843 or e-mailed to RROGWireFaxes@fcc.gov on the same business day the wire transfer is initiated. Failure to provide all required information in Form 159 or CORES may result in payment not being recognized as having been received. When completing FCC Form 159 or CORES, enter the Account Number in block number 23A (call sign/other ID), enter the letters “FORF” in block number 24A (payment type code), and enter in block number 11 the FRN(s) captioned above (Payor FRN).⁹¹ For additional detail and wire transfer instructions, go to <https://www.fcc.gov/licensing-databases/fees/wire-transfer>.
- Payment by credit card must be made by using CORES at <https://apps.fcc.gov/cores/userLogin.do>. To pay by credit card, log-in using the FCC Username associated to the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Manage Existing FRNs | FRN Financial | Bills & Fees” from the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the “Open Bills” tab and find the bill number associated with the NAL Acct. No. The bill number is the NAL Acct. No. with the first two digits excluded (e.g., NAL 1912345678 would be associated with FCC Bill Number 12345678). After selecting the bill for payment, choose the “Pay by Credit Card” option. Please note that there is a \$24,999.99 limit on credit card transactions.
- Payment by ACH must be made by using CORES at <https://apps.fcc.gov/cores/userLogin.do>. To pay by ACH, log in using the FCC Username associated to the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Manage Existing FRNs | FRN Financial | Bills & Fees” on the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the “Open Bills” tab and find the bill number associated with the NAL Acct. No. The bill number is the NAL Acct. No. with the first two digits excluded (e.g., NAL 1912345678 would be associated with FCC Bill Number 12345678). Finally, choose the “Pay from Bank Account” option. Please contact the appropriate financial institution to confirm the correct Routing Number and the correct account number from which payment will be made and verify with that financial institution that the designated account has authorization to accept ACH transactions.

⁸⁸ For questions regarding payment procedures, please contact the Financial Operations Group Help Desk by phone at 1-877-480-3201 (option #1).

⁸⁹ FCC Form 159 is accessible at <https://www.fcc.gov/licensing-databases/fees/fcc-remittance-advice-form-159>.

⁹⁰ Information completed using the Commission’s Registration System (CORES) does not require the submission of an FCC Form 159. CORES is accessible at <https://apps.fcc.gov/cores/userLogin.do>.

⁹¹ Instructions for completing the form may be obtained at <http://www.fcc.gov/Forms/Form159/159.pdf>.

31. Any request for making full payment over time under an installment plan should be sent to: Chief Financial Officer—Financial Operations, Federal Communications Commission, 45 L Street, NE, Washington, D.C. 20554.⁹² Questions regarding payment procedures should be directed to the Financial Operations Group Help Desk by phone, 1-877-480-3201, or by e-mail, ARINQUIRIES@fcc.gov.

32. The written statement seeking reduction or cancellation of the proposed forfeiture, if any, must include a detailed factual statement supported by appropriate documentation and affidavits pursuant to sections 1.16 and 1.80(f)(3) of the Commission's Rules.⁹³ The written statement must be mailed to the Office of the Secretary, Federal Communications Commission, 45 L Street, NE, Washington, D.C. 20554, ATTN: Enforcement Bureau – Investigations and Hearings Division, and must include the NAL/Account Number referenced in the caption. The statement must also be e-mailed to Patrick McGrath, Kalun Lee, Georgina Feigen, and Pam Slipakoff at Patrick.McGrath@fcc.gov, Kalun.Lee@fcc.gov, Georgina.Feigen@fcc.gov, Pam.Slipakoff@fcc.gov, and EnforcementBureauIHD@fcc.gov.

33. The Commission will not consider reducing or canceling a forfeiture in response to a claim of inability to pay unless the petitioner submits the following documentation: (1) federal tax returns for the past three years; (2) financial statements for the past three years prepared according to generally accepted accounting practices; or (3) some other reliable and objective documentation that accurately reflects the petitioner's current financial status.⁹⁴ Any claim of inability to pay must specifically identify the basis for the claim by reference to the financial documentation. Inability to pay, however, is only one of several factors that the Commission will consider in determining the appropriate forfeiture, and we retain the discretion to decline reducing or canceling the forfeiture if other prongs of 47 U.S.C. § 503(b)(2)(E) support that result.⁹⁵

⁹² See 47 CFR § 1.1914.

⁹³ 47 CFR §§ 1.16, 1.80(f)(3).

⁹⁴ 47 U.S.C. § 503(b)(2)(E).

⁹⁵ See, e.g., *Ocean Adrian Hinson, Surry County, North Carolina*, Forfeiture Order, 34 FCC Rcd 7619, 7621, para. 9 & n.21 (2019); *Vearl Pennington and Michael Williamson*, Forfeiture Order, 34 FCC Rcd 770, paras. 18-21 (2019); *Fabrice Polynice, Harold Sido and Veronise Sido, North Miami, Florida*, Forfeiture Order, 33 FCC Rcd 6852, 6860–62, paras. 21-25 (2018); *Adrian Abramovich, Marketing Strategy Leaders, Inc., and Marketing Leaders, Inc.*, Forfeiture Order, 33 FCC Rcd 4663, 4678-79, paras. 44-45 (2018); *Purple Communications, Inc.*, Forfeiture Order, 30 FCC Rcd 14892, 14903-904, paras. 32-33 (2015); *TV Max, Inc., et al.*, Forfeiture Order, 29 FCC Rcd 8648, 8661, para. 25 (2014).

34. **IT IS FURTHER ORDERED** that a copy of this Notice of Apparent Liability for Forfeiture shall be sent by first class mail and certified mail, return receipt requested, to Greg Friedman, Chief Executive Officer, Vero Broadband, LLC at PO Box 1110, Denver, CO 80306, and to Lance Steinhart, Esq., Lance J.M. Steinhart, PC, Attorneys at Law, 1725 Windward Concourse, Suite 150, Alpharetta, GA 30005.

FEDERAL COMMUNICATIONS COMMISSION

Loyaan A. Egal
Chief
Enforcement Bureau

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
BPO Innovate
EB-TCD-24-000360562

ORDER

Adopted: March 27, 2024

Released: March 27, 2024

By the Chief, Enforcement Bureau:

I. INTRODUCTION

1. By this Order, the Federal Communications Commission's (FCC or Commission) Enforcement Bureau (Bureau) removes the certification of BPO Innovate (BPO Innovate or Company) from the Robocall Mitigation Database (RMD).1 BPO Innovate did not cure its deficient RMD certification (Certification) or otherwise demonstrate why the Bureau should not remove its Certification from the RMD following the Bureau's January 9, 2024 Order directing it to take either one of these actions.2 Removal from the RMD requires all intermediate providers and terminating voice service providers to cease accepting traffic directly from BPO Innovate.3 Furthermore, BPO Innovate shall not re-file a Certification without the prior approval of the FCC's Wireline Competition Bureau and the Bureau.

II. BACKGROUND

A. Database Requirements for Voice Service Providers

2. Protecting Americans from the dangers of illegal robocalls is the Commission's top consumer protection priority.4 As part of its multi-pronged approach to combatting illegal robocalls, the Commission mandated adoption of the Secure Telephony Identity Revisited/Signature-based Handling of Asserted information using toKENs (STIR/SHAKEN) caller ID authentication framework.5 Prior to revisions to the RMD certification requirements that took effect on February 26, 20246—which is the

1 See Call Authentication Trust Anchor, WC Docket No. 17-97, Sixth Report and Order and Further Notice of Proposed Rulemaking, 38 FCC Rcd 2573, 2604, para. 60 (2023) (Sixth Caller ID Authentication Order).

2 See BPO Innovate, Order, DA 24-20, 2024 WL 124225 (EB Jan. 9, 2024) (Show Cause Order).

3 47 CFR § 64.6305(g)(1); Call Authentication Trust Anchor, WC Docket No. 17-97, Second Report and Order, 36 FCC Rcd 1859, 1904, para. 86 (2020) (Second Caller ID Authentication Order).

4 See Consumer Guide, Fed. Comm'n's Comm'n, Stop Unwanted Robocalls and Texts (July 7, 2023), https://www.fcc.gov/consumers/guides/stop-unwanted-robocalls-and-texts#:~:text=Unwanted%20calls%20%E2%80%93%20including%20illegal%20and,our%20top%20consumer%20protection%20priority.

5 See 47 CFR § 64.6301(a); Call Authentication Trust Anchor, Implementation of TRACED Act Section 6(a)—Knowledge of Customers by Entities with Access to Numbering Resources, WC Docket Nos. 17-97 and 20-67, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 3241, 3243, para. 3 (2020).

6 See Advanced Methods to Target and Eliminate Unlawful Robocalls, Call Authentication Trust Anchor, 89 Fed. Reg. 4833, 4833 (Jan. 25, 2024); Wireline Competition Bureau Announces Robocall Mitigation Database Filing

(continued....)

relevant time period for the actions subject to this Order—all voice service providers were required to file Certifications with the Commission declaring whether their traffic is authenticated with STIR/SHAKEN or subject to a robocall mitigation program.⁷

3. A voice service provider that certified in the RMD that it has partially implemented the STIR/SHAKEN caller ID authentication framework on its network was also required to certify that it will “respond fully and in a timely manner to all traceback requests.”⁸ The Commission’s rules also required a voice service provider to respond to all traceback requests from the Commission, law enforcement, and the Industry Traceback Group (ITG) “fully and in a timely manner[.]”⁹

4. Voice service providers that had not fully implemented STIR/SHAKEN were also required to detail in a robocall mitigation plan attached to their Certifications the specific reasonable steps they were taking to avoid originating illegal robocall traffic.¹⁰

5. The Bureau may remove a voice service provider’s Certification from the RMD that it finds deficient.¹¹ A deficient Certification includes one that inaccurately represents the provider will respond fully and in a timely manner to traceback requests as required.¹² A deficient Certification also includes one that fails to attach a robocall mitigation plan that describes specific reasonable steps a voice service provider or gateway provider has taken to avoid originating or carrying illegal robocall traffic.¹³

6. To remove a deficient Certification, the Bureau first contacts the provider and notifies it that its filing is deficient, explains the nature of the deficiency, and provides 14 days for the provider to cure the deficiency.¹⁴ If the provider fails to cure the deficiency, the Bureau will release an order concluding that the provider’s filing is deficient based on the available evidence.¹⁵ The order will direct the provider to—within 14 days—cure the deficiency in its filing and explain why the Bureau should not remove the Company’s certification from the RMD.¹⁶ If the provider fails to cure the deficiency or provide a sufficient explanation why its filing is not deficient within that 14-day period, the Bureau will release an order removing the provider from the RMD.¹⁷

Deadlines and Instructions and Additional Compliance Dates, WC Docket No. 17-97, Public Notice, DA 24-73, 2024 WL 329264, at *1-4 (WCB Jan. 25, 2024) (*January 2024 RMD Filing Public Notice*).

⁷ 47 CFR § 64.6305(d)(1) (2023); *Second Caller ID Authentication Order*, *supra* note 3, at 1902, para. 82.

⁸ *See* 47 CFR § 64.6305(d)(2)(iii) (2023).

⁹ *Id.* § 64.1200(n)(1)(i) (2023). Effective January 8, 2024, section 64.1200(n)(1) requires a provider to fully respond to a traceback request within 24 hours of receipt of the request. *See id.* § 64.1200(n)(1) (current); *Advanced Methods to Target and Eliminate Unlawful Robocalls*, Call Authentication Trust Anchor, 88 Fed. Reg. 43446, 43458 (July 10, 2023).

¹⁰ 47 CFR § 64.6305(d)(2)(ii) (2023); *Second Caller ID Authentication Order*, *supra* note 3, at 1902, para. 82.

¹¹ 47 CFR § 0.111(a)(28)(i); *see Second Caller ID Authentication Order*, *supra* note 3, at 1902-03, para. 83.

¹² *See* 47 CFR § 64.6305(d)(2)(iii) (2023).

¹³ *See id.* § 64.6305(d)(2)(ii), (e)(2)(ii); *see also Second Caller ID Authentication Order*, *supra* note 3, at 1902, para. 82; *Gateway Provider Order*, 37 FCC Rcd at 6882, para. 40.

¹⁴ *Sixth Caller ID Authentication Order*, *supra* note 1, at 2604, para. 60.

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

7. Commission rules prohibit any intermediate provider or terminating voice service provider from accepting voice traffic directly from any voice service provider that does not have a Certification in the RMD.¹⁸

B. BPO Innovate’s Deficient Certification

8. On March 25, 2022, BPO Innovate filed a Certification in the RMD and indicated that it is a voice service provider.¹⁹ In its Certification, BPO Innovate declared under penalty of perjury that some of its traffic was subject to a robocall mitigation program.²⁰

9. The Company further committed in its Certification—also under penalty of perjury—to “respond to all traceback requests from the Commission, law enforcement, and the industry traceback consortium[.]”²¹ BPO Innovate received numerous traceback requests from the ITG.²² To date, and contrary to its Certification, BPO Innovate has not responded to any of these traceback requests.²³

10. BPO Innovate’s RMD certification also purported—under penalty of perjury—to attach a document detailing “the specific reasonable steps it has taken to avoid originating illegal robocall traffic as part of its robocall mitigation program[.]”²⁴ Despite BPO Innovate’s sworn Certification, the document it provided as its purported robocall mitigation plan did not identify any specific reasonable steps the Company has taken to avoid originating illegal robocall traffic as part of its robocall mitigation program.²⁵

11. On September 29, 2023, the Bureau sent BPO Innovate a notice that its certification was deficient and gave the Company 14 days to correct the deficiencies.²⁶ The Bureau’s notice informed BPO Innovate that to cure these deficiencies it needed to respond fully to the identified traceback requests and any future traceback requests, and upload a compliant robocall mitigation plan.²⁷ The Bureau did not receive a response from BPO Innovate, and BPO Innovate did not cure the identified deficiencies.

¹⁸ 47 CFR § 64.6305(g)(1); *Second Caller ID Authentication Order*, *supra* note 3, at 1904, para. 86.

¹⁹ BPO Innovate Listing (No. RMD0010872), Fed. Commc’ns Comm’n, Robocall Mitigation Database (filed Mar. 25, 2022) (indicating it is a voice service provider). Due to changes to the Commission’s rules that were adopted in the *Sixth Caller ID Authentication Order* and took effect on January 8, 2024, the Wireline Competition Bureau directed existing filers to update their RMD submissions to provide newly-required information and certifications by February 26, 2024. *See January 2024 RMD Filing Public Notice*, *supra* note 6, at *1-2. As a result of this recertification process and associated revisions to the RMD, the full text of provider certifications prior to 2024 are no longer publicly available in the RMD.

²⁰ *See Show Cause Order*, *supra* note 2, at *1, para. 3.

²¹ *See id.*

²² ITG, BPO Innovate Traceback Report (on file in EB-TCD-24-000360562).

²³ *Id.*

²⁴ *See Show Cause Order*, *supra* note 2, at *2, para. 4.

²⁵ *See id.* (describing the attachment filed by BPO Innovate as an unrelated document from the IRS). We note that the Certification was not merely deficient, but was facially deficient because it did not attach any robocall mitigation plan. *See Sixth Caller ID Authentication Order*, *supra* note 1, at 2604, para. 61 (“A certification is ‘facially deficient’ where the provider fails to submit a robocall mitigation plan within the meaning of our rules. That is, it fails to submit any information regarding the ‘specific reasonable steps’ it is taking to mitigate illegal robocalls.”). The Commission has adopted an expedited procedure for removing facially deficient certifications, *see id.* at 2604-05, paras. 61-62.

²⁶ Letter from Loyaan A. Egal, Chief, Enforcement Bureau, to BPO Innovate, at 1-2 (Sept. 29, 2023) (Egal Letter).

²⁷ *Id.* at 2.

12. On January 9, 2024, the Bureau ordered BPO Innovate to correct the deficiencies of its Certification or explain why its Certification should not be removed from the RMD.²⁸ BPO Innovate had 14 days to file a response.²⁹ The Bureau did not receive a response from BPO Innovate, and BPO Innovate did not cure the identified deficiencies.

III. DISCUSSION

13. We find that BPO Innovate's Certification is deficient because (1) the Company failed to respond to traceback requests and (2) the purported robocall mitigation plan submitted with its Certification includes no description of any reasonable steps the Company has taken to avoid originating illegal robocall traffic, and thus does not satisfy the Commission's requirements.³⁰ The Bureau notified BPO Innovate of those deficiencies and it did not cure.³¹ The Bureau then ordered the Company to cure the deficiencies or otherwise explain why it should not be removed from the RMD.³² BPO Innovate did neither. Therefore, the Certification now warrants removal.

14. Accordingly, we remove BPO Innovate's Certification from the RMD as of the release date of this Order. Once removed, **all intermediate providers and voice service providers must cease accepting traffic from BPO Innovate.**³³ BPO Innovate shall not refile in the Database unless and until both the Wireline Competition Bureau and the Bureau determine that the Company has addressed and resolved any deficiencies or shortcomings in its Certification.

15. *Additional Information.* For further information about this Order, contact Alexander Hobbs, Attorney Advisor, Telecommunications Consumers Division, Enforcement Bureau, at alexander.hobbs@fcc.gov or (202) 418-7433.

IV. ORDERING CLAUSES

16. Accordingly, **IT IS ORDERED** that, pursuant to sections 4(i), 4(j), 227b, 251(e), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 227b, 251(e), 403; and sections 0.111, 0.311, 1.1, and 64.6305 of the Commission's rules, 47 CFR §§ 0.111, 0.311, 1.1, 64.6305, this Removal Order is **ADOPTED**.

17. **IT IS FURTHER ORDERED** that BPO Innovate is **IMMEDIATELY REMOVED** from the Robocall Mitigation Database as of the release date of this Order.

18. **IT IS FURTHER ORDERED** that BPO Innovate shall not refile in the Robocall Mitigation Database unless and until both the Wireline Competition Bureau and the Enforcement Bureau determine that it has addressed and resolved any deficiencies or shortcomings in its Certification.

19. **IT IS FURTHER ORDERED** that copies of this Order shall be sent by email and registered mail, return receipt requested, to: BPO Innovate, sales@bpinnovate.com, 31 Myrtle Ave Keansburg, Jersey City, NJ 07734.

²⁸ *Show Cause Order*, *supra* note 2, at *3, para. 10.

²⁹ *Id.* at para. 11.

³⁰ See 47 CFR § 64.6305(d)(2)(ii)–(iii) (2023).

³¹ Egal Letter, *supra* note 26, at 1-2.

³² *Show Cause Order*, *supra* note 2, at *3, para. 10.

³³ 47 CFR § 64.6305(g)(1).

20. **IT IS FURTHER ORDERED** that pursuant to section 1.102(b) of the Commission's rules, 47 CFR § 1.102(b), this Removal Order **SHALL BE EFFECTIVE** upon release.

FEDERAL COMMUNICATIONS COMMISSION

Loyaan A. Egal
Chief
Enforcement Bureau



PUBLIC NOTICE

Federal Communications Commission
45 L Street, NE
Washington, D.C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>

DA 24-284
Released: March 22, 2024

COMMENTS INVITED ON SECTION 214 APPLICATION(S) TO DISCONTINUE DOMESTIC NON-DOMINANT CARRIER TELECOMMUNICATIONS SERVICES

WC Docket No(s). 24-33

Comments Due: April 8, 2024

Unless otherwise specified, the following procedures and dates apply to the application(s) (the Section 214 Discontinuance Application(s)) listed in the Appendix.

The Wireline Competition Bureau (Bureau), upon initial review, has found the Section 214 Discontinuance Application(s) listed herein to be acceptable for filing and subject to the procedures set forth in Section 63.71 of the Commission's rules.¹ The application(s) request authority, under section 214 of the Communications Act of 1934, as amended,² and section 63.71 of the Commission's rules,³ to discontinue, reduce, or impair certain domestic telecommunications service(s) (Affected Service(s)) in specified geographic areas (Service Area(s)) as applicable and as fully described in each application.

In accordance with section 63.71(f) of the Commission's rules, the Section 214 Discontinuance Application(s) listed in the Appendix will be deemed granted automatically on **April 22, 2024**, the 31st day after the release date of this public notice, unless the Commission notifies any applicant(s) that their grant will not be automatically effective.⁴ We note that the date on which an application for Commission authorization is deemed granted may be different from the date on which applicants are authorized to discontinue, reduce, or impair service ("Authorized Date"). Any applicant whose application has been deemed granted may discontinue, reduce or impair their Affected Service(s) in their Service Area(s) on or after the authorized date(s) specified in the Appendix, in accordance with their filed representations. Accordingly, pursuant to section 63.71(f), and the terms outlined in each application, absent further Commission action, each applicant may discontinue, reduce or impair the Affected Service(s) in the Service Area(s) described in their application on or after the authorized discontinuance date(s) listed in the Appendix for that application. For purposes of computation of time when filing a petition for reconsideration, application for review, or petition for judicial review of the Commission's decision(s), the date of "public notice" shall be the later of the auto grant date stated above in this Public Notice, or the release date(s) of any further public notice(s) or order(s) announcing final Commission action, as

¹ 47 CFR § 63.71.

² 47 U.S.C. § 214.

³ 47 CFR § 63.71.

⁴ See 47 CFR § 63.71(f) (stating, in relevant part, that an application filed by a non-dominant carrier "shall be automatically granted on the 31st day... unless the Commission has notified the applicant that the grant will not be automatically effective.").

applicable. Should no petitions for reconsideration, applications for review, or petitions for judicial review be timely filed, the proceeding(s) listed in this Public Notice shall be terminated, and the docket(s) will be closed.

Comments objecting to any of the applications listed in the Appendix must be filed with the Commission on or before **April 8, 2024**.⁵ Comments should refer to the specific WC Docket No. and Comp. Pol. File No. listed in the Appendix for the particular Section 214 Discontinuance Application that the commenter intends to address. Comments should include specific information about the impact of the proposed discontinuance on the commenter, including any inability to acquire reasonable substitute service. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.⁶ Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs>. Filers should follow the instructions provided on the Web site for submitting comments. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket number.

Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit one additional copy for each additional docket or rulemaking number associated with the proceeding in which they choose to file comments. Filings can be sent by commercial overnight courier or by first-class or overnight U.S. Postal Service mail.⁷ All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, D.C. 20554.

Copies of the comments may also be emailed to the Competition Policy Division, Wireline Competition Bureau, Federal Communications Commission, using the contact information listed in the Appendix for the appropriate Section 214 Application. In addition, comments should be served upon the Applicant(s).

These proceedings are considered "permit but disclose" proceedings for purposes of the Commission's *ex parte* rules.⁸ Participants should familiarize themselves with the Commission's *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or

⁵ Comments are normally due 15 days after the Commission releases public notice of the proposed discontinuance. 47 CFR § 63.71(a). For purposes of computation of time, if the comment deadline falls on a weekend or officially recognized Federal legal holiday, however, comments will be due on the next business day. See 47 CFR § 1.4(e) and (j).

⁶ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

⁷ Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Filing*, Public Notice, 35 FCC Rcd 2788 (OMD 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

⁸ 47 CFR § 1.1200 *et seq.*

otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b).

People with Disabilities: We ask that requests for accommodations be made as soon as possible in order to allow the agency to satisfy such requests whenever possible. Send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418-0530.

For further information, please see the contact(s) for the specific discontinuance proceeding you are interested in as listed in the Appendix. For further information on procedures regarding section 214 please visit <https://www.fcc.gov/encyclopedia/domestic-section-214-discontinuance-service>.

– FCC –

Appendix

- 1) **Applicant(s): Zippytech LLC d/b/a Cedar Networks**
WC Docket No. 24-33, Comp. Pol. File No. 1891
Link – [https://www.fcc.gov/ecfs/search/search-filings/results?q=\(proceedings.name:\(%2224-33*%22\)\)](https://www.fcc.gov/ecfs/search/search-filings/results?q=(proceedings.name:(%2224-33*%22)))
Affected Service(s) – Residential Phone Service Line
Service Area(s) – Aspen Trails; Bayfield; Bear Creek/Pine River Ranches; Cortez; Durango Hills; Enchanted Forest; Forest Lakes; and Rafter J, Colorado
Authorized Date(s) – on or after April 22, 2024
Contact(s) – Kimberly Jackson, (202) 418-7393 (voice), Kimberly.Jackson@fcc.gov, of the Competition Policy Division, Wireline Competition Bureau



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
45 L STREET NE
WASHINGTON D.C. 20554

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DA No. 24-285

Friday March 22, 2024

Report No. SAT-01810

Satellite Licensing Division and Satellite Programs and Policy Division Information

Actions Taken

The Commission, by its Space Bureau, took the following actions pursuant to delegated authority. The effective date of these actions is the release date of this Notice, except where an effective date is specified.

SAT-AMD-20231013-00249 E S3178 Capella Space Corp.
Amendment
Grant of Authority Effective Date: 03/15/2024

Nature of Service: Earth Exploration Satellite Service

See ICFS File No. SAT-LOA-20230718-00177 for a description of the action taken.

SAT-LOA-20230718-00177 E S3178 Capella Space Corp.
Launch and Operating Authority
Grant of Authority Effective Date: 03/15/2024

Nature of Service: Earth Exploration Satellite Service

On March 15, 2024, the Satellite Programs and Policy Division granted, with conditions, authority to Capella Space Corp. to deploy and operate two low-Earth orbit, non-geostationary satellites, known as Acadia-3 and Acadia-4, that would operate in the earth-exploration satellite service (EESS), conducting synthetic aperture radar (SAR) imaging. Capella Space is authorized to operate in the following frequency bands: 9300-10000 MHz for SAR imaging; 8025-8400 MHz (space-to-Earth) for an EESS downlink; 2025-2110 MHz (Earth-to-space) for a command uplink; 8025-8400 MHz (space-to-Earth) for a telemetry and tracking downlink; and 1525.0-1559.0 MHz receiving (space-to-space) and 1626.5-1660.0 MHz transmitting (space-to-space) for inter-satellite links with the Inmarsat system, including all the satellites on the Commission's "ISAT" list. Specifically, Capella Space is authorized to operate using a center frequency of 9650 MHz and bandwidths from 10 MHz to 700 MHz for SAR imaging, a center frequency of 8212.5 MHz and bandwidth of 337.5 MHz for its EESS downlink, a center frequency of 2036 MHz and bandwidth of 1.4 MHz for its command uplink, and a center frequency of 8027 MHz and bandwidth of 1.4 MHz for its telemetry and tracking downlink. In addition, the Acadia-3 and Acadia-4 satellites are authorized to receive a signal from a single earth station in the 9400-9900 MHz band (Earth-to-space) for a limited period following deployment in order to radiometrically calibrate radar measurements.

SAT-LOA-20230729-00189 E S3179 Quantum Space LLC
Launch and Operating Authority
Grant of Authority Effective Date: 03/12/2024

Nature of Service: Other

On March 12, 2024, the Satellite Programs and Policy Division granted, with conditions, Quantum Space LLC's request for authority to also operate its satellite, known as the Quantum Sentry, in the 400.15-401 MHz (space-to-Earth) band. Specifically Quantum Space is authorized to operate using a signal with a center frequency 400.5 MHz and 40 kHz bandwidth.

SAT-MOD-20230927-00235 E S2347 SES Americom, Inc.
Modification 11/22/2023 - 11/01/2026
Grant of Authority Effective Date: 03/15/2024

Nature of Service: Fixed Satellite Service

On March 15, 2024, the Satellite Programs and Policy Division granted, with conditions, the request of Astranis Projects USA LLC for extension of its special temporary authority for up to 30 days to conduct telemetry, tracking and command (TT&C) functions related to drifting the Arcturus space station from the 163° W.L. orbital location to the 78° E.L. orbital location. TT&C is performed using the 19701-19703 MHz and 19704-19706 MHz (space-to-Earth), and 28351-28353 MHz and 28354-28356 MHz (Earth-to-space) frequency bands.

SAT-STA-20240216-00034 E S3092 Astranis Projects USA LLC
Special Temporary Authority
Grant of Authority Effective Date: 03/15/2024

On March 15, 2024, the Satellite Programs and Policy Division granted, with conditions, the request of Astranis Projects USA LLC for extension of its special temporary authority for up to 30 days to conduct telemetry, tracking and command (TT&C) functions related to drifting the Arcturus space station from the 163° W.L. orbital location to the 78° E.L. orbital location. TT&C is performed using the 19701-19703 MHz and 19704-19706 MHz (space-to-Earth), and 28351-28353 MHz and 28354-28356 MHz (Earth-to-space) frequency bands.

SAT-STA-20240308-00050 E S2673 DIRECTV Enterprises, LLC
Special Temporary Authority
Grant of Authority Effective Date: 03/21/2024

Nature of Service: Direct Broadcast Satellite Service

On March 21, 2024, the Satellite Programs and Policy Division granted, with conditions, the request of DIRECTV Enterprises, LLC for an extension of special temporary authority for a period of 60 days for the DIRECTV 5 space station to operate with its beams oriented to improve coverage to Alaska and Hawaii. DIRECTV 5 operates from the 110.1 W.L. orbital location, using the 12.2-12.7 GHz (space-to-Earth) and 17.3-17.8 GHz (Earth-to-space) frequency bands. Telemetry, tracking & command is performed using the following center frequencies: 12201.0 MHz and 12202.0 MHz (space-to-Earth); and 17301.0 MHz and 17305.0 MHz (Earth-to-space).

SAT-STA-20240314-00056 E S3134 Intelsat License LLC
Special Temporary Authority
Grant of Authority Effective Date: 03/21/2024

Nature of Service: Direct Broadcast Satellite Service

On March 21, 2024, the Satellite Programs and Policy Division granted, with conditions, Intelsat License LLC's request for special temporary authority, for an additional period of 60 days, to operate the Galaxy 35 space station at the 93.1° W.L. orbital location.

For more information concerning this Notice, contact the Satellite Licensing Division and Satellite Programs and Policy Division at (202) 418-0719.



PUBLIC NOTICE

Federal Communications Commission
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Washington, DC 20554

News Media Information 202 / 418-0500
Internet: <https://www.fcc.gov>
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DA 24-286
Released: March 22, 2024

EFFECTIVE AND COMPLIANCE DATES FOR VIDEO RELAY SERVICE IMPROVEMENTS

CG Docket Nos. 03-123, 10-51

In December 2023, the Federal Communications Commission (Commission) released a Report and Order modifying several Video Relay Service (VRS) rules relating to communications assistants (CAs) working at home, the use of contractors for VRS interpreting, and the use of VRS by registered users when traveling abroad.¹

On March 21, 2024, a summary of the Report and Order was published in the Federal Register, establishing effective dates and compliance dates for some of these rule amendments.² Accordingly, the effective date for the rule changes on CAs working at home and the use of contractors for VRS interpreting is April 22, 2024. The compliance date for the modified rule on the portion of a VRS provider's monthly minutes that may be handled by CAs working at home is October 17, 2024. Certain other rule changes contain modified information collection requirements and will not be effective until the Office of Management and Budget (OMB) concludes review under the Paperwork Reduction Act.³ The effective date for those rules will be announced in a subsequent Public Notice.

To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice).

For further information, contact Joshua Mendelsohn, Disability Rights Office, Consumer and Governmental Affairs Bureau, at 202-559-7304, or Joshua.Mendelsohn@fcc.gov.

- FCC -

¹ See *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program; Petition for Rulemaking and Interim Waiver of Convo Communications, LLC*, CG Docket Nos. 03-123, 10-51, Report and Order and Order, FCC 23-116 (Dec. 20, 2023) (*2023 VRS Improvements Order*).

² Federal Communications Commission, Video Relay Service Improvements, Final Rule, 89 Fed. Reg. 20125 (March 21, 2024).

³ *2023 VRS Improvements Order*, paras. 32, 52.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
MORGAN COUNTY, INDIANA) File No. 0010920594
Request for Special Temporary Authority)

ORDER

Adopted: March 22, 2024

Released: March 22, 2024

By the Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau:

I. INTRODUCTION

1. On February 13, 2024, Morgan County, Indiana (Morgan County, or the County), filed a request for Special Temporary Authority (STA) to operate its Travelers' Information Station (TIS) at 100 watts, rather than 10 watts as limited by the Commission's rules. Morgan County filed the request to expand the TIS signal's reach for a 15-day period, April 1 to April 15, 2024, to manage the expected influx of visitors, traffic congestion, and public safety surrounding the April 8, 2024 solar eclipse. For the reasons set forth below, we grant Morgan County's STA request as conditioned herein.

II. BACKGROUND

2. The Commission authorized Travelers' Information Stations in 1977 to "establish an efficient means of communicating certain kinds of information to travelers over low power radio transmitters licensed to Local Government entities." The Commission specifically noted that such stations had been used to reduce traffic congestion and to transmit "road conditions, travel restrictions, and weather forecasts to motorists." Further, the Commission anticipated that such stations also would be used to "transmit travel related emergency messages concerning natural disasters (e.g., forest fires, floods, etc.), traffic accidents and hazards, and related bulletins affecting the immediate welfare of citizens." In 2013, the Commission modified the TIS rules to allow "ribbon" transmitters but emphasized that a TIS was only allowed to transmit "travel and emergency information that is relevant to travelers in the vicinity of each transmitter."

1 File No. 0010920594 (filed Feb. 13, 2024), attached Request for Special Temporary Authority (Exhibit).
2 47 CFR § 90.242(b)(4)(iii).
3 Exhibit at 1.
4 See Amendment of Parts 2 and 89 of the Rules to Provide for the Use of Frequencies 530, 1606, and 1612 kHz by Stations in the Local Government Radio Services for the Transmission of Certain Kinds of Information to the Traveling Public, Docket No. 20509, Report and Order, 67 FCC 2d 917 (1977) (TIS Report and Order).
5 Id. at 917 para. 1.
6 Id. at 922 para. 16.
7 Travelers' Information Stations, Report and Order and Further Notice of Proposed Rulemaking, 28 FCC Red 11276, 11290, para. 41 (2013).

3. Morgan County operates a TIS transmitter in Martinsville, Indiana, call sign WQSI562, operating on 1700 kilohertz within the AM radio band.⁸ The County states that “[b]ased on what occurred during the last solar eclipse which severely impacted our area, roads will gridlock with travelers and visitors for days before - and especially following - the event, which is on the afternoon of April 8, 2024. The line of totality traverses our immediate area. Our ability to dispatch EMS and public safety will be negatively impacted by the crush of vehicle traffic.”⁹ The County states that “[w]e will use this radio system to advise the thousands who are in their vehicles – some of whom may be stranded - of safety procedures, directions and hazards specific to congestion which will result from the eclipse. Cellular communications may become overloaded, affecting motorists’ ability to reach out for help. If unexpected events occur, this radio system will be invaluable as a means to redirect motorists and apprise listeners of emergency procedures on the fly, and how to find assistance.”¹⁰ The County contends that “[w]ith the currently-licensed 10 watts of transmitter output, we cannot cover adequately the extent of Interstate 69 and SR 67 which traverse our jurisdiction, not to mention the many surface roads which visitors and commuters will seek out to avoid the main thoroughfares when traffic comes to a stop. There are two-lane roads which more even more prone to congestion.”¹¹

III. DISCUSSION

4. Morgan County’s proposal would contravene three TIS rules and one other part 90 rule:

- Section 90.242(b)(4)(iii), which limits TIS transmitter output power to 10 watts.¹² Morgan County requests 100 watts.
- Section 90.242(b)(4)(i), which limits the TIS antenna height above ground level to 15.0 meters (49.2 feet).¹³ Morgan County will a height of 22 meters.¹⁴
- Section 90.242(b)(4)(iv), which imposes a field strength limit of 2 millivolts per meter (mV/m) at a distance of 1.5 kilometers from the TIS transmitter antenna.¹⁵ Morgan County requests 2.0 mV/m contour coverage at 5.5 miles (8.9 kilometers) radius from the antenna.¹⁶
- Section 90.203(a), which requires that each transmitter utilized for operation under part 90 of the Commission’s rules must be of a type which has been certified for use under this part.¹⁷ The County proposes to use an ASPiSYS ASM100-100 AM transmitter.¹⁸

5. The Commission’s rules permit an STA to be granted for temporary, non-recurring service where a regular authorization is not appropriate.¹⁹ Given that a total solar eclipse is relatively rare

⁸ Call Sign WQSI562.

⁹ Exhibit at 1.

¹⁰ *Id.*

¹¹ *Id.* at 1-2.

¹² 47 CFR § 90.242(b)(4)(iii).

¹³ 47 CFR § 90.242(b)(4)(i).

¹⁴ Morgan County has a waiver of 47 CFR § 90.242(b)(4)(i) to use a 22-meter antenna height on call sign WQSI562.

¹⁵ 47 CFR § 90.242(b)(4)(iv).

¹⁶ Exhibit at 2.

¹⁷ 47 CFR § 90.203(a).

¹⁸ Exhibit at 2, 7-8.

¹⁹ 47 CFR § 1.931(b)(2)(iv).

event for a particular location, and that the April 8, 2024 eclipse is expected to draw crowds and traffic gridlock to the path of totality,²⁰ which traverses Indiana, we find that the County meets the threshold for consideration of a non-recurring STA. Under the Commission's rules, STAs will be authorized on a secondary, non-interference basis.²¹ Morgan County included an interference analysis, which concludes that the proposed facility using the STA power of 100 watts will cause no groundwave contour overlap to AM broadcast stations.²² We agree with the County's analysis.

6. We find that the public interest would be served by granting an STA for a period of 15 days, from April 1 to April 15, 2024. We stress that conditional grant of this STA is solely intended to address Morgan County's need to manage the expected influx of visitors, traffic congestion, and public safety during the period surrounding the April 8, 2024 solar eclipse. The County must adhere to the Commission's TIS content and permissible communications limits.²³ Granting this STA does not prejudice the outcome of any pending or future request by Morgan County or any other party for an STA or permanent waiver seeking TIS operation with a power exceeding 10 watts.

7. For the foregoing reasons, we grant the County's STA request as conditioned below, in addition to standard STA special conditions:

- This Special Temporary Authority shall be authorized for the period beginning April 1, 2024 and ending April 15, 2024.

IV. ORDERING CLAUSES

8. Accordingly, IT IS ORDERED that, pursuant to Sections 1, 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), and 303(r), and Section 1.931 of the Commission's Rules, 47 CFR § 1.931, the Request for Special Temporary Authority filed by Morgan County, Indiana on February 13, 2024, IS GRANTED as conditioned herein.

9. IT IS FURTHER ORDERED that the application, File No. 0010920594, SHALL BE PROCESSED in accordance with this order.

10. This action is taken pursuant to delegated authority under Sections 0.191 and 0.392 of the Commission's rules, 47 CFR §§ 0.191, 0.392.

FEDERAL COMMUNICATIONS COMMISSION

John A. Evanoff
Chief, Policy and Licensing Division
Public Safety and Homeland Security Bureau

²⁰ See, e.g., Marcia Dunn, *Countdown begins for April's total solar eclipse. What to know about watch parties and safe viewing* (Mar. 8, 2024), <https://apnews.com/article/total-solar-eclipse-april-2024-83164668ee08b0a0c92e1d2ac41e91aa> ("An estimated 44 million people live inside the 115-mile-wide (185-kilometer-wide) path of totality stretching from Mazatlán, Mexico to Newfoundland; about 32 million of them are in the U.S., guaranteeing jammed roads for the must-see celestial sensation.") .

²¹ 47 CFR § 1.931(b)(1).

²² Exhibit at 3-5.

²³ See 47 CFR §§ 90.242(a)(7), 90.405(a).



PUBLIC NOTICE

Federal Communications Commission
45 L St., N.E.
Washington, DC 20554

News Media Information: 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-288
March 22, 2024

MEDIA BUREAU PROVIDES FURTHER GUIDANCE ON SETTLEMENT WINDOW FOR MUTUALLY EXCLUSIVE APPLICATIONS SUBMITTED IN THE DECEMBER 2023, LPFM FILING WINDOW

On March 15, 2024, the Media Bureau (Bureau) released a Public Notice to (1) identify by group all of the mutually exclusive (MX) applications submitted in the December 2023, filing window for Form 2100, Schedule 318 applications for Low Power FM (LPFM) new station construction permits,¹ and (2) announce a 60-day period, until May 14, 2024, for MX applicants to enter into and file settlement agreements and/or to submit technical amendments to resolve conflicts and expedite the grant of applications filed in the recent LPFM window.²

The purpose of this Public Notice is to clarify that MX applicants may, at this time, also submit time-share agreements to resolve conflicts.³ Time-share agreements may be partial or universal, but are limited to three MX applicants.⁴ Any time-share agreement must propose the grant of technically acceptable applications, and not create new application conflicts, or make conflicts worse. During this settlement period, time-share applicants are not required to be tied with the same or highest point total in the MX group.⁵ Any time-share agreement filed for the purpose of point aggregation is prohibited at this time.⁶

¹ See *Media Bureau Announces Filing Procedures and Requirements for November 1 – November 8, 2023, Low Power FM Filing Window*, Public Notice, DA 23-642 (MB July 31, 2023); *Media Bureau Announces Revised Dates for LPFM New Station Application Filing Window; Window Open from December 6, 2023 to December 13, 2023*, Public Notice, DA 23-984 (MB October 17, 2023).

² See *Media Bureau Identifies Groups of Mutually Exclusive Applications Submitted in the December 2023, LPFM Filing Window; Opens Window To Accept Settlements and Technical Amendments*, Public Notice, DA 24-256 (MB March 15, 2024) (*Settlement Notice*).

³ See 47 CFR § 73.872(e) (providing that settlement proposals may include time-share agreements).

⁴ *Id.* (specifying time-share agreements must comply with the requirements of paragraph (c) of section 73.872); 47 CFR § 73.872(c) (limiting time-sharing to no more than three MX applicants). See also *Reexamination of the Comparative Standards and Procedures for Licensing Noncommercial Educational Broadcast Stations and Low Power FM Stations*, MB Docket No. 19-3, Report and Order, 34 FCC Rcd 12519, 12536, para. 40 & n.123 (2019) (clarifying that the three applicant limit applies to any time-sharing agreement incorporated in an overall settlement under 47 CFR § 73.872(e)).

⁵ The LPFM point system awards a maximum of six merit points, based on six criteria, with one point awarded under each criterion: (1) established community presence of at least two years; (2) commitment to originate local programming; (3) commitment to maintain a main studio; (4) commitment both to originate local programming and to maintain a main studio; (5) diversity of ownership; and (6) Tribal applicants serving Tribal lands. See 47 CFR § 73.872(b).

⁶ As explained in the *Settlement Notice*, although LPFM applicants may communicate and collaborate at any time on aggregating their points and entering into voluntary time-sharing agreements, time share proposals for the purpose (continued....)

Any time-share agreement must be in writing, signed by each time-share proponent, and satisfy the following requirements:

1. The proposal must specify the proposed hours of operation of each time-share proponent;
2. The proposal must not include simultaneous operation of the time-share proponents; and
3. Each time-share proponent must propose to operate for at least 10 hours per week.⁷

Finally, we remind applicants that when considering whether to enter into a settlement or time-share agreement with another MX applicant, the Commission is the official, and only, source for determining and awarding comparative points to MX applicants.⁸ Applicants that rely on unofficial point predictions from outside sources do so at their own risk, as such predictions are not binding on the Commission.

For additional information, please contact: James Bradshaw, James.Bradshaw@fcc.gov; Alexander Sanjenis, Alexander.Sanjenis@fcc.gov; Amy Van de Kerckhove, Amy.Vandekerckhove@fcc.gov; or Lisa Scanlan, Lisa.Scanlan@fcc.gov of the Media Bureau, Audio Division.

- FCC -

of point aggregation cannot be submitted at this time. Any such time-share proposal may *only* be electronically submitted within 90 days after the release of the public notice announcing the tentative selectees in an MX group. *See Settlement Notice* at n.11.

⁷ 47 CFR 73.872(c)(1).

⁸ The Commission compares MX applications under the LPFM point system and tentatively selects the application(s) with the highest point total from each MX group for grant. *See* 47 CFR § 73.872(b).



Federal Communications Commission
Washington, D.C. 20554

March 22, 2024

DA 24-289

In Reply Refer to:

1800B3-ARR

Released: March 22, 2024

RENEW Taylorsville
c/o Jim Turvaville
P.O. Box 36
Mobeetie, TX 79061
jimturbo61@gmail.com

Re: **RENEW Taylorsville**
New LPFM, Taylorsville, Mississippi
Facility ID No. 787873
Application File No. 0000231474

Petition for Reconsideration

Dear Applicant:

We have before us the Petition for Reconsideration (Petition)¹ filed by RENEW Taylorsville (Petitioner), seeking reconsideration of the Media Bureau's (Bureau) dismissal of Petitioner's application (Application) for a construction permit for a new low power FM (LPFM) station at Taylorsville, Mississippi.² For the reasons set forth below, we deny the Petition and dismiss the Supplement.

Background. Petitioner filed the Application during the 2023 LPFM Filing Window,³ and certified that "the proposed facility complies with the engineering requirements of 47 CFR [s]ection 73.807(a) through (g), and 73.825."⁴ On January 17, 2024, Bureau staff dismissed the Application for failure to meet the minimum distance spacing requirements enumerated in section 73.807(a)⁵ of the Commission's rules (Rules), with respect to the co-channel license of station WHJT(FM), Kearney Park, Mississippi, and with respect to the second-adjacent channel license of station WJAI(FM), Pearl, Mississippi, and noted that an amendment was not permitted under section 73.870(c) of the Rules.⁶

¹ Pleading File No. 0000237234 (filed Jan. 29, 2024). Petitioner also subsequently filed a Supplement with a "replacement application" reflecting changes to make the Application rule-compliant. *See* Supplement, Pleading File No. 0000239847 (filed Feb. 27, 2024).

² Application File No. 0000231474 (filed Dec. 6, 2023).

³ *Media Bureau Announces Filing Procedures and Requirements for November 1 – November 8, 2023, Low Power FM Filing Window*, Public Notice, DA 23-642 (MB July 31, 2023) (*Procedures Public Notice*). Based on a request from LPFM advocates, the Bureau subsequently delayed the window until December 6, 2023. *Media Bureau Announces Revised Dates for LPFM New Station Application Filing Window*, Public Notice, DA 23-984 (MB Oct. 17, 2023). The Bureau subsequently extended the close of the window until December 15, 2023. *Media Bureau Announces Extension of LPFM New Station Application Filing Window*, Public Notice, DA 23-1150 (MB Dec. 11, 2023).

⁴ Application at Technical Certifications, Interference.

⁵ *See* 47 CFR § 73.807(a).

⁶ *See Broadcast Actions*, Public Notice, Report No. PN-2-240119-01 (MB Jan. 19, 2024) (citing 47 CFR § 73.870(c)). *See also* Application File Nos. BLH-20170804AAH and BMLD-20170824AAC (license applications for WHJT(FM) and WJAI(FM)) (*Dismissal Public Notice*).

On January 29, 2024, Petitioner filed the Petition, seeking reinstatement of the Application and a waiver of section 73.870(c) in order to amend the Application to correct the proposed Station coordinates to meet the minimum distance spacing requirements of section 73.807. Specifically, Petitioner characterizes the co-channel spacing error as a “simple data entry error” on the part of its consulting engineer, and argues that a minor amendment could correct the coordinates, to make the Application a singleton, and warrants reinstatement of the Application *nunc pro tunc*.⁷

Discussion. The Commission will consider a petition for reconsideration only when the petitioner shows either a material error in the Commission’s original determination, or raises additional facts not known or existing at the time of the petitioner’s last opportunity to present such matters.⁸ Petitioner has not demonstrated any legal error in the Bureau’s dismissal of the Application, nor has it cited any precedent that warrants reinstatement.

Section 73.807 Violation. Bureau staff correctly dismissed the Application for failure to meet the co-channel and second-adjacent channel spacing requirements, as outlined in section 73.807(a). Specifically, LPFM applicants must protect authorized FM stations, pending applications for new and existing FM stations filed prior to the release of the *Procedures Public Notice*, authorized LPFM stations, and vacant FM allotments, by meeting the minimum distance separation requirements specified in section 73.807 of the Commission’s rules.⁹ Pursuant to section 73.870(c), any application submitted during an LPFM filing window that fails to meet the spacing requirements of section 73.807 will be dismissed without opportunity to amend.¹⁰ Moreover, the *Procedures Public Notice* warned LPFM applicants that, “[c]onsistent with established processing rules, an LPFM application that fails to protect these authorizations, applications, and vacant FM allotments will be *dismissed with no opportunity to correct the deficiency*.”¹¹

In addition, section 3(b)(1) of the Local Community Radio Act of 2010 (LCRA) statutorily bars the Commission from “amend[ing] its rules to reduce the minimum co-channel and first-and second-adjacent channel distance separation requirements” in effect on the date of its enactment, and the Commission cannot waive the co-channel minimum distance spacing requirements imposed by statute.¹² Although section 3(b)(2)(A) of the LCRA authorizes the Commission to waive second-adjacent channel spacing requirements, an LPFM applicant must specifically request the waiver and demonstrate that its

⁷ Petition at 1.

⁸ See 47 CFR § 1.106(c), (d); see also *WWIZ, Inc.*, Memorandum Opinion and Order, 37 FCC 685, 686 (1964).

⁹ See 47 CFR § 73.807(a)(1).

¹⁰ See *id.* § 73.870(c).

¹¹ See *Procedures Public Notice* at 3 and n.14 (emphasis in original) (citing *Low Power FM Filing Window*, Public Notice, 15 FCC Rcd 24817, 24818 (MB 2000); *Media Bureau Announces Availability of the Revised FCC Form 318 and the Filing Procedures for October 15-October 29, 2013 Low Power FM Filing Window*, Public Notice, 28 FCC Rcd 8854, 8855 (MB 2013); 47 CFR §73.870(c)); see also *Christian Charities Deliverance Church*, Memorandum Opinion and Order, 30 FCC Rcd 10548, 10552-53, paras. 11-12 (2015) (*Christian Charities*) (affirming section 73.870(c) dismissal of applications for failure to meet minimum spacing requirements).

¹² Pub. L. No. 111-371, 124 Stat. 4072 (2011). See also *Rural Health Care Support Mechanism*, Order, 22 FCC Rcd 20360, 20415, para. 106 (2007) (“although the Commission has authority to waive regulatory requirements, it does not have authority to waive a requirement imposed by statute”); *Federal-State Joint Board on Universal Service*, Memorandum Opinion and Order, 15 FCC Rcd 7170, 7178, para. 13 (1999) (rejecting request to waive statute); see also *Chrysler Corp. v. Brown*, 441 U.S. 281, 302 (1979) (“[T]he exercise of quasi-legislative authority by governmental departments and agencies must be rooted in a grant of such power by the Congress and subject to the limitations which that body imposes.”).

proposed LPFM facilities “will not result in interference to any authorized radio service.”¹³ The Bureau explicitly cautioned LPFM applicants that it will dismiss any application that fails to comply with the second-adjacent channel spacing requirements without requesting a waiver, supported by the requisite engineering exhibit, and that a dismissed applicant will *not* be permitted to seek *nunc pro tunc* reinstatement of its application.¹⁴

Here, the Bureau correctly dismissed the Application because Petitioner failed to meet the minimum distance spacing requirements of section 73.807(a)(1) with respect to co-channel station WHJT(FM), and second-adjacent channel station WJAI(FM). The Commission has previously held that the Bureau may properly prohibit dismissed LPFM applicants that did not comply with the co-channel and second-adjacent channel spacing rules in the filing window from filing amendments to correct violations of section 73.807.¹⁵ Additionally, typographical error claims cannot be used to justify filing an otherwise prohibited amendment.¹⁶ Petitioner has not demonstrated any basis to contravene the rules and established precedent and reinstate the Application.

Section 73.870(c) Waiver Request. We reject Petitioner’s request of a waiver of section 73.870(c) to allow it to amend the Application to correct the proposed Station coordinates to meet the minimum spacing requirements of section 73.807. The Commission’s Rules may be waived only for good cause shown.¹⁷ The Commission must give waiver requests “a hard look,” but an applicant for waiver “faces a high hurdle even at the starting gate”¹⁸ and must support its waiver request with a compelling showing.¹⁹ Waiver is appropriate only if both (1) special circumstances warrant a deviation from the general rule, and (2) such deviation better serves the public interest.²⁰

Petitioner fails to meet this burden. Petitioner states generally that a waiver “serves the public interest,”²¹ but offers no other justification, circumstance, or precedent warranting grant of the request. Petitioner likewise fails to assert a “special circumstance” warranting the waiver beyond the error of its engineer. The Commission, however, has long held that errors made by engineering consultants are not

¹³ Pub. L. No. 111-371, 124 Stat. 4072 (2011); 47 CFR § 73.807(e) (outlining LPFM applicant requirements for a second-adjacent channel spacing waiver).

¹⁴ See *Procedures Public Notice* at 4; see also *Clifford Brown Jazz Foundation*, Memorandum Opinion and Order, 29 FCC Rcd 13258 (2014) (*Clifford Brown*) (affirming dismissal of application, without ability to amend and seek reinstatement, where applicant failed to comply with second-adjacent spacing rules and failed to include a waiver request with its application) (citing 47 CFR § 73.870(c)).

¹⁵ See *Calvary Chapel of Bremerton*, Letter Order, 28 FCC Rcd 15537, 15538-39 (MB 2013) (dismissing LPFM applications that fail to meet minimum co-channel spacing requirements, and noting that the Commission does not have authority to waive co-channel spacing requirements); *Christian Charities*, 30 FCC Rcd at 10549, para. 5 (finding *nunc pro tunc* reinstatement inapplicable because it is superseded by section 73.870(c)) (citing *People of Progress*, Memorandum Opinion and Order, 29 FCC Rcd 15065 (2014); *Clifford Brown*, 29 FCC Rcd 13258).

¹⁶ *NCE MX Group 82*, Letter Order, DA 23-348 (MB Apr. 25, 2023) (rejecting argument to correct typographical error where corrective amendment was prohibited because it would result in increased mutually exclusivity and was a major amendment).

¹⁷ 47 CFR § 1.3.

¹⁸ *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969) (subsequent history omitted).

¹⁹ *Greater Media Radio Co., Inc.*, Memorandum Opinion and Order, 15 FCC Rcd 7090 (1999) (citing *Stoner Broadcasting System, Inc.*, Memorandum Opinion and Order, 49 FCC 2d 1011, 1012 (1974)).

²⁰ *NetworkIP, LLC v. FCC*, 548 F.3d 116, 125-128 (D.C. Cir. 2008); *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

²¹ Petition at 1.

an excuse for failure to adhere to the Rules.²² Additionally, the Commission has held that the fact that an application is a singleton²³ is not a special circumstance that justifies a waiver of the Rules.²⁴ Moreover, permitting applicants to file application amendments to resolve section 73.807 minimum distance separation requirements after the close of the filing window and the Commission's dismissal of their applications would frustrate the processing efficiencies which sections 73.807 and 73.870(c) were designed to promote, be unfair to the many applicants who fully complied with the rules and filing requirements, and is therefore, contrary to the public interest.²⁵ Accordingly, we find Petitioner fails to show that special circumstances warrant a deviation from our rules or that such deviation would serve the public interest.

Supplement. Finally, under section 1.106(f) of the Rules, a "petition for reconsideration and any supplement thereto shall be filed within 30 days from the date of public notice of the final Commission action."²⁶ The *Dismissal Public Notice* was issued on January 19, 2024, and, therefore, any petition for reconsideration or supplement was required to be filed by February 18, 2024.²⁷ Because the Petitioner filed the Supplement on February 27, 2024, we dismiss it as untimely. Additionally, the Supplement is effectively an amendment to the Application and a prohibited attempt to circumvent section 73.870(c) of the Rules. Thus, we would have declined to consider the Supplement even it was timely filed.

Conclusion. For the reasons set forth above, **IT IS ORDERED** that the Petition for Reconsideration filed by RENEW Taylorsville, on January 29, 2024 (Pleading File No. 0000237234) **IS DENIED**, and the Supplement filed on February 27, 2024 (Pleading File No. 0000239847) **IS DISMISSED** as untimely.

Sincerely,

Albert Shuldiner
Chief, Audio Division
Media Bureau

²² See *Roy E. Henderson*, Memorandum Opinion and Order, 33 FCC 3385, 3387-88, para. 6 (2018) (rejecting argument that licensee's engineer was to blame for station's unauthorized operations); *Whidbey Island Ctr. for the Arts*, Forfeiture Order, 25 FCC Rcd 8204, 8205, para. 6 and n.12 (MB 2010) ("the Commission has long held that 'licensees are responsible for the acts and omissions of their employees and independent contractors'"); *Vista Services Corporation*, Forfeiture Order, 15 FCC Rcd 20646, 20650 para. 9, n.24 (2000) ("[e]mployers are routinely held liable for breach of statutory duties, even where the failings are those of an independent contractor").

²³ An application which is not in conflict with any other application is deemed a singleton application.

²⁴ See *NCE MX Group 543*, Memorandum Opinion and Order, 31 FCC Rcd 1358, 1360-61, para. 6 (2016).

²⁵ See *Creation of a Low Power Radio Service*, Report and Order, 15 FCC Rcd 2205, 2257 (2000) ("In accordance with our window filing procedure for commercial broadcast applications, after the LPFM window closes, the staff initially will screen applications for the purpose of identifying those that are mutually exclusive and those that fail to protect existing broadcast stations in accordance with the standards adopted herein. Applications that fail to properly protect these existing stations will be dismissed without the applicant being afforded an opportunity to amend. This will increase the speed and efficiency with which LPFM applications can be processed by the staff.").

²⁶ 47 CFR § 1.106(f). The 30-day period for filing the Supplement ended on Sunday, February 17, which was a holiday as defined by the Rules. Thus, the Supplement should have been filed on the first business day after February 17, 2024, which was Monday, February 18, 2024.

²⁷ See 47 CFR § 1.4(e)(1).



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-290

Released: March 22, 2024

INTERNET PROTOCOL CAPTIONED TELEPHONE SERVICE PROVIDERS' COST AND DEMAND DATA TO BE PLACED IN THE RECORD

CG Docket Nos. 22-408, 13-24, and 03-123

Oppositions Due: March 29, 2024

On December 21, 2022, the Federal Communications Commission (Commission) adopted a Notice of Proposed Rulemaking seeking comment on Telecommunications Relay Services (TRS) Fund compensation for the provision of Internet Protocol Captioned Telephone Service (IP CTS).¹ The current compensation formula for IP CTS is effective through June 30, 2024—or the effective date of Commission action revising the compensation formula, if earlier.²

To assist the Commission's consideration of compensation options, the Consumer and Governmental Affairs Bureau (CGB or Bureau) intends to place in the record of this rulemaking proceeding certain worksheets from each IP CTS provider's completed TRS Fund Annual Provider Form for 2024, i.e., the worksheets of historical and projected expenses and demand for the provision of IP CTS for the years 2022 through 2025, filed this year with the Interstate TRS Fund administrator. In addition, CGB intends to place in the record certain information contained in individual providers' TRS Fund Annual Provider Form Appendices, relating to currently non-allowable cost categories.³ The above information (2024 IP CTS Provider Cost and Demand Data) will be designated as Highly Confidential Information subject to the terms of the *Third Protective Order* and will not be available to the general public, but may be examined by appropriate persons on behalf of interested parties, subject to protections for confidentiality.⁴

Affected parties have until March 29, 2024, to oppose placing the 2024 IP CTS Provider Cost and Demand Data in the record, subject to the *Third Protective Order*. If submission of the data into the record is opposed, the procedures set forth in 47 CFR § 0.461(i) shall apply. All filings should refer to CG Docket Nos. 22-408, 13-24, and 03-123.

¹ *Internet Protocol Captioned Telephone Service Compensation; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Misuse of Internet Protocol (IP) Captioned Telephone Service*, CG Docket Nos. 22-408, 03-123, and 13-24, Notice of Proposed Rulemaking and Order on Reconsideration, 37 FCC Rcd 15243 (2022) (*Notice*).

² *Internet Protocol Captioned Telephone Service Compensation; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Misuse of Internet Protocol (IP) Captioned Telephone Service*, CG Docket Nos. 22-408, 03-123, 13-24, Order, DA 23-1189 (CGB Dec. 20, 2023) (*December 2023 Extension Order*).

³ See *Notice*, 37 FCC Rcd at 15252-56, paras. 26-35.

⁴ *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program; Misuse of Internet Protocol (IP) Captioned Telephone Service*, CG Docket Nos. 03-123, 10-51, and 13-24, Order and Third Protective Order, 33 FCC Rcd 6802 (CGB 2018) (*Third Protective Order*).

After the 2024 IP CTS Provider Cost and Demand Data is placed in the record, outside persons participating or intending to participate in the proceeding who are not involved in competitive decision-making activities and who have signed the Acknowledgment of Confidentiality attached to the *Third Protective Order* may review the 2024 IP CTS Provider Cost and Demand Data in accordance with the terms of the *Third Protective Order*.⁵ We emphasize that persons seeking to review the 2024 IP CTS Provider Cost and Demand Data may do so only for purposes of participating in this proceeding and must have adequate protections in place to prevent improper use or disclosure of the information.⁶

Reviewing Parties should request the 2024 IP CTS Provider Cost and Demand Data from the Bureau via email to Michael Scott, Deputy Chief, Disability Rights Office, Consumer and Governmental Affairs Bureau, at Michael.Scott@fcc.gov. Reviewing parties shall include with their email requests to the Bureau a copy of the executed Acknowledgment agreeing to be bound by the terms and conditions of the *Third Protective Order*.⁷ A Reviewing Party also shall deliver a copy of the Acknowledgment to each of the relevant Third-Party Interest Holders through its Counsel of Record so that it is received at least five business days prior to such Reviewing Party reviewing or having access to the Highly Confidential Information.⁸ A Third-Party Interest Holder must file, and serve on counsel for the Reviewing Party, any objection to a Reviewing Party's access within three business days after receiving a copy of the Acknowledgment.⁹ Reviewing Parties shall not have access to Confidential Information or Highly Confidential Information before the period for filing objections has passed, unless both the Bureau and the Third-Party Interest Holders waive this requirement.¹⁰ The Bureau will make the data available in an electronic format and will transmit the data electronically.¹¹

Under the Commission's current procedures for the submission of filings and other documents, submissions in this matter may be filed electronically (i.e., through ECFS) or on paper to the Commission.

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <https://www.fcc.gov/ecfs/filings>.
- Paper Filers:
 - Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.
 - Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.¹²

⁵ See *id.* at 6815, Appx. C.

⁶ See *id.* at 6811, Appx. A, para. 14.

⁷ See *id.* at 6809, Appx. A, para. 6; *id.* at 6815, Appx. C.

⁸ See *id.* at 6809, Appx. A, para. 6.

⁹ See *id.* at 6809, Appx. A, para. 7.

¹⁰ See *id.*

¹¹ See *id.* at 6810, Appx. A, para. 9.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail may be addressed to 45 L Street, NE, Washington, DC 20554.

Accessible Materials. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530.

For further information, contact Michael Scott, Deputy Chief, Disability Rights Office, Consumer and Governmental Affairs Bureau, at michael.scott@fcc.gov or (202) 418-1264.

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(Continued from previous page) _____

¹² See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (OMD 2020).



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202 / 418-0500
Internet: <https://www.fcc.gov>

DA 24-293

Released: March 25, 2024

FCC ANNOUNCES THE MEMBERSHIP OF THE WORKING GROUPS OF THE TASK FORCE FOR REVIEWING THE CONNECTIVITY AND TECHNOLOGY NEEDS OF PRECISION AGRICULTURE IN THE UNITED STATES

GN Docket No. 19-329

This Public Notice serves as notice that, consistent with the Federal Advisory Committee Act¹ and the Agriculture Improvement Act of 2018,² Federal Communications Commission Chairwoman Jessica Rosenworcel, in consultation with Secretary of Agriculture Tom Vilsack, has appointed Working Group members to serve on the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States (Precision Ag Connectivity Task Force or Task Force).

The following working groups will assist the Task Force in carrying out its work: (1) Mapping and Analyzing Connectivity on Agricultural Lands; (2) Examining Current and Future Connectivity Demand for Precision Agriculture; (3) Encouraging Adoption of Precision Agriculture and Availability of High-Quality Jobs on Connected Farms; and (4) Accelerating Broadband Deployment on Unserved Agricultural Lands. A full list of Task Force Working Group members appointed by the Chairwoman in consultation with the Secretary is attached to this Public Notice as Appendix A.³

More information about the Precision Ag Connectivity Task Force is available at <https://www.fcc.gov/task-force-reviewing-connectivity-and-technology-needs-precision-agriculture-united-states>. You may also contact Emily Caditz, Designated Federal Officer, at (202) 418-2268, or Emily.Caditz@fcc.gov; and Thomas Hastings, Deputy Designated Federal Officer, at (202) 418-1343, or Thomas.Hastings@fcc.gov.

- FCC -

¹ Federal Advisory Committee Act, 5 U.S.C. App. 2 (FACA).

² Pub. L. No. 115-334, 132 Stat. 4490 (2018 Farm Bill).

³ For more information on the working groups, see *FCC Announces and Solicits Nominations for Working Groups of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States*, GN Docket No. 19-329, Public Notice, 34 FCC Rcd 10496 (WCB 2019).

APPENDIX A

**MEMBERS OF THE PRECISION AGRICULTURE CONNECTIVITY TASK FORCE
WORKING GROUPS**

* Indicates a member of the Precision Agriculture Connectivity Task Force

^ Indicates an application for membership has been submitted and is pending approval

Mapping and Analyzing Connectivity on Agricultural Lands Working Group**Chair:**

Joseph M. Carey*
Special Government Employee

Vice Chair:

Brad Robison*
Chief Executive Officer, Tallahatchie Valley Electric Power Association and Tallahatchie Valley Internet Services, LLC; President, MS Fiber (representing the *National Rural Electric Cooperative Association*)

Members:

Michael Adelaine, Ph.D.*
CIO Emeritus & Special Advisor to the President, *South Dakota State University*

Sreekala Bajwa, Ph.D.*
Vice President, Dean & Director, *Montana State University College of Agriculture & Montana Agricultural Experiment Station*

Luke Deryckx ^
Special Government Employee

B. Lynn Follansbee
Vice President, Policy & Advocacy, *USTelecom – The Broadband Association*

Cody Goodnight
Managing Partner, Goodknight Farms (representing *Oklahoma Farm Bureau*)

Todd Harpest
Business Intelligence Analyst, *WISPER ISP, LLC*

Examining Current and Future Connectivity Demand for Precision Agriculture Working Group:**Chair:**

Joy Sterling*
Chief Executive Officer, *Iron Horse Vineyards*

Vice Chair:

Steven Strickland
Director, Partnerships & Channels, *Ericsson*

Members:

Andy Bater*
Farmer, *Fifth Estate Growers LLC*

Steven Hill*
President, *Satellite Broadcasting and Communications Association*

Brent Kemp
Chief Executive Officer, *AgGateway*

Ryan Krogh*
Global Combine and FEE Business Manager, *John Deere*

Daniel Maycock
Vice President, Professional Services, *CropTrak*

George Woodward
President and Chief Executive Officer, Trilog Networks, Inc. (representing the *Rural Wireless Association*)

Encouraging Adoption of Precision Agriculture and Availability of High-Quality Jobs on Connected Farms Working Group:

Chair:

Joshua Seidemann*
Vice President of Policy, *NTCA–The Rural Broadband Association*

Vice Chair:

J. Alex Thomasson, Ph.D., P.E.
Professor, Department Head and William and Sherry Berry Endowed Chair, Department of Agricultural and Biological Engineering, *Mississippi State University*

Members:

Taylre Beaty
State Broadband Director, State of Tennessee Department of Economic and Community Development

Timothy Bradford, Jr., Ph.D.*
Director of Agronomy, *Vayda, Inc.*

Julie Bushell*
Chief Executive Officer, Ethos Connected (representing *Irrigation Association*)

Hunter Hook
Managing Director, Communication Banking Group, *CoBank*

Russell Peotter
Senior Advisor, *America's Public Television Stations*

Kevin Royal
Precision Agriculture Specialist, *Clemson University Center for Agricultural Technology*

Accelerating Broadband Deployment on Unserved Agricultural Lands Working Group:

Chair:

Heather Hampton+Knodle*
Vice President & Secretary, *Knodle Ltd. Farms*

Vice Chair:

Jarrett Taubman

Vice President and Deputy Chief Government Affairs and Regulatory Officer, *Viasat*

Members:

David Crawford

Principal Corporate Counsel, Federal Regulatory Affairs, *T-Mobile USA, Inc.*

Louis E. Paraertz

Vice President of Policy, *WISPA – Broadband Without Boundaries*

Matthew R. Peterson

Member, *The National Grange*

Carolyn Price*

Executive Director, *Upstate New York Towns Association*

Dan Watermeier*

Commissioner, First District, *Nebraska Public Service Commission*

Douglas Weber ^

Special Government Employee

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
July 1, 2024) WC Docket No. 24-41
Annual Access Charge Tariff Filings)

ORDER

Adopted: March 27, 2024

Released: March 27, 2024

By the Chief, Pricing Policy Division:

15-DAY TARIFF FILINGS: June 17, 2024
EFFECTIVE: July 2, 2024
PETITIONS: June 24, 2024
REPLIES: June 28, 2024 (due no later than 12:00 p.m. (noon) Eastern Time)

7-DAY TARIFF FILINGS: June 25, 2024
EFFECTIVE: July 2, 2024
PETITIONS: June 28, 2024 (due no later than 12:00 p.m. (noon) Eastern Time)
REPLIES: July 1, 2024 (due no later than 12:00 p.m. (noon) Eastern Time)

I. INTRODUCTION

1. In this Order, we establish procedures for the 2024 filing of annual access charge tariffs and tariff review plans (TRPs) for price cap incumbent local exchange carriers and rate-of-return incumbent local exchange carriers subject to sections 61.38, 61.39, and 61.50 of the Commission’s rules (collectively incumbent LECs or carriers).¹

2. This Order: (1) sets an effective date of July 2, 2024 for 2024 annual access charge tariff filings pursuant to a limited waiver; (2) establishes the dates for filing petitions to suspend or reject carrier’s tariff filing and replies to such petitions;² and (3) addresses service of the petitions and replies.

3. In the USF/ICC Transformation Order, the Commission adopted rules requiring incumbent LECs to reduce, over a period of years, many of their switched access rates.³ That rate transition ended in 2020.⁴ The Commission also established Eligible Recovery which enables incumbent

1 47 CFR §§ 61.38 (rate-of-return carriers that file tariffs based on projected costs and demand), 61.39 (rate-of-return carriers that file tariffs based on historical costs and demand), 61.43 (tariff filings for price cap carriers), and 61.50 (regulation of business data services offered by rate-of-return carriers electing incentive regulation).

2 See 47 CFR § 1.773.

3 Connect America Fund et al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17677, 17934-35, 18149, paras. 36, 801 & fig. 9, 1404 (2011) (USF/ICC Transformation Order), pets. for review denied sub nom. In re: FCC 11-161, 753 F.3d 1015 (10th Cir. 2014); 47 CFR §§ 51.915, 51.917.

4 Price cap carriers were required to transition certain tariffed switched access rates effective July 1 on each of those years to bill-and-keep (\$0) over a six-year period that ended in 2018. Rate-of-return carriers were required to transition certain tariffed switched access rates effective July 1 on each of those years to bill-and-keep (\$0) over a nine-year period that ended in 2020. See USF/ICC Transformation Order, 26 FCC Rcd at 17934-96, para. 801, fig. 9; 47 CFR §§ 51.907(h), 51.909(j).

LECs to recover a decreasing portion of their lost revenue attributable to the required switched access rate reductions.⁵ We rely on TRP worksheets⁶ submitted by filing carriers to confirm that the annual adjustments to Eligible Recovery have been implemented in accordance with the Commission's rules.⁷ All correspondence and comments in connection with these filings should refer to the caption of this proceeding, *July 1, 2024 Annual Access Charge Tariff Filings*, WC Docket No. 24-41.

II. DISCUSSION

A. Tariff Effective Dates and Tariff Filing Dates

4. The Commission's rules generally require carriers to file annual access charge tariffs with a scheduled effective date of July 1.⁸ The Commission's rules, however, do not preclude the filing of revisions to annual tariffs effective on dates other than July 1.⁹ Carriers may submit their annual tariff filings on a streamlined basis pursuant to section 204(a)(3) of the Communications Act of 1934, as amended, either 15 or 7 days prior to the scheduled effective date of their tariff revisions, depending on the type of changes they propose to make.¹⁰ Unless the Commission takes action during the relevant statutory notice periods, rates contained in annual tariff filings filed 15 days (for rate increases) or 7 days (for rate reductions) prior to the effective date are "deemed lawful."¹¹ For the 2024 tariff filings, carriers filing tariffs on 15-days' notice must submit their annual tariff filings on June 17, 2024 to be effective July 2, 2024. Carriers filing tariffs on 7-days' notice must submit their annual tariff filings on June 25, 2024 to be effective July 2, 2024.

5. To establish an effective date of July 2, 2024 for 15-days' and 7-days' notice tariff filings, we grant a limited waiver of sections 69.3, 51.907, 51.909, 51.915, and 51.917 of the Commission's rules to the extent that those rules would otherwise require rates to be effective July 1, 2024.¹² Absent a waiver, carriers filing on 15-days' notice would need to submit their annual tariff filings on June 16, 2024, a Sunday, to be effective July 1, 2024. However, a filing received by the Commission

⁵ *USF/ICC Transformation Order*, 26 FCC Rcd at 17677, 17956-96, paras. 36, 847-923; 47 CFR §§ 51.915, 51.917.

⁶ Commission staff works with industry to prepare updated TRP worksheets every year. TRP worksheets collect and display the information necessary to calculate Eligible Recovery in a consistent manner, facilitating review by Commission staff and interested parties. Carriers are free, however, to create and use their own TRPs, as long as those TRPs comply with the Commission's rules. See *July 1, 2022 Annual Access Charge Tariff Filings*, WC Docket No. 22-108, Order, 37 FCC Rcd 5972, 5972, para. 2 (PPD 2022).

⁷ See *USF/ICC Transformation Order*, 26 FCC Rcd at 18149, para. 1404 (delegating authority to the Wireline Competition Bureau, as appropriate, to implement the rules adopted in the *USF/ICC Transformation Order*).

⁸ See 47 CFR §§ 69.3(a).

⁹ 47 CFR § 69.3(b).

¹⁰ 47 U.S.C. § 204(a)(3) ("A local exchange carrier may file with the Commission a new or revised charge, classification, regulation, or practice on a streamlined basis...[which]...shall be deemed lawful and shall be effective 7 days (in the case of a reduction in rates) or 15 days (in the case of an increase in rates) after the date on which it is filed with the Commission unless the Commission takes action...before the end of that 7-day or 15-day period, as is appropriate."); 47 CFR § 61.58(a)(2)(i) (pursuant to section 204(a)(3) of the Act, local exchange carriers may file streamlined tariffs on 7-days' notice if it proposes only rate decreases, and on 15-days' notice for any other streamlined tariff including those that propose rate increases).

¹¹ 47 U.S.C. § 204(a)(3).

¹² 47 CFR §§ 69.3, 51.907, 51.909, 51.915, 51.917. Generally, the Commission's rules may be waived for "good cause shown." 47 CFR § 1.3. The Commission may exercise its discretion to waive a rule where the particular facts make strict compliance inconsistent with the public interest. *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990). Waiver of the Commission's rules is therefore appropriate only if special circumstances warrant a deviation from the general rule and such deviation will serve the public interest. *Id.* The Commission may, on an individual basis, consider evidence of hardship, equity, and more effective implementation of overall policy. *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

on a Sunday, a holiday on which the Commission is closed, would be counted as filed on the next business day, June 17, 2024,¹³ which is less than 15 days prior to the July 1, 2024 effective date. A limited waiver is necessary to allow carriers to avail themselves of the 15-days' notice streamlined tariff filing procedures established by section 204(a)(3) of the Act. Under this limited waiver, carriers submitting annual tariff filings on 15-days' notice must do so on June 17, 2024 to be effective date July 2, 2024.¹⁴ For administrative consistency, we likewise establish an effective date of July 2, 2024 for 7-days' notice tariff filings. Accordingly, carriers submitting annual filings on 7-days' notice must do so on June 25, 2024 to be effective July 2, 2024.

6. Carriers that file tariffs under the price cap ratemaking methodology are required to file revised annual access charge tariffs every year.¹⁵ Carriers that file tariffs under a rate-of-return ratemaking methodology are required to file every other year. Carriers filing pursuant to the requirements of section 61.38 of the Commission's rules are required to file annual access charge tariffs this year, an even-numbered year.¹⁶ Ordinarily, rate-of-return carriers subject to section 61.39 of the Commission's rules¹⁷ would not be required to file annual access charge tariffs this year, because they file revisions in odd-numbered years.¹⁸ Pursuant to the *USF/ICC Transformation Order*, however, rate-of-return carriers subject to section 61.39 of the Commission's rules must submit tariff filings each year including this year to comply with the requirements of section 51.917(d)(1)(iv), (e), and (f) of the Commission's rules.¹⁹

B. Tariff and Tariff Review Plan Filing Instructions

7. Carriers must file their tariff materials through the Commission's Electronic Tariff Filing System (ETFS)²⁰ and submit the associated complex tariff filing fee payment through the Commission's Registration System (CORES).²¹ Carriers should make every effort to file as early in the day as possible to avoid any complications in meeting the applicable filing deadlines. Carriers' 15-days' notice tariff filings must be received by ETFS after 7:00 p.m. Eastern Time on June 14, 2024 and before 7:00 p.m. Eastern Time on June 17, 2024 for the filing to be considered officially received on June 17, 2024. Carriers' 7-days' notice tariff filings must be received after 7:00 p.m. Eastern Time on June 24, 2024 and before 7:00 p.m. Eastern Time on June 25, 2024 for the filing to be considered officially received on June 25, 2024.

8. The public and interested parties may obtain copies of tariffing materials through ETFS. For more information, please contact either Christopher S. Koves, Pricing Policy Division, Wireline Competition Bureau, Christopher.Koves@fcc.gov, or Richard Kwiatkowski, Economic Analysis Division, Office of Economics and Analytics, Richard.Kwiatkowski@fcc.gov.

C. Pleading Filing Dates and Procedures

9. Petitions to suspend or reject 15 days' notice tariff filings will be due no later than 7:00 p.m. Eastern Time on June 24, 2024, and replies will be due no later than 12:00 p.m. (noon) Eastern Time

¹³ See 47 CFR § 1.4(e)(1), (j), (k)(1).

¹⁴ See *July 1, 2017 Annual Access Charge Tariff Filings*, WC Docket No. 17-65, Order, 32 FCC Rcd 1918, 1918, 1923, paras. 2 n.2, 15 (PPD 2017) (waiving Commission rules that otherwise would require rates filed on 7-days' notice to be effective on July 1 because the 7-days' notice filing deadline fell on a Saturday).

¹⁵ 47 CFR § 61.43.

¹⁶ 47 CFR §§ 61.38, 69.3(f)(1).

¹⁷ 47 CFR § 61.39.

¹⁸ 47 CFR § 69.3(f)(2).

¹⁹ 47 CFR § 51.917(d)(1)(iv), (e), (f).

²⁰ See 47 CFR § 61.13(b). Access to ETFS is available here: <https://apps.fcc.gov/etfs/etfsHome.action>.

²¹ 47 CFR § 1.1105. For more information about the CORES Payment System, please visit: <https://www.fcc.gov/licensing-databases/fees/cores-payment-system>.

on June 28, 2024. Petitions to suspend or reject 7-days' notice tariff filings will be due no later than 12:00 p.m. (noon) Eastern Time on June 28, 2024, and replies will be due no later than 12:00 p.m. (noon) Eastern Time on July 1, 2024. We waive those portions of sections 1.4(f) and 1.773 of the Commission's rules that are inconsistent with these deadlines.²²

10. Pursuant to sections 1.419 and 1.773 of the Commission's rules, interested parties may file petitions to suspend or reject tariff filings, and replies thereto, on or before the dates indicated in this Order.²³ Pleadings must reference **WC Docket No. 24-41** and must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- Electronic Filers: Pleadings may be filed electronically using the Commission's Electronic Comment Filing System (ECFS): www.fcc.gov/ecfs.²⁴
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
 - U.S. Postal Service First-Class, Express, and Priority mail must be addressed to 45 L Street NE, Washington, DC 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings at its headquarters. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.²⁵

11. *People with Disabilities.* To request materials in accessible formats for people with disabilities (Braille, large print, *electronic* files, audio format), send an email to fcc504@fcc.gov.

12. *Courtesy Copies.* On the day an electronic filing is submitted, an electronic courtesy copy of any comments, reply comments, petitions, and replies, must also be emailed to Christopher Koves, Christopher.Koves@fcc.gov, and Richard Kwiatkowski, Richard.Kwiatkowski@fcc.gov.

13. *Ex Parte Rules.* The proceeding this Order initiates shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.²⁶ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given

²² See 47 CFR §§ 1.3, 1.4(f), 1.773(a), (b).

²³ *Id.* §§ 1.419, 1.773.

²⁴ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

²⁵ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (OMD 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

²⁶ 47 CFR § 1.1200 *et seq.*

to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

D. Service

14. Because there is limited time available for review of petitions to suspend or reject tariff filings made pursuant to this Order, we establish the following service requirements for such petitions and responses thereto. Any party filing a petition to suspend or reject such a tariff filing must also serve that petition on the relevant tariff-filer, or the tariff-filer's attorney or other duly-constituted agent, by personal delivery, facsimile transmission, or email.²⁷ Any party responding to a petition to suspend or reject must serve that response on the relevant petitioner, or the petitioner's attorney or other duly-constituted agent, by personal delivery, facsimile transmission, or email. To effectuate these service requirements, we waive those portions of sections 1.47(d), 1.773(a)(4) and 1.773(b)(3) of the Commission's rules that are inconsistent with the requirements set forth above.²⁸ Parties are instructed to provide contact persons, email addresses, and facsimile numbers in their filings.

III. ORDERING CLAUSES

15. Accordingly, IT IS ORDERED that, pursuant to sections 1, 4(i) and (j), 5, and 201-209 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i)-(j), 155, 201-209, and sections 0.91 and 0.291 of the Commission's rules, 47 CFR §§ 0.91, 0.291, this Order IS ADOPTED.

16. IT IS FURTHER ORDERED that, pursuant to sections 0.91, 0.291, and 1.3 of the Commission's rules, 47 CFR §§ 0.91, 0.291, 1.3, sections 69.3, 51.907, 51.909, 51.915, and 51.917 ARE WAIVED to the extent specified herein in paragraph 5.

17. IT IS FURTHER ORDERED that, pursuant to sections 0.91, 0.291, and 1.3 of the Commission's rules, 47 CFR §§ 0.91, 0.291, 1.3, that sections 1.4(f), 1.47(d), and 1.773 of the Commission's rules, 47 CFR §§ 1.4(f), 1.47(d), 1.773, ARE WAIVED for the limited purposes specified herein in paragraphs 9 and 14.

18. IT IS FURTHER ORDERED that, pursuant to section 1.102(b)(1) of the Commission's rules, 47 CFR § 1.102(b)(1), this Order SHALL BE EFFECTIVE upon release.

FEDERAL COMMUNICATIONS COMMISSION

Victoria S. Goldberg
Chief, Pricing Policy Division
Wireline Competition Bureau

²⁷ See *id.* §§ 1.773(a)(4), (b)(3).

²⁸ *Id.* §§ 1.3, 1.47(d), 1.773(a)(4), (b)(3).



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202 / 418-0500
Internet: <https://www.fcc.gov>
TTY: 1-888-835-5322

DA 24-295

Released: March 27, 2024

WIRELINE COMPETITION BUREAU REMINDS NONDOMINANT INTEREXCHANGE CARRIERS TO FILE ANNUAL SECTION 64.1900 CERTIFICATIONS BY MAY 1, 2024

CC Docket No. 96-61

By this Public Notice, the Wireline Competition Bureau (Bureau) reminds nondominant interexchange carriers (IXCs) to submit annual filings by **May 1, 2024** certifying compliance with their geographic rate averaging and rate integration obligations pursuant to section 64.1900 of the Commission's rules.¹

Section 254(g) of the Communications Act of 1934, as amended (the Act), requires providers of interexchange telecommunications services to charge rates to subscribers in rural and high cost areas that are no higher than urban areas and to charge rates in one state that are no higher than rates charged in other states.² As part of the rules implementing section 254(g) of the Act, the Commission adopted section 64.1900, requiring nondominant IXCs providing detariffed interstate, domestic, interexchange services, to annually certify that they are in compliance with their geographic rate averaging and rate integration obligations pursuant to section 254(g) of the Act.³ The rule requires these certifications to be signed by an officer of the company, under oath.⁴ Consistent with past practice, the annual certifications should continue to be filed by May 1 each year.⁵ Accordingly, the annual section 64.1900 certifications should be filed this year on or before May 1, 2024.

Filing Requirements. Pursuant to section 64.1900 of the Commission's rules, 47 CFR § 64.1900, nondominant IXCs must file their annual certifications on or before May 1, 2024. Certifications must be filed in **CC Docket No. 96-61**.

¹ 47 CFR § 64.1900.

² 47 U.S.C. § 254(g).

³ 47 CFR § 64.1900; 47 U.S.C. § 254(g); *see Policy and Rules Concerning the Interstate, Interexchange Marketplace*, CC Docket No. 96-61, Second Report and Order, 11 FCC Rcd 20730, 20773-78, paras. 78-87 (1996); Order on Reconsideration, 12 FCC Rcd 15014 (1997); Second Order on Reconsideration and Erratum, 14 FCC Rcd 6004 (1999).

⁴ 47 CFR § 64.1900(b).

⁵ *See Wireline Competition Bureau Reminds Nondominant Interexchange Carriers to File Annual Section 64.1900 Certifications by May 1, 2023*, CC Docket No. 96-61, Public Notice, DA 23-270, 2023 WL 2967544 (WCB Mar. 30, 2023); *Common Carrier Bureau Extends Deadline for First Annual Certification of Compliance with Geographic Deaveraging and Rate Integration Requirements to August 1, 2001*, CC Docket No. 96-61, Public Notice, 16 FCC Rcd 4556 (Com. Car. Bur. 2000).

- Electronic Filers: Certifications may be filed electronically via the Commission's Electronic Comment Filing System (ECFS): <http://apps.fcc.gov/ecfs/>.⁶
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
 - U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, DC 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings at headquarters. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.⁷

People with Disabilities. To request materials in accessible formats (such as Braille, large print, electronic files, or audio format), please send an email to fcc504@fcc.gov.

For more information about this Public Notice, please contact Christopher S. Koves, Pricing Policy Division, Wireline Competition Bureau, Christopher.Koves@fcc.gov.

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⁶ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

⁷ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (OMD 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202 / 418-0500
Internet: <https://www.fcc.gov>

DA 24-296

Released: April 1, 2024

STREAMLINED RESOLUTION OF REQUESTS RELATED TO ACTIONS BY THE UNIVERSAL SERVICE ADMINISTRATIVE COMPANY

CC Docket No. 02-6
WC Docket No. 02-60

Pursuant to our procedure for resolving requests for review, requests for waiver, and petitions for reconsideration of decisions related to actions taken by the Universal Service Administrative Company (USAC) that are consistent with precedent (collectively, Requests), the Wireline Competition Bureau (Bureau) grants, dismisses, or denies the following Requests.¹ The deadline for filing petitions for reconsideration or applications for review concerning the disposition of any of these Requests is 30 days from the release date of this Public Notice.²

Schools and Libraries (E-Rate) **CC Docket No. 02-6**

Dismiss as Moot³

Lansing School District, MI, Application No. 201031854, Request for Waiver, CC Docket No. 02-6 (filed Feb. 23, 2021)

¹ See *Streamlined Process for Resolving Requests for Review of Decisions by the Universal Service Administrative Company*, CC Docket Nos. 96-45 and 02-6, WC Docket Nos. 02-60, 06-122, 08-71, 10-90, 11-42, and 14-58, Public Notice, 29 FCC Rcd 11094 (WCB 2014). Sections 54.719(b) of the Commission's rules provide that any person aggrieved by an action taken by a division of USAC, after first seeking review at USAC, may seek review from the Commission. Sections 54.719(c) of the Commission's rules provide that parties seeking waivers of the Commission's rules shall seek review directly from the Commission. 47 CFR §§ 54.719(b)-(c). In this Public Notice, we have reclassified as Requests for Waiver any appeals seeking review of a USAC decision that appropriately should have requested a waiver of the Commission's rules. Similarly, we have reclassified as Requests for Review any appeals seeking a waiver of the Commission's rules but that are, in fact, seeking review of a USAC decision.

² See 47 CFR §§ 1.106(f), 1.115(d); see also 47 CFR § 1.4(b)(2) (setting forth the method for computing the amount of time within which persons or entities must act in response to deadlines established by the Commission).

³ See, e.g., *Requests for Review and/or Requests for Waiver of the Decisions of the Universal Service Administrator by Al-Noor High School et al.; Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 27 FCC Rcd 8223, 8224, para. 2 (WCB 2012) (*Al-Noor High School Order*) (dismissing as moot requests for review where USAC had taken the action the petitioner requested and issued new decisions approving funding).

Dismissed for Failure to Comply with the Commission's Basic Filing Requirements⁴

St. Agnes Elementary School, CA, Application No. 221021625, CC Docket No. 02-6 (filed Feb. 26, 2024)

Dismissed on Reconsideration⁵

Fairfield Community School District, IA, Application No. 191038832, Petition for Reconsideration, CC Docket No. 02-6 (filed Feb. 22, 2021)

Salina Unified School District, KS, Application No. 191031915, Petition for Reconsideration, CC Docket No. 02-6 (filed Mar. 18, 2021)

⁴ The Bureau will not consider requests for review or waiver without reference to the relevant FCC Form 471 application number and supporting documentation. See 47 C.F.R. § 54.721 (setting forth general filing requirements for requests for review of decisions issued by the Administrator, including the requirement to provide supporting documentation); see also *Wireline Competition Bureau Reminds Parties of Requirements for Request for Review of Decisions by the Universal Service Administrative Company*, CC Docket Nos. 96-45, 02-6, WC Docket Nos. 02-60, 06-122, 10-90, 11-42, 13-184, 14-58, Public Notice, 29 FCC Rcd 13874 (WCB 2014) (reminding parties submitting appeals to the Bureau of the general filing requirements contained in the Commission's rules which, along with a proper caption and reference to the applicable docket number, require (1) a statement setting forth the party's interest in the matter presented for review; (2) a full statement of relevant, material facts with supporting affidavits and documentation; (3) the question presented for review, with reference, where appropriate, to the relevant Commission rule, order or statutory provision; and (4) a statement of the relief sought and the relevant statutory or regulatory provision pursuant to which such relief is sought); *Universal Service Contribution Methodology; Request for Review by Alternative Phone, Inc. and Request for Waiver*, WC Docket No. 06-122, Order, 26 FCC Rcd 6079 (WCB 2011) (*Alternative Phone, Inc. Order*) (dismissing without prejudice a request for review that failed to meet the requirements of section 54.721 of the Commission's rules).

⁵ See, e.g., *Requests for Waiver and Review of Decisions of the Universal Service Administrator by Allan Shivers Library et al.; Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order and Order on Reconsideration, 29 FCC Rcd 10356, 10357, para. 2 (WCB 2014) (*Allan Shivers Library Order*) (dismissing petitions for reconsideration that fail to identify any material error, omission, or reason warranting reconsideration, and rely on arguments that have been fully considered and rejected by the Bureau within the same proceeding).

Previously, we found that Salina Unified School District requested E-Rate program funding without posting a new FCC Form 470 for the services, in violation of our competitive bidding rules. See *Streamlined Resolution of Requests Related to Actions by the Universal Service Administrative Company*, CC Docket No. 02-6; WC Docket Nos. 02-60, 06-122; Public Notice, DA 21-215 (WCB Feb. 26, 2021). On reconsideration, Salina Unified School District raises a new argument that it did post a new FCC Form 470 for its services but mistakenly listed the previous FCC Form 470 number on its FCC Form 471 and categorized the services as contractual, when it really was receiving the services on a month-to-month basis. They argue that this ministerial and clerical error gave the appearance that the school district did not post an FCC Form 470 for the services they were seeking. Our rules state that a petition for reconsideration will be entertained only if the petition relies on facts or arguments that have changed or were unknown to the petitioner when it previously filed at the Commission. Because the Petitioner did not make this argument when it first filed the waiver request with the Commission on January 3, 2020, we dismiss the petition because it relies on an argument that was not raised previously. See 47 CFR § 1.106(b)(2), (c)(2) (stating that a petition for reconsideration will be entertained only if the petition relies on facts or arguments that have changed or were unknown to the petitioner when it previously filed at the Commission, unless it is required in the public interest). As an alternative and independent basis for rejecting this petition, we also deny the petition on procedural grounds. Because Salina Unified School District knew of the ministerial and clerical error on its FCC Form 471 when its funding was initially denied, it is now time-barred from filing a waiver request on this issue. See, e.g., *Requests for Review of Decisions of the Universal Service Administrator by Agra Public Schools I-134 et al.; Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 25 FCC Rcd 5684, 5688, para. 6 (WCB 2010) (*Agra Public Schools Order*); *Requests for Waiver or Review of Decisions of the Universal Service Administrator by Bound Brook School District et al.; Schools and Libraries Universal Service*

(continued....)

Dismissed to Allow Appeal to be Filed with USAC⁶

Centro de Aprendizaje Individualizado, PR, Application No. 201019237, Request for Waiver, CC Docket No. 02-6 (filed Dec. 7, 2020)

Wagner Community School, SD, Application No. 171038593, Request for Waiver, CC Docket No. 02-6 (filed Oct. 22, 2020)

Granted⁷Competitive Bidding – Price as Primary Factor⁸

Capital City Public Charter School, DC, Application Nos. 191027841, 201017928, 221008544, Request for Waiver, CC Docket No. 02-6 (filed Feb. 23, 2024)

Support Mechanism, CC Docket No. 02-6, Order, 29 FCC Rcd 5823, 5823, para. 1 (WCB 2014) (*Bound Brook School District Order*) (denying requests for review and/or waiver on the grounds that the petitioners failed to (1) submit their appeals either to the Commission or to USAC within 60 days or failed to submit their waiver requests to the Commission within 60 days as required by the Commission's rules; and (2) did not demonstrate special circumstances required for the Commission to waive the rule). For these reasons, we dismiss this Petition for Reconsideration.

⁶ See *Petitions for Reconsideration by Little Falls Township School District et al.; Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order on Reconsideration, DA 23-110, para. 10 (WCB 2023) (*Little Falls Township Order*) (dismissing without prejudice appeals that are filed with the Commission before being reviewed at USAC and waiving the 60-day appeal filing deadline to allow the party to refile its appeal at USAC and have it considered on the merits).

Parties seeking review of USAC decisions must first file an appeal with USAC. See 47 CFR § 54.719(a). Because the petitioners filed their appeals with the Commission first, we now provide Centro de Aprendizaje Individualizado and Wagner Community School 60 days from the release date of this Public Notice to refile their appeals at USAC. Pursuant to the *Little Falls Township Order*, we also waive the 60-day appeal filing deadline, 47 CFR § 54.720(a), to allow the appeals to be considered on the merits by USAC without being considered late. See *Little Falls Township Order* at para. 10. Appeals for funding year 2016 and forward should be filed in the E-Rate Productivity Center portal, found here: [EPC](#). Appeals from funding year 2015 and prior funding years should be filed by email to Appeals@usac.org.

⁷ We remand these applications to USAC and direct USAC to complete its review of the applications and issue a funding decision based on a complete review and analysis, no later than 90 calendar days from the release date of this Public Notice. In remanding these applications to USAC, we make no finding as to the ultimate eligibility of the services or the petitioners' applications. We also waive sections 54.507(d) and 54.514(a) of the Commission's rules and direct USAC to waive any procedural deadline that might be necessary to effectuate our ruling. See 47 CFR § 54.507(d) (requiring non-recurring services to be implemented by September 30 following the close of the funding year); 47 CFR § 54.514(a) (codifying the invoice filing deadline).

⁸ See, e.g., *Requests for Review of Decisions of the Universal Service Administrator by Allendale County School District et al.; Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 26 FCC Rcd 6109, 6114-15, para. 9 (WCB 2011) (*Allendale County School District Order*) (granting appeals where the record demonstrated that applicants gave the most weight to price during the bid evaluation process).

Capital City Public Charter School's appeal was filed with the Commission more than 60 days after the date of the revised funding commitment decision letter for SLD No. 201017928. Consistent with precedent, we find good cause exists to waive section 54.720(a) or (b) of the Commission's rules, which requires that petitioners file their appeals within 60 days of an adverse USAC decision. See, e.g., *Requests for Review of Decisions of the Universal Service Administrator by ABC Unified School District*, CC Docket No. 02-6, Order, 26 FCC Rcd 11019, para. 2 (WCB 2011) (*ABC Unified School District Order*) (waiving the filing deadline for petitioners that submitted their appeals to the Commission or USAC only a few days late).

*Discount Calculation—Information Submitted Outside Permitted Time Period*⁹

Flagstaff Arts and Leadership Academy, AZ, Application No. 231021192, Request for Waiver, CC Docket No. 02-6 (filed Mar. 6, 2024)

*Incorrect Service Start Date on FCC Form 486*¹⁰

Coleman Public Library, TX, Application No. 318645, Request for Waiver, CC Docket No. 02-6 (filed Nov. 6, 2020)

*Ministerial and/or Clerical Errors*¹¹

San Juan Unified School District, CA, Application No. 191000968, Request for Review, CC Docket No. 02-6 (filed Mar. 5, 2021)

*New Entity Within Scope of FCC Form 470*¹²

Gainesville City School District, GA, Application No. 201008705, Request for Review, CC Docket No. 02-6 (filed Feb. 21, 2021)

⁹ See, e.g., *Requests for Review of the Decision of the Universal Service Administrator by Academia Claret et al.; Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 21 FCC Rcd 10703, 10708, para. 12 (WCB 2006) (*Academia Claret Order*) (allowing the submission of discount calculation information when the applicant was previously unable to fully comply with the document request within USAC's permitted time period).

¹⁰ *Request for Review and/or Waiver by Glendale Unified School District, Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 21 FCC Rcd 1040 (WCB 2006) (granting waiver request when the applicant inadvertently listed the wrong service start date on the FCC Forms 486); see also *Request for Waiver by Harvey Public Library District, Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 23 FCC Rcd 15419 (WCB 2008) (*Glendale Unified School District Order*) (same).

¹¹ See, e.g., *Request for Waiver and Review of Decisions of the Universal Service Administrator by Erie I BOCES et al.; Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 28 FCC Rcd 13381 (WCB 2013) (*Erie I BOCES Order*) (granting waivers of the Commission's E-rate rules to correct ministerial or clerical errors on petitioners' E-Rate applications or associated forms).

¹² Gainesville City School District sought bids for its entire school district on its FCC Form 470 and entered into a multiple-year contract with its service provider under an agreement which allowed for additional sites to be opened (and specifically referenced the then-unopened school at issue in this appeal). USAC denied funding for the additional entity because a new FCC Form 470 should have been posted to the USAC website prior to adding the new site. We find in this instance that the competitive bidding process was not harmed by the subsequent opening of one additional school and that a new FCC Form 470 did not need to be posted.

Consistent with our obligation to conduct a de novo review of appeals of decisions made by USAC, we grant this request for review. See 47 CFR § 54.723. Based on the facts and circumstances of this case, we disagree with USAC's conclusion and find that the new entity does not require the filing a new FCC Form 470. See, e.g., *Request for Review of a Decision of the Universal Service Support Mechanism*, CC Docket No. 06-6, Order, 23 FCC Rcd 15413, 15416, para. 6 (WCB 2008) (conducting de novo review of the facts and circumstances to determine that USAC's decision was in error).

*Permissible Service Implementation Delay*¹³

Cocke County School District, TN, Application No. 201036751, Request for Waiver, CC Docket No. 02-6 (filed Jan. 18, 2022)

*Reconsidering Bureau Decision and Granting on the Merits*¹⁴

Capital City Public Charter School, DC, Application No. 231030634, Request for Waiver, CC Docket No. 02-6 (filed Feb. 6, 2024)

*Remand to Determine Eligibility of Services*¹⁵

Licking Valley Local Schools, OH, Application No. 201022855, Request for Review, CC Docket No. 02-6 (filed Jan. 27, 2021; supplemented Jan. 29, 2021)

¹³ See, e.g., *Request for Review/Waiver of the Decision of the Universal Service Administrator by Accelerated Charter et al.; Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 29 FCC Rcd 13652, 13652-3, para. 2 (WCB 2014) (*Accelerated Charter Order*) (granting late-filed extensions of the service implementation deadline when applicants demonstrated they were unable to complete implementation on time for reasons beyond the service providers' control and made significant efforts to secure the necessary extensions in a timely manner).

¹⁴ In the *March 2024 USF Streamlined Resolution PN*, we denied an appeal filed by Capital City Public Charter School on procedural grounds as being late-filed. See *Streamlined Process for Resolving Requests for Review of Decisions by the Universal Service Administrative Company*, CC Docket No. 02-6, WC Docket Nos. 02-60, 06-122, and 21-93, Public Notice, DA 24-176 (WCB March 1, 2024) (*March 2024 USF Streamlined Resolution PN*). We now reconsider on our own motion the denial of that appeal. 47 CFR § 1.113(a). Because the Wireline Competition Bureau's (Bureau's) decision dismissing the appeal was released 31 days ago, we also waive the section 1.113 of the Commission's rules that requires any sua sponte reconsideration of an action taken under delegated authority occur within 30 days of that action. See, e.g., *Requests for Waiver and Review of Decisions of the Universal Service Administrator by Archdiocese of San Antonio et al.; Schools and Libraries Universal Service Support Mechanism; Establishing Emergency Connectivity Fund to Close the Homework Gap*, CC Docket No. 02-6, WC Docket No. 21-93, Order, DA 22-399, para. 11 (WCB 2022); *Requests for Review of the Decision of the Universal Service Administrator by Pioneerland Library System; Federal-State Joint Board on Universal Service; Changes to the Board of Directors of the National Exchange Carrier Assoc.*, CC Docket Nos. 96-45, 97-21, Order on Reconsideration, 16 FCC Rcd 3428 (2001) (waiving section 1.113 of the Commission's rules to permit the reconsideration of a more-than-30-day Bureau denial because it was warranted in that case). We now find that Capital City Public Charter School demonstrated that its competitive bidding process was in compliance with Commission rules and procedures. See, e.g., *Allendale County School District Order*, 26 FCC Rcd at 6114-15, para. 9 (granting appeals where the record demonstrated that applicants gave the most weight to price during the bid evaluation process).

¹⁵ In processing Licking Valley Local Schools' request on remand, we direct USAC to apply the test described in the *Tennessee Order* to determine whether the services Licking Valley Local Schools characterized as on-premise category one service were properly characterized as such. See *Request for Review of the Decision of the Universal Service Administrator by New Albany-Floyd County Consolidated School Corporation; Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Order on Reconsideration, 16 FCC Rcd 3881, 3883, para. 7 (CCB 2001) (*New Albany-Floyd County Consolidated School Corporation Order*) (remanding application to USAC to determine service eligibility under the *Tennessee Order* test when it is unclear whether USAC already performed this analysis); *Request for Review by the Department of Education of the State of Tennessee of the Decision of the Universal Service Administrator*, *Request for Review by Integrated Systems and Internet Solutions, Inc., of the Decision of the Universal Service Administrator*, *Request for Review by Education Networks of America of the Decision of the Universal Service Administrator*, CC Docket Nos. 96-45 and 97-21, Order, 14 FCC Rcd 13734 (1999) (*Tennessee Order*) (establishing criteria to consider whether certain facilities on school premises could be properly considered Internet access, rather than internal connections). We make no finding on the underlying issues in these appeals and remand these applications to USAC to make a determination on the merits. See *supra* note 7.

*Remand to Obtain Additional Information on Services Delivered*¹⁶

St. Catharine Academy, NY, Application No. 201046169, Request for Waiver, CC Docket No. 02-6 (filed Feb. 23, 2021)

*Signed Contract Requirement*¹⁷

Indian River County School District, FL, Application No. 171037694, Request for Waiver, CC Docket No. 02-6 (filed Oct. 22, 2020)

*Waiver of Appeal Filing Deadline*¹⁸

American Samoa SEA, AS, Application No. 171025640, Request for Waiver, CC Docket No. 02-6 (filed Nov. 16, 2020)

Great Rivers Education Services Cooperative, AR, Application No. 171039611, Request for Waiver, CC Docket No. 02-6 (filed Oct. 6, 2020)

Little Singer Community School, AZ, Application No. 867676, Request for Waiver, CC Docket No. 02-6 (filed Sept. 25, 2020)

Noble Network of Charter Schools, IL, Application No. 1048372, Request for Waiver, CC Docket No. 02-6 (filed Jan. 13, 2021)

YMCA of the East Bay, CA, Application No. 1032781, Request for Review, CC Docket No. 02-6 (filed Jan. 27, 2021)¹⁹

¹⁶ Consistent with our obligation to conduct a de novo review of appeals of decisions made by USAC, we find that additional information would assist in resolving this matter and remand this request for review back to USAC for additional outreach. *See* 47 CFR § 54.723. Based on the facts and circumstances of this case, we agree with USAC's conclusion that St. Catharine Academy, based on the documentation submitted, did not demonstrate that the additional amount of funding it requested for FRN 2099085025 was warranted. On remand, USAC should reach out again to St. Catharine Academy for additional evidence demonstrating that the contract with its service provider included more bandwidth for an additional \$60.20 per month for the period of time the applicant claims.

¹⁷ *Requests for Waiver of the Decision of the Universal Service Administrator by Adams County School District 14 et al.; Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 22 FCC Rcd 6019, 6022-23, paras. 9 (2007) (*Adams County School District 14 Order*) (granting a waiver of the Commission's contract rule for applicants unable to sign a legally binding agreement prior to filing their FCC Form 471 because they needed their commitments with service providers approved by their governing boards before they could legally enter into the contract).

¹⁸ *See, e.g., ABC Unified School District Order*, 26 FCC Rcd at 11019, para. 2 (granting waivers of appeal filing deadline when the petitioners submitted their appeals or waiver requests only a few days late or within a reasonable period of time after receiving actual notice of USAC's adverse decision). We make no finding on the underlying issues in these appeals and remand these applications to USAC to make a determination on the merits. *See supra* note 7.

¹⁹ YMCA of the East Bay continued to work with USAC on its Category 2 cost allocation until it realized that its changes had not been made and funding was denied. On remand, USAC should work with YMCA of the East Bay using the FCC Form 500 the school included in its appeal to the FCC.

Denied*Competitive Bidding Violation – 28-Day Rule*²⁰

Ben Porat Yosef School, NJ, Application No. 201042893, Request for Review, CC Docket No. 02-6 (filed Jan. 19, 2021)

*Competitive Bidding Violation – Applicant Failed to Consider All Bids Submitted*²¹

Centerville School District 60-1, SD, Application No. 161048523, Request for Waiver, CC Docket No. 02-6 (filed Dec. 17, 2020)

*Competitive Bidding Violation – Price Not Primary Factor in Vendor Selection*²²

Delta Schoolcraft Consortium, WI, Application Nos. 181039397, 191002221, Request for Review and/or Waiver, CC Docket No. 02-6 (filed Dec. 18, 2020)

*Cost-effectiveness*²³

Monsey Beis Chaya Mushka, NY, Application No. 962556, Request for Review, CC Docket No. 02-6 (filed Jun. 22, 2015)

Yeshiva Yagdil Torah, NY, Application No. 871421, Request for Review, CC Docket No. 02-6 (filed Oct. 6, 2014)

²⁰ See, e.g., *Requests for Review and/or Waiver of Decisions of the Universal Service Administrator by Albuquerque School District et al.; Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 26 FCC Rcd 5878, 5880, para. 4 (WCB 2011) (*Albuquerque School District Order*) (denying appeals where applicants signed their contracts or certified their FCC Forms 471 more than a few days before the allowable contract date, thus violating the requirement that the FCC Form 470 be posted for 28 days before entering into an agreement with a service provider).

²¹ See, e.g., *Request for Review of A Decision of the Universal Service Administrator by Truth or Consequences Municipal Schools*, CC Docket No. 02-6, Order, 27 FCC Rcd 10078 (WCB 2012) (*Truth or Consequences Municipal Schools*) (denying appeal where applicant failed to evaluate all the bids it received); *Requests for Review of Decisions of the Universal Service Administrator by Central Islip Free Union School District et al.; Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 26 FCC Rcd 8630, 8640, para. 22 (WCB 2011) (*Central Islip Free Union School District Order*) (denying appeal where applicant failed to carefully consider all bids submitted in response to its FCC Form 470 posting).

²² See, e.g., *Requests for Review of a Decision of the Universal Service Administrator by Fall River Public School District, Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 28 FCC Rcd 7427, 7429, para. 5 (WCB 2013) (*Fall River Public School District Order*) (denying appeal where applicant failed to consider price as primary factor in its vendor selection process and where it was not clear from the record that applicant selected the most cost-effective service offering).

²³ *Request for Review by Ysleta Independent School District of the Decision of the Universal Service Administrator*, CC Docket Nos. 96-45, 97-21, Order, 18 FCC Rcd 26407, 26432, para. 54 (2003) (*Ysleta Independent School District Order*) (explaining that a request for routers at prices two or three times greater than the prices available from commercial vendors would not be cost-effective, absent extenuating circumstances).

*Late-Filed Invoice or Invoice Deadline Extension*²⁴

Brownsville Independent School District, TX, Application Nos. 181039492, 181038087, Request for Waiver, CC Docket No. 02-6 (filed Dec. 3, 2020)

Claverack Free Library and Reading Room Association, NY, Application No. 221039349, Request for Waiver, CC Docket No. 02-6 (filed Feb. 13, 2024)

McCurdy Charter School, NM, Application No. 191032210, Request for Waiver, CC Docket No. 02-6 (filed Mar. 18, 2021)

MSGR McClancy High School, NY, Application No. 221020112, Request for Waiver, CC Docket No. 02-6 (filed Feb. 27, 2024)

*Relying on FCC Form 470 That Did Not Seek Bids on Types of E-Rate Services Later Requested*²⁵

Audubon Community Schools, IA, Application No. 201013647, Request for Waiver, CC Docket No. 02-6 (filed Oct. 16, 2020)

Special Education Services, Inc., IL, Application No. 181039584, Request for Waiver, CC Docket No. 02-6 (filed Mar. 5, 2021)

*Untimely Filed Appeals or Waiver Requests*²⁶

Aspiranet Dba Fusion Charter School, CA, Application Nos. 181028269, 181036146, Request for Waiver, CC Docket No. 02-6 (filed Feb. 20, 2024)

Beth Chana School for Girls, NY, Application No. 881989, Request for Waiver, CC Docket No. 02-6 (filed Dec. 8, 2020)

Biblioteca Revndo Eleuterio Feliciano Crespo, PR, Application No. 161040723, Request for Waiver, CC Docket No. 02-6 (filed Dec. 22, 2020)

²⁴ 47 CFR § 54.514. See also, e.g., *Requests for Waiver of Decisions of the Universal Service Administrator by Ada School District et al.*; *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 31 FCC Rcd 3834, 3836, para. 8 (WCB 2016) (*Ada School District Order*) (denying requests for waiver of the Commission's invoice filing deadline rule for petitioners that failed to demonstrate extraordinary circumstances justifying a waiver).

²⁵ See, e.g., *Request for Review of a Decision of the Universal Service Administrator by Albert Lea Schools et al.*; *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 24 FCC Rcd 4533, 4541, para. 14 (WCB 2009) (*Albert Lea Schools Order*); *Petition for Reconsideration by Chicago Public Schools*; *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 29 FCC Rcd 9289, 9289-90, para. 5 (WCB 2014) (*Chicago Public Schools Order*) (denying appeals of applicants that filed FCC Forms 470 that did not include the types of services for which the applicants later requested E-Rate funding).

²⁶ See, e.g., *Agra Public Schools I-134 Order*, 25 FCC Rcd at 5688, para. 6; *Bound Brook School District Order*, 29 FCC Rcd at 5823, para. 1 (denying requests for review and/or waiver on the grounds that the petitioners failed to (1) submit their appeals either to the Commission or to USAC within 60 days or failed to submit their waiver requests to the Commission within 60 days as required by the Commission's rules; and (2) did not demonstrate special circumstances required for the Commission to waive the rule).

Cambridge School District #432, ID, Application No. 231035539, Request for Waiver, CC Docket No. 02-6 (filed Jan. 9, 2024)

Collegedale Academy, TN, Application No. 201041370, Request for Waiver, CC Docket No. 02-6 (filed Jan. 1, 2021)

Erie 1 BOCES, NY, Application No. 211012094, Request for Waiver, CC Docket No. 02-6 (filed Feb. 21, 2024)

Fulton County School District, GA, Application Nos. 593044, 593102, 752567, Request for Waiver, CC Docket No. 02-6 (filed Feb. 8, 2021)

Vista College Preparatory, AZ, Application No. 161029967, Request for Waiver, CC Docket No. 02-6 (filed Feb. 24, 2021)

*Upholding USAC's Funding Procedures*²⁷

Giffit Hill School, VI, Application No. 201045156, Request for Review, CC Docket No. 02-6 (filed Jan. 25, 2021)

Rural Health Care Program
WC Docket No. 02-60

Granted

*Competitive Bidding*²⁸

²⁷ Giffit Hill School applied for and received a second E-Rate FY2020 FCC Form 471 window funding commitment to help pay for faster Internet service to boost capacity needed during the COVID-19 pandemic. The school's transition date to this more expensive Internet access service was changed by USAC from mid-October to November 1, 2020 because USAC is unable to support partial-month commitments. Although the school was reimbursed the entire month for the less expensive service, Giffit Hill School is now seeking additional E-Rate funding to pay for the more expensive Internet access services it purchased for the latter part of October 2020.

We deny Giffit Hill School's appeal. We find that USAC's internal application processing system is not able, procedurally and systematically, to process partial-month funding commitments. Because the Commission's regulations authorize USAC to establish procedures for the administration of the E-Rate application process in an efficient and effective manner, including procedures for the review of applications, it was authorized to begin the funding commitment transition at the beginning of the following month. See 47 C.F.R. §§ 54.701(a), 54.702, 54.705(a)(iii), 54.705(a)(xi); See also *Requests for Review of the Decision of the Universal Service Administrator by Boone County School District; Federal-State Joint Board on Universal Service, Changes to the Board of Directors of the National Exchange Carrier Association, Inc.*, CC Docket Nos. 96-45, 97-21, Order, 16 FCC Rcd 21124, 21127, para. 6 (CCB 2001) (*Boone County School District Order*) (finding that USAC properly used its own application review procedures to deny a funding request).

²⁸ See *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Report and Order, 34 FCC Rcd 7335, 7376, n.186 (2019) (*Promoting Telehealth Report and Order*) (stating that, when no bids are received, the health care provider has the option to "(1) repost the [request for services form] for an additional 28 days to solicit bids; (2) use a current contract as a 'standing bid' to obtain the requested service or equipment; or (3) select a service provider of its choosing"). On October 25, 2019, Community Counseling Services Region VII MH/ID Commission Consortium (CCS) entered into a service agreement with C-Spire for services to begin on February 18, 2021. On December 10, 2020, CCS submitted an FCC Form 461 requesting services for funding year 2021. USAC posted the FCC Form 461 on January 7, 2021, thereby setting an allowable contract selection date (ACSD) of February 5, 2021. CCS received no bids in response to its request for services and, treating its existing agreement as a "standing bid," selected C-Spire
(continued....)

Community Counseling Services Region VII MH/ID Commission Consortium (CCS), MS, Request for Review, WC Docket No. 02-60, Funding Request No. 21131731 (filed Aug. 25, 2022)

*Waiver of the Invoice Filing Deadline*²⁹

Atlantic Metro Communications II, Inc. (Providence St. Joseph Health Consortium), WA, Request for Waiver, WC Docket No. 02-60, Funding Request No. RHC20220012811 (filed Feb. 21, 2024)

CommonSpirit Health, CO, Request for Waiver, WC Docket No. 02-60, Funding Request No. RHC20220012959 (filed March 19, 2024)

CommonSpirit Health, CO, Request for Waiver, WC Docket No. 02-60, Funding Request No. RHC20220012960 (filed March 19, 2024)

Community Hospital Corporation, TX, Request for Waiver, WC Docket No. 02-60, Funding Request No. RHC20220012327 (filed March 19, 2024)

Divine Providence Community Home, MN, Request for Waiver, WC Docket No. 02-60, Funding Request No. RHC20220011139 (filed March 5, 2024)³⁰

Mercury Voice and Data, LLC (La Paz Regional Hospital), AZ, Request for Waiver, WC Docket No. 02-60, Funding Request No. 20234381 (filed Dec. 12, 2024)³¹

Fiber Communications of Columbus, LLC (Eastern Kansas Health Network), KS, Request for Waiver, WC Docket No. 02-60, Funding Request No. 20868221 (filed March 6, 2024)

as its service provider on February 11, 2021 – six days after the ACSD but seven days before service commenced. RHC Program applicants are typically permitted to treat existing contracts as standing bids only when choosing to continue service under the existing contract, among other requirements. *Request for Review of the Decision of the Universal Service Administrator by Kalamazoo Public Schools, Kalamazoo, Michigan, Federal-State Joint Board on Universal Service, Changes to the Board of Directors of the National Exchange Carrier Association, Inc.*, CC Docket Nos. 96-45 and 97-21, Order on Reconsideration, 17 FCC Rcd 22154, 22157-58 (WCB 2002); *see also Request for Review, Franciscan Skemp Waukon Clinic, Waukon, Iowa, Rural Health Care Universal Service Support Mechanism*, WC Docket No. 02-60, Order, 29 FCC Rcd 11714, 11717 (WCB 2014). We find, however, that because CCS received no bids in response to its FCC Form 461, it was permitted to select a service provider of its choosing after the ACSD. *See Promoting Telehealth Report and Order*, 34 FCC Rcd at 7376, n.186. We therefore grant CCS's appeal and remand its funding request to USAC for further action.

²⁹ *See Requests for Waiver or Review of Decision of the Universal Service Administrator by Indiana Telehealth Network*, WC Docket No. 02-60, Order, 33 FCC Rcd 12341, 12342, para. 4 (WCB 2018) (granting a waiver of the invoice filing deadline when the petitioner missed the deadline due to technical issues outside of its control) (*Indiana Telehealth Network Order*). We waive the petitioners' invoice filing deadlines and allow them 120 days from the release of this Public Notice to file invoices.

³⁰ *See id.* *See also Requests for Waiver and Review of Decisions of the Universal Service Administrator by Abbotsford School District, Abbotsford, Wisconsin, et al.*, CC Docket No. 02-6, Order, 27 FCC Rcd 15299, 15300, para. 2 (WCB 2012) (*Abbotsford School District Order*) (waiver of invoice filing deadline due to delays beyond the control of the entities requesting a waiver).

³¹ *See Indiana Telehealth Network Order*, 33 FCC Rcd 12341; *see also Abbotsford School District Order*, 27 FCC Rcd 15299.

*Waiver of the Invoice Filing Deadline—Sua Sponte Waiver*³²

Ascension Health, MO, *Sua Sponte Waiver*, WC Docket No. 02-60, Funding Request No. 19293161

Midwest Medical Center, IL, *Sua Sponte Waiver*, WC Docket No. 02-60, Funding Request No. 18452711

*Waiver of Service Provider Identification Number Deadline*³³

Atlantic Metro Communications II, Inc. (Providence St. Joseph Health Consortium), WA; CenturyLink CenturyTel of Central Louisiana (Willis-Knighton Health System), LA; Eastern Oregon Net, Inc. (Grande Ronde Hospital), OR; PriorityOne Telecommunications, Inc. (Wallowa County Health Care District), OR, Request for Waiver, WC Docket No. 02-60, Funding Request Nos. RHC20220012811, RHC20220001356, RHC20220001630, RHC20220004941, RHC20220004944, RHC20220006243, RHC20220006244, RHC20220004809 (filed Feb. 26, 2024)

Mosaic Medical - Madras High-School Based Health Center (Centro Escolar) & Mosaic Medical Consortium, OR; Crittenden County Health Dept., Livingston County Health Dept., Lyon County Health Dept., KY, Request for Waiver, WC Docket No. 02-60, Funding Request Nos. RHC20220009548, RHC20220009541, RHC20220009547, RHC20220008567, RHC20220008562, RHC20220008570 (filed Feb. 16, 2024)

For additional information concerning this Public Notice, please contact James Bachtell in the Telecommunications Access Policy Division, Wireline Competition Bureau, at james.bachtell@fcc.gov or (202) 418-2694.

- FCC -

³² See *Rural Health Care Support Mechanism*, WC Docket No. 02-60, Order, 35 FCC Rcd 1986, 1994 (WCB 2020) (*Funding Year 2018 Invoice Waiver Order*); *Rural Health Care Support Mechanism*, WC Docket No. 02-60, Order, 32 FCC Rcd 5065, 5065-66, paras. 2, 4 (WCB 2017) (*Funding Year 2016 Invoice Waiver Order*) (granting a waiver *sua sponte* of the invoice filing deadline when the deadline had already passed at the time that health care providers received USAC's decision, which made compliance with program rules impossible). We waive the petitioner's invoice filing deadline and allow it 120 days from the later of the release of this Public Notice or the issuance of a Funding Commitment Letter to file invoices with USAC.

³³ See *Requests for Review of Decisions of the Universal Service Administrator by Bay Shore Union Free School District, et al., Schools and Libraries Universal Service Support Mechanism, et al.*, CC Docket No. 02-6, Order, 23 FCC Rcd 15537, 15543, para. 11 (WCB 2008) (waiving the service provider identification number (SPIN) change deadline when applicants were unaware of the need for a SPIN change until after the deadline). We direct USAC to coordinate with the applicants on filing SPIN change requests and make no finding as to the merits of the request. We also dismiss any requests for waivers of the invoice deadline as moot because, if a SPIN change is granted, USAC will set a new invoice deadline of 120 days from the date of the revised funding commitment letter approving the SPIN change. See 47 CFR § 54.627(a)(2).



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-297

Released: March 25, 2024

**PUBLIC SAFETY AND HOMELAND SECURITY BUREAU ANNOUNCES FILING
DEADLINES FOR COMMENTS AND REPLY COMMENTS REGARDING THE
CYBERSECURITY LABELING FOR INTERNET OF THINGS FURTHER NOTICE OF
PROPOSED RULEMAKING (FCC 24-26)**

PS Docket No. 23-239

Comments Due: April 24, 2024

Reply Comments Due: May 24, 2024

On March 14, 2024, the Federal Communications Commission adopted a Report and Order and Further Notice of Proposed Rulemaking (FNPRM), FCC 24-26, establishing a voluntary cybersecurity labeling program for wireless consumer Internet of Things, or IoT, products that will help consumers make safer purchasing decisions, raise consumer confidence regarding the cybersecurity of the IoT products they buy, and encourage manufacturers to develop IoT products with security-by-design principles in mind.¹ The FNPRM proposes and seeks comment on additional national security declarations for the IoT labeling program.² The proposed additional disclosures are intended to provide consumers with assurances that the products bearing the FCC IoT Label do not contain hidden vulnerabilities from high-risk countries, that the data collected by the products does not sit within or transit high-risk countries, and that the products cannot be remotely controlled by servers located within high-risk countries. The FNPRM also seeks comment on whether the disclosed information should be included in the publicly accessible registry associated with the program; whether the fact that software or firmware originates from high-risk countries, data will be stored in such countries, or that products can be remotely controlled by servers within such countries, should make the products ineligible for the label altogether; and whether the federal Magnusson-Moss Warranty Act governing consumer product warranties is applicable.³

A summary of the FNPRM was published in the Federal Register on March 25, 2024, stating that comments on these proposed rules would be due 30 days after the date on which the Federal Register publication occurred, and that reply comments would be due 60 days after such Federal Register publication.⁴ Accordingly, by this Public Notice, the Public Safety and Homeland Security Bureau

¹ *Cybersecurity Labeling for Internet of Things*, PS Docket No. 23-239, Report and Order and Further Notice of Proposed Rulemaking, FCC 24-26 (Mar. 15, 2024) (FNPRM).

² FNPRM at 81-82, paras. 162-166.

³ FNPRM at 82, paras. 164-166.

⁴ See Federal Communications Commission, *Cybersecurity Labeling for Internet of Things*, 89 Fed. Reg. 20603 (March 25, 2024).

notifies interested parties that comments on the proposed rules are due on **April 24, 2024**, and reply comments are due on **May 24, 2024**. The FNPRM contains the comment filing instructions.⁵

Additional Information. For additional information on this proceeding, please contact Zoe Li, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau at Zoe.Li@fcc.gov or 202-418-2490; or Tara B. Shostek, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau at Tara.Shostek@fcc.gov or (202) 418-8130.

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⁵ FNPRM at 85-84, paras. 174-177.



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
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DA 24-298

Released: March 26, 2024

REQUEST FOR COMMENT ON PETITION FOR RULEMAKING BY SPACE EXPLORATION HOLDINGS, LLC, REGARDING REVISION OF THE COMMISSION'S 1.6/2.4 GHz "BIG LEO" NGSO MSS SHARING PLAN

RM-11975

Comments Due: April 25, 2024

Reply Comments Due: May 10, 2024

Pursuant to section 1.403 of the Commission's rules,¹ the Office of Managing Director, Reference Information Center of the Federal Communications Commission (Commission) seeks comment on a Petition for Rulemaking filed by Space Exploration Holdings, LLC (SpaceX),² requesting that the Commission revise its licensing and spectrum sharing framework for "Big LEO" non-geostationary satellite orbit, mobile-satellite service systems operating in the 1610-1617.775 MHz and 2483.5-2500 MHz bands.³

We remind the public that, to the extent any communications with Commission decision-making personnel regarding the SpaceX Petition go to the merits or outcome of any other proceeding, those communications should be disclosed in the related proceeding in accordance with the applicable *ex parte* rules.

Filing Requirements. Interested parties may file comments on the Petition on or before the dates indicated on the first page of this document.⁴ All filings must reference RM-11975. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS).⁵

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <https://www.fcc.gov/ecfs/filings>.
- Paper Filers:

¹ 47 CFR § 1.403.

² SpaceX Petition for Rulemaking (filed Feb. 21, 2024) (SpaceX Petition), available at <https://www.fcc.gov/ecfs/document/102211948918123/1>.

³ We note that Kuiper Systems LLC filed a letter opposing SpaceX's related requests to implement a freeze on new mobile-satellite service applications, without taking any position on the substance of SpaceX's proposal to open these bands to new users. Letter from Michael Carlson, Senior Corporate Counsel, Kuiper Systems LLC, to Julie M. Kearney, Chief, Space Bureau, FCC (filed Mar. 8, 2024). SpaceX responded to the Kuiper letter. Letter from David Goldman, Vice President of Satellite Policy, SpaceX, to Marlene H. Dortch, Secretary, FCC (filed Mar. 12, 2024).

⁴ See 47 CFR §§ 1.1, 1.45, 1.49.

⁵ *Electronic Filing of Documents in Rulemaking Proceedings*, GC Docket No. 97-113, Report and Order, 13 FCC Rcd 11322 (1998).

- Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.
- Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
- Currently, the Commission does not accept any hand delivered or messenger delivered filings as a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. In the event that the Commission announces the lifting of COVID-19 restrictions, a filing window will be opened at the Commission's office located at 9050 Junction Drive, Annapolis Junction, Maryland 20701.⁶
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail may be addressed to 45 L Street, NE, Washington, DC 20554.
- During the time the Commission's building is closed to the general public and until further notice, if more than one docket or rulemaking number appears in the caption of a proceeding, paper filers need not submit two additional copies for each additional docket or rulemaking number; an original and one copy are sufficient.

Ex Parte Requirements. The proceeding this Notice initiates shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.⁷ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

Accessible Materials. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530.

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⁶ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (OMD 2020).

⁷ 47 CFR §§ 1.1200 *et seq.*



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-299

Released: March 26, 2024

REQUEST FOR COMMENT ON PETITION FOR RULEMAKING BY SPACE EXPLORATION HOLDINGS, LLC, REGARDING REVISION OF THE COMMISSION'S 2 GHz MSS SHARING PLAN

RM-11976

Comments Due: April 25, 2024

Reply Comments Due: May 10, 2024

Pursuant to section 1.403 of the Commission's rules,¹ the Office of Managing Director, Reference Information Center of the Federal Communications Commission (Commission) seeks comment on a Petition for Rulemaking filed by Space Exploration Holdings, LLC (SpaceX),² requesting that the Commission revise its licensing and spectrum sharing framework for mobile-satellite service systems operating in the 2000-2020 MHz (Earth-to-space) and 2180-2200 MHz (space-to-Earth) bands.

After filing of the SpaceX Petition, EchoStar Corporation (EchoStar) submitted an Opposition to the Petition.³ We have reviewed the EchoStar Opposition and conclude it fails to establish that the SpaceX Petition falls under any of the criteria set forth in section 1.401(e) of the Commission's rules that would warrant dismissal or denial.⁴ Nonetheless, we will include the EchoStar Opposition in the record of Docket No. RM-11976 and consider EchoStar's arguments in determining appropriate next steps. EchoStar may additionally submit new comments in response to this Notice.⁵

Further, we remind the public that, to the extent any communications with Commission decision-making personnel regarding the SpaceX Petition go to the merits or outcome of any other proceeding, those communications should be disclosed in the related proceeding in accordance with the applicable *ex parte* rules.

¹ 47 CFR § 1.403.

² SpaceX Petition for Rulemaking (filed Feb. 22, 2024) (SpaceX Petition), available at <https://www.fcc.gov/ecfs/document/1022285915062/1>.

³ EchoStar Corporation Opposition to Petition to Rulemaking (filed Mar. 12, 2024) (EchoStar Opposition), available at <https://www.fcc.gov/ecfs/document/10312260615836/1>.

⁴ 47 CFR § 1.401(e).

⁵ We note that Kuiper Systems LLC filed a letter opposing SpaceX's related requests to implement a freeze on new mobile-satellite service applications, without taking any position on the substance of SpaceX's proposal to open these bands to new users. Letter from Michael Carlson, Senior Corporate Counsel, Kuiper Systems LLC, to Julie M. Kearney, Chief, Space Bureau, FCC (filed Mar. 8, 2024). SpaceX responded to the Kuiper letter. Letter from David Goldman, Vice President of Satellite Policy, SpaceX, to Marlene H. Dortch, Secretary, FCC (filed Mar. 12, 2024).

Filing Requirements. Interested parties may file comments on the Petition on or before the dates indicated on the first page of this document.⁶ All filings must reference RM-11976. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS).⁷

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <https://www.fcc.gov/ecfs/filings>.
- Paper Filers:
 - Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.
 - Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.
 - Currently, the Commission does not accept any hand delivered or messenger delivered filings as a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. In the event that the Commission announces the lifting of COVID-19 restrictions, a filing window will be opened at the Commission’s office located at 9050 Junction Drive, Annapolis Junction, Maryland 20701.⁸
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
 - U.S. Postal Service first-class, Express, and Priority mail may be addressed to 45 L Street, NE, Washington, DC 20554.
 - During the time the Commission’s building is closed to the general public and until further notice, if more than one docket or rulemaking number appears in the caption of a proceeding, paper filers need not submit two additional copies for each additional docket or rulemaking number; an original and one copy are sufficient.

Ex Parte Requirements. The proceeding this Notice initiates shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.⁹ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must

⁶ See 47 CFR §§ 1.1, 1.45, 1.49.

⁷ *Electronic Filing of Documents in Rulemaking Proceedings*, GC Docket No. 97-113, Report and Order, 13 FCC Rcd 11322 (1998).

⁸ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (OMD 2020).

⁹ 47 CFR §§ 1.1200 *et seq.*

be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.*, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

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– FCC –

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
Space Exploration Holdings, LLC) ICFS File No.: SAT-MOD-20230207-00022
Application for Modification of Authorization for) Call Sign: S3069
the SpaceX Gen2 NGSO Satellite System to Add a)
Mobile-Satellite Service System)

ORDER

Adopted: March 26, 2024

Released: March 26, 2024

By the Associate Division Chief, Satellite Programs and Policy Division, Space Bureau:

I. INTRODUCTION

1. In this Order, we dismiss as unacceptable for filing the application of Space Exploration Holdings, LLC (SpaceX) for modification of its authorization to construct, deploy, and operate up to 7,500 "second-generation" Starlink satellites (Gen2 Starlink) to include authority for operations in the 1610-1617.775 MHz (Earth-to-space) and 2483.5-2500 MHz (space-to-Earth) bands (1.6/2.4 GHz bands), the 2000-2020 MHz (Earth-to-space) and 2180-2200 MHz (space-to-Earth) bands (2 GHz bands), and the 2020-2025 MHz (Earth-to-space) band.1 We conclude that the requests in the Modification Application do not substantially comply with Commission requirements established in rulemaking proceedings which determined that the 1.6/2.4 GHz and 2 GHz bands are not available for additional MSS applications and, with respect to operations in the 2020-2025 MHz band, conclude that the remaining request for uplink operations only does not constitute a comprehensive proposal necessary to sustain a satellite application, as required under Commission rules.2 Accordingly, we dismiss the Modification Application on our own motion. We also dismiss as moot the Petition to Dismiss or Deny the Modification Application filed by

1 Space Exploration Holdings, LLC, Application for Modification of Authorization for the SpaceX Gen2 NGSO Satellite System to Add a Mobile-Satellite Service System, ICFS File No. SAT-MOD-20230207-00022 (filed Feb. 7, 2023) (Modification Application).

2 See Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands, Report and Order, 9 FCC Rcd 5936 (1994) (Big LEO Order), on reconsideration, Memorandum Opinion and Order, 11 FCC Rcd 12861 (1996); Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Service to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, Report and Order, Fourth Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 13386 (2004) (Big LEO Spectrum Sharing Order); Spectrum and Service Rules for Ancillary Terrestrial Components in the 1.6/2.4 GHz Big LEO Bands, Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, Second Order on Reconsideration, Second Report and Order, and Notice of Proposed Rulemaking, 22 FCC Rcd 19733 (2007) (Big LEO Spectrum Sharing Second Order); Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Band, Report and Order and Order of Proposed Modification, 27 FCC Rcd 16102 (2012) (AWS-4 Report and Order); 47 CFR §§ 25.112(a), 25.114(a)(1).

DISH Network Corporation (DISH), EchoStar Satellite Services LLC, EchoStar Global PTY LTD, and EchoStar Mobile Limited,³ and deny in part and dismiss in part a SpaceX request to hold in abeyance.⁴

II. BACKGROUND

2. On March 28, 2018, the Commission granted SpaceX authority to deploy and operate a non-geostationary satellite orbit (NGSO) satellite system of 4,425 satellites to provide fixed-satellite service (FSS) in portions of the Ku- and Ka-bands, between 10.7 GHz and 30 GHz.⁵ On December 1, 2022, the Commission granted in part SpaceX's application for authority to deploy and operate the Gen2 Starlink system to provide FSS in the Ku- and Ka-bands.⁶ On March 8, 2024, the Space Bureau further granted in part SpaceX's Gen2 Starlink system application to authorize operations using additional frequencies in the E-band.⁷

3. On February 7, 2023, SpaceX filed the Modification Application seeking to introduce a mobile-satellite service (MSS) component to its Gen2 Starlink constellation that would use the 1.6/2.4 GHz bands, 2 GHz bands, and the 2020-2025 MHz (Earth-to-space) band.⁸ After filing of SpaceX's Modification Application, Globalstar, Inc. (Globalstar), which is licensed in the 1.6/2.4 GHz bands, submitted a letter in opposition to the Modification Application,⁹ and DISH, which is licensed in the 2 GHz bands, filed a letter and petition stating that the Modification Application should be dismissed

³ Petition to Dismiss or Deny of DISH Network Corporation, EchoStar Satellite Services LLC, EchoStar Global PTY LTD, and EchoStar Mobile Limited, ICFS File No. SAT-MOD-20230207-00022 (filed Mar. 14, 2023) (DISH Petition). We also dismiss as moot the related pleadings, including the SpaceX Opposition, the DISH Reply to Opposition, and the SpaceX Motion to Strike.

⁴ Letter from David Goldman, Vice President of Satellite Policy, SpaceX, to Marlene H. Dortch, Secretary, FCC, ICFS File Nos. SAT-MOD-20230207-00022, SAT-MOD-20230804-00192, and SES-RWL-20230926-02119 (filed Feb. 5, 2024) (SpaceX Request to Hold in Abeyance).

⁵ *Space Exploration Holdings, LLC, Application for Approval for Orbital Deployment and Operating Authority for the SpaceX NGSO Satellite System*, Memorandum Opinion, Order and Authorization, 33 FCC Rcd 3391 (2018). SpaceX's authorization for first-generation satellites has been modified several times. See, e.g., *Space Exploration Holdings, LLC, Request for Orbital Deployment and Operating Authority for the SpaceX Gen2 NGSO Satellite System*, Order and Authorization, 37 FCC Rcd 14882, para. 4 (2022) (*SpaceX Gen2 Order*), *appeals pending sub nom International Dark-Sky Association v. FCC*, No. 22-1337 (D.C. Cir. filed Dec. 29, 2022), *Dish Network Corp. v. FCC*, No. 23-1001 (D.C. Cir. filed Jan. 3, 2023).

⁶ *SpaceX Gen2 Order*; see also *Space Exploration Holdings, LLC, Application for Modification of Authorization for the SpaceX Gen2 NGSO Satellite System to Add a Direct-to-Cellular System*, Stamp Grant, ICFS File No. SAT-MOD-20230207-00021 (granted in part and deferred in part Dec. 1, 2023), petition for reconsideration pending.

⁷ *Space Exploration Holdings, LLC, Request for Orbital Deployment and Operating Authority for the SpaceX Gen2 NGSO Satellite System*, Order and Authorization, DA 24-222 (SB Mar. 8, 2024).

⁸ See, *supra*, note 1.

⁹ Letter from L. Barbee Ponder, General Counsel & Vice President, Regulatory Affairs, Globalstar, Inc., to Marlene H. Dortch, Secretary, FCC, ICFS File No. SAT-MOD-20230207-00022 (filed Feb. 27, 2023) (Globalstar Opposition Letter).

without being accepted for filing.¹⁰ SpaceX responded to the Globalstar and DISH filings.¹¹ Because the Bureau has not accepted the Modification Application for filing, it was not placed on public notice.¹²

III. DISCUSSION

4. After review of the Modification Application and the filings in the record, we conclude that, under Commission rulemakings, the 1.6/2.4 GHz and 2 GHz bands are currently unavailable for additional MSS applicants,¹³ and therefore the Modification Application's requests to operate in these bands do not substantially comply with Commission requirements. Further, we conclude that the Modification Application's remaining request to provide MSS in the 2020-2025 MHz (Earth-to-space) band does not constitute a comprehensive proposal on its own required in a satellite application.¹⁴ Accordingly, we find the Modification Application unacceptable for filing.

A. Legal Standard

5. Section 25.112(a) of the Commission's rules provides that an application under part 25 will be unacceptable for filing and will be returned to the applicant if the application is defective with respect to completeness of answers to questions, informational showings, or other matters of a formal character, or if the application does not substantially comply with the Commission's rules, regulations, or other requirements.¹⁵ Section 25.114(a)(1) of the Commission's rules requires that license applications for NGSO constellations must comprise a "comprehensive proposal."¹⁶

B. 1.6/2.4 GHz Bands

6. For nearly 30 years, the 1610-1626.5 MHz and 2483.5-2500 MHz bands have been designated through Commission rulemaking proceedings for use by NGSO MSS "Big LEO" systems. In 1994, the Commission first adopted licensing and operating rules for Big LEO operators and established the Big LEO band plan.¹⁷ The initial band plan considered operations by multiple NGSO MSS systems using code division multiple access (CDMA) techniques, and operations by a single NGSO MSS system using time division multiple access (TDMA) techniques.¹⁸ The Commission designated the 1610-1621.35 MHz band for CDMA uplink operations, the 2483.5-2500 MHz band for CDMA downlink operations,

¹⁰ Letter from Pantelis Michalopoulos, Counsel for DISH Network Corporation, to Marlene H. Dortch, Secretary, FCC, ICFS File No. SAT-MOD-20230207-00022 (filed Feb. 17, 2023); DISH Petition.

¹¹ Letter from David Goldman, Sr. Director, Satellite Policy, SpaceX, to Marlene H. Dortch, Secretary, FCC, ICFS File No. SAT-MOD-20230207-00022 (filed Mar. 3, 2023); Letter from David Goldman, Sr. Director, Satellite Policy, SpaceX, to Marlene H. Dortch, Secretary, FCC, ICFS File No. SAT-MOD-20230207-00022 (filed Mar. 8, 2023); Opposition to Petition to Dismiss or Deny of Space Exploration Holdings, LLC, ICFS File No. SAT-MOD-20230207-00022 (filed Mar. 29, 2023). SpaceX, Globalstar, and DISH also submitted further filings in the record. See ICFS File No. SAT-MOD-20230207-00022.

¹² See 47 CFR §§ 25.112(a), (b), 25.157(c).

¹³ See *Big LEO Order*, 9 FCC Rcd 5936; *Big LEO Spectrum Sharing Order*, 19 FCC Rcd 13386; *Big LEO Spectrum Sharing Second Order*, 22 FCC Rcd 19733; *AWS-4 Report and Order*, 27 FCC Rcd 16102.

¹⁴ 47 CFR § 25.114(a)(1).

¹⁵ 47 CFR § 25.112(a); see *Comprehensive Review of Licensing and Operating Rules for Satellite Services*, Second Report and Order, 30 FCC Rcd 14713, 14798, para. 258 (2015) (while the Commission may place on public notice applications with minor inaccuracies that are not material to the Commission's or the public's review, all applications under part 25 must be substantially complete when they are filed).

¹⁶ 47 CFR § 25.114(a)(1).

¹⁷ See *Big LEO Order*, 9 FCC Rcd 5936.

¹⁸ See *id.* at para. 43.

and the 1621.35-1626.5 MHz band for TDMA operations on a bi-directional basis.¹⁹ Of the Big LEO systems considered in developing the initial band plan, two were ultimately deployed – Globalstar, using CDMA, and Iridium Constellation LLC (Iridium), using TDMA.²⁰ In 2004, in response to a petition from Iridium, the Commission reconsidered the Big LEO sharing environment, given the two operational systems, and modified the spectrum designations by permitting TDMA (Iridium) operations in the 1618.25-1621.35 MHz band on a shared basis with CDMA (Globalstar) operations.²¹ In 2007, the Commission again rebalanced the Big LEO band plan, “based upon new information in the record showing the impracticality of Big LEO spectrum sharing,” to allow for exclusive use of 7.775 megahertz of spectrum to each CDMA (Globalstar) and TDMA (Iridium) MSS system, with the two systems sharing only 0.95 megahertz.²² The Commission subsequently modified the licenses of Globalstar and Iridium accordingly. Globalstar is authorized to operate its space stations in the 1610-1617.775 MHz frequency band on an “exclusive basis,” and in the 1617.775-1618.725 MHz band on a shared basis with Iridium.²³

7. In proposing to introduce 7,500 MSS space stations operating in the portion of the Big LEO band plan designated for CDMA operations and used exclusively by Globalstar, SpaceX argues that circumstances have changed from when the bands were last examined by the Commission.²⁴ SpaceX states that it can use a variety of strategies, including phased arrays and beam scheduling protocols, to “coexist” with existing operations without causing harmful interference to “any modern, capable, and well-designed” satellite system.²⁵ SpaceX’s interference analyses, however, rely on the successful outcome of coordination with co-frequency MSS operations.²⁶ In opposition, Globalstar argues that the Modification Application lacks sufficient technical justification, contradicts settled Commission precedent, and jeopardizes important services, including emergency services, provided by Globalstar for more than two decades.²⁷

8. The Big LEO rulemaking proceedings have addressed the availability of the 1.6/2.4 GHz bands for MSS systems, most recently based on the characteristics of the only two operational systems,

¹⁹ See *id.* at paras. 43-48.

²⁰ See *Big LEO Spectrum Sharing Second Order*, 22 FCC Rcd 19733, para. 4.

²¹ See *Big LEO Spectrum Sharing Order*, 19 FCC Rcd 13386, para. 3 (“When the Commission initially adopted the Big LEO band plan, it licensed five companies to provide MSS in the Big LEO bands. Two Big LEO systems were implemented and are now providing MSS – one TDMA system and one CDMA system. In this proceeding, we consider how this development impacts usage of Big LEO spectrum and, as a result, make changes to the existing band sharing plan.”).

²² *Big LEO Spectrum Sharing Second Order*, 22 FCC Rcd 19733, para.1 (“The Big LEO L-band band plan that we establish here provides an equitable distribution of the spectrum between the CDMA satellite system operated by Globalstar, Inc. (Globalstar), and the TDMA satellite system operated by Iridium Satellite LLC (Iridium)... As a result of today’s decision, Globalstar’s CDMA system and Iridium’s TDMA system will have equal amounts of L-band Big LEO spectrum for their exclusive MSS use.”).

²³ *Globalstar Licensee LLC, GUSA Licensee LLC and Iridium Constellation LLC, Iridium Satellite LLC, Iridium Carrier Services LLC, Modification of Authority to Operate a Mobile Satellite System in the 1.6 GHz Frequency Band*, Order of Modifications, 23 FCC Rcd 15207, para. 44 (2008) (*Globalstar Modification Order*).

²⁴ Modification Application at 4. SpaceX acknowledges that “the Commission has made multiple changes to the bands over time to reflect real world uses” through the rulemaking process, and that the Commission “bas[ed] the current band plan on the fact that ‘[t]he Commission currently ha[d] no application before it for any new Big LEO MSS system.’” *Id.* SpaceX does not propose to operate in Big LEO spectrum designated for TDMA operations.

²⁵ *Id.*, Attach. A at 6.

²⁶ *Id.*, Attach. A at 7.

²⁷ Globalstar Opposition Letter, Attach. at 1.

Globalstar and Iridium.²⁸ The carefully rebalanced Big LEO band plan the Commission adopted in 2007 does not envision an additional CDMA MSS system, much less a system of 7,500 space stations, operating in this band, as proposed under the Modification Application.²⁹ In light of prior Commission action addressing Big LEO spectrum availability in the context of a rulemaking proceeding, the proper proceeding would be a new rulemaking to determine whether there is additional availability for another CDMA MSS system in the 1.6/2.4 GHz bands, and if so, what operating criteria would be appropriate for that system.³⁰ Absent such a rulemaking to address any changed circumstances, we conclude that the 1.6/2.4 GHz bands are not available for licensing of an additional NGSO MSS system. Therefore, the Modification Application's request to operate in these bands is not in substantial compliance with Commission requirements and is unacceptable for filing.³¹

C. 2 GHz Bands

9. The 2000-2020 MHz and 2180-2200 MHz bands are allocated on a co-primary basis to the fixed, mobile, and mobile-satellite services and are licensed for both MSS and AWS-4 terrestrial wireless services.³² In 2001, the Commission authorized eight satellite operators to provide MSS in the 2 GHz bands.³³ Six operators subsequently either failed to meet their deployment milestones or surrendered their authorizations, and by 2005 there were only two operators remaining – ICO Satellite Services (ICO) and TMI Communications and Company, Limited Partnership (TMI).³⁴ In 2005, the Commission modified the spectrum reservations of ICO and TMI by reassigning the portions of the 2 GHz bands forfeited by the six terminated authorizations to ICO and TMI.³⁵ Later, the ICO and TMI spectrum reservations were acquired by DISH, through its subsidiaries. DISH's New DBSD Satellite Services G.P. (formerly ICO) currently operates the DBSD G-1 satellite at the 92.85° W.L. orbital location and DISH's Gamma Acquisition L.C.C. (formerly Terrestrial, TMI) operates the Terrestrial T-1 satellite at the 111° W.L.

²⁸ See *Big LEO Spectrum Sharing Second Order*, 22 FCC Rcd 19733, para. 1.

²⁹ Modification Application at 11 (“The proposed SpaceX MSS system will consist of a payload on the satellites currently authorized to deploy as part of SpaceX’s Gen2 system, and subject to the conditions set forth in the Gen2 Authorization initially granting SpaceX authority to launch and operate 7,500 satellites.”). While SpaceX argues that the Commission has never granted Globalstar exclusive use of the 1.6/2.4 GHz bands, the Commission discussion it cites was in reference to Globalstar’s initial license based on the band plan established in 1994, which considered four possible CDMA satellite systems, not the rebalanced band plan adopted in 2007 that considered only one CDMA system (Globalstar) or Globalstar’s 2008 license. See Modification Application at 4 n.9; *Big LEO Spectrum Sharing Second Order*, 22 FCC Rcd 19733, paras. 1, 19, 20; *Globalstar Modification Order*, 23 FCC Rcd 15207, para. 44 (“Globalstar’s Big LEO MSS satellites and mobile earth station terminals are AUTHORIZED to operate in the 1610-1617.775 MHz frequency band on an exclusive basis.”).

³⁰ SpaceX appears to concede that a rulemaking is necessary to decide these issues. See SpaceX Request to Hold in Abeyance at 2 (“The Commission should reset the sharing frameworks it originally envisioned for the 1.6/2.4 GHz and 2 GHz bands by expeditiously adopting a rulemaking to ensure multiple satellite operator coexistence and sharing in these bands.”).

³¹ See 47 CFR § 25.112(a)(2).

³² 47 CFR § 2.106.

³³ *Use of Returned Spectrum in the 2 GHz Mobile Satellite Service Frequency Bands*, Order, 20 FCC Rcd 19696, para. 2 (2005).

³⁴ *Id.*

³⁵ *Id.* at 19707.

orbital location.³⁶ Consequently, DISH is the only entity authorized to provide MSS in the 2 GHz bands.³⁷

10. In 2012, the Commission adopted a terrestrial service plan known as the AWS-4 plan, which allowed for stand-alone terrestrial service in the 2000-2020 MHz and 2180-2200 MHz bands, previously authorized for MSS and its associated ancillary terrestrial component.³⁸ These bands were allocated on a co-primary basis for mobile-satellite and terrestrial fixed and mobile services.³⁹ The Commission also modified the existing 2 GHz MSS licenses to give AWS operating authority so they could provide both terrestrial and satellite service using the same spectrum. It noted that “same band, separate operator” sharing between mobile-satellite and terrestrial operations is “impractical.”⁴⁰ In allocating terrestrial operations in these bands, the Commission adopted rules requiring AWS to protect 2 GHz MSS operations.⁴¹ It also provided that if AWS-4 spectrum rights are returned, they will be made available for reassignment for terrestrial use only and will not be subject to the MSS protection rule.⁴² The Commission noted that this approach was incompatible with the deployment of additional MSS systems and did not anticipate accepting applications for new or modified systems, except for incumbent operators.⁴³

11. SpaceX, in seeking to introduce a new 2 GHz MSS system, argues that DISH is not currently offering MSS service in these bands and has no plans to offer MSS service.⁴⁴ SpaceX states that, as with its proposed operations in the 1.6/2.4 GHz bands, it can use a variety of strategies to coexist with existing operations,⁴⁵ while ultimately relying on the successful outcome of coordination with co-frequency MSS operations in its interference analyses in the 2 GHz bands.⁴⁶ In its Petition to Dismiss or Deny the SpaceX Modification Application, DISH argues that the current 2 GHz regulatory framework does not allow for additional MSS systems and that the Commission’s AWS-4 order acknowledged that only incumbent operators can deploy MSS operations in the band.⁴⁷ DISH further states that it is building out its AWS system in accordance with specific benchmarks established in the AWS-4 order, including offering terrestrial service to at least 70 percent of the population in each of its license areas within seven

³⁶ See Call Signs S2651 and S2633.

³⁷ *DISH Network Corporation*, Memorandum Opinion and Order, 28 FCC Rcd 16787, para. 6 (WTB 2013).

³⁸ *AWS-4 Report and Order*, 27 FCC Rcd 16102.

³⁹ *Id.*, para. 33.

⁴⁰ *DISH Network Corporation*, 28 FCC Rcd at 16795.

⁴¹ *AWS-4 Report and Order*, 27 FCC Rcd at 16164, para. 160.

⁴² *Id.* at 16183. Advanced Wireless Services (AWS): (1710-1755 MHz and 2110-2155 MHz bands (AWS-1); 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz bands (AWS-2); 2155-2175 MHz band (AWS-3); 2000-2020 MHz and 2180-2200 MHz (AWS-4). The loss of MSS protections refers to the economic area where the AWS system is not built out.

⁴³ *Id.* at n.468. The Commission acknowledged that “same band, separate operator sharing [may] become technically feasible in the future” but found that the appropriate means of facilitating this possible outcome was “to permit licensees of AWS-4 operating authority to utilize the Commission’s wireless secondary market mechanisms with respect to their terrestrial operating authority.” *Id.* at para. 163.

⁴⁴ Modification Application at 7.

⁴⁵ *Id.*, Attach. A at 6.

⁴⁶ *Id.*, Attach. A at 7-8.

⁴⁷ DISH Petition at 5-7.

years.⁴⁸ DISH notes that on September 29, 2023, the Commission confirmed that DISH has met its build out requirements.⁴⁹

12. In the 2012 AWS-4 Report and Order, additional MSS applications were precluded and incumbent MSS operators were assigned terrestrial rights by modification of their authorizations.⁵⁰ Limiting use of the 2 GHz bands to the incumbent MSS operators was based on the impracticality of avoiding harmful interference if separate operators for MSS and terrestrial systems were authorized in the same band. In light of prior Commission action addressing this issue in the context of a rulemaking proceeding, the proper proceeding would be a new rulemaking in order to determine if additional MSS systems should be authorized for operations in these bands.⁵¹ Absent such a rulemaking to address any changed circumstances, we conclude that the 2 GHz bands are not available for licensing an additional MSS system. Therefore, the Modification Application's request to operate in these bands is not in substantial compliance with Commission requirements and is unacceptable for filing.⁵²

D. 2020-2025 MHz band

13. SpaceX finally seeks authority to provide MSS (Earth-to-space) in the 2020-2025 MHz band. Internationally, there is a co-primary allocation to the MSS in Region 2 in the Earth-to-space direction, but no MSS allocation in Regions 1 or 3.⁵³ In the United States, this band is currently allocated on a primary basis to the fixed and mobile services, with no allocation to the MSS.⁵⁴

14. Domestically, the 2020-2025 MHz band once supported a primary MSS allocation. In 1997, the Commission added an MSS (Earth-to-space) primary allocation in the 2020-2025 MHz band.⁵⁵ Following the surrender of a number of S-band MSS licenses between 2001 and 2003, however, the Commission reallocated most of the spectrum available for MSS in the S-band to terrestrial mobile uses.⁵⁶ The Commission initially paired the 2020-2025 MHz and 2175-2180 MHz bands and proposed service

⁴⁸ Letter from Jeffrey Blum, DISH Network Corp., to Marlene H. Dortch, Secretary, FCC, ICFS File No. SAT-MOD-20230207-00022 (filed July 6, 2023).

⁴⁹ Letter from Pantelis Michalopoulos, Counsel, DISH Network Corp., to Marlene H. Dortch, Secretary, FCC, ICFS File No. SAT-MOD-20230207-00022, at 4 (filed Oct. 11, 2023).

⁵⁰ *AWS-4 Report and Order*, 27 FCC Rcd at 16164, para. 160, n.468; *DISH Network Corporation*, 28 FCC Rcd 16787.

⁵¹ SpaceX appears to concede that a rulemaking is necessary to decide these issues. *See* SpaceX Request to Hold in Abeyance at 2 (“The Commission should reset the sharing frameworks it originally envisioned for the 1.6/2.4 GHz and 2 GHz bands by expeditiously adopting a rulemaking to ensure multiple satellite operator coexistence and sharing in these bands.”).

⁵² *See* 47 CFR § 25.112(a)(2).

⁵³ *Id.*

⁵⁴ 47 CFR § 2.106. SpaceX requests waiver of the U.S. Table of Frequency allocations. Modification Application at 10.

⁵⁵ *See Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, First Report and Order and Further Notice of Proposed Rule Making, 12 FCC Rcd 7388, para. 1 (1997).

⁵⁶ *See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile & Fixed Services, et al.*, Third Report and Order, Third Notice of Proposed Rulemaking and Second Memorandum Opinion and Order, 18 FCC Rcd 2223, para. 3 (2003).

rules.⁵⁷ However, in 2008, the Commission declined to adopt the proposal.⁵⁸ In 2013, the Commission proposed to align the 2020-2025 MHz band with the 2155-2180 MHz band to support complementary uplink/mobile operations for terrestrial systems in other frequencies.⁵⁹ The Commission, however, deferred action on addressing the 2020-2025 MHz band at that time.⁶⁰ In 2020, Kepler Communications, Inc., and Spire Global, Inc., filed a Petition for Rulemaking to add a primary MSS (space-to-Earth) allocation in the 2020-2021 MHz band and a primary MSS (Earth-to-space) allocation in the 2021-2025 MHz band for use by “small satellites.”⁶¹ That petition remains pending.

15. SpaceX’s request to operate MSS (Earth-to-space) in the 2020-2025 MHz band is inconsistent the Commission’s rules in the U.S. Table of Frequency Allocations and, we note, would not be fully covered even by the pending rulemaking petition, which does not seek an MSS (Earth-to-space) allocation in the 2020-2021 MHz band. Moreover, because we have concluded that SpaceX’s requests to operate in the 1.6/2.4 GHz and 2 GHz frequency bands are unacceptable for filing, the portion of the Modification Application seeking uplink operations only in the 2020-2025 MHz band does not constitute a “comprehensive proposal” even if a waiver of the U.S. Table were considered,⁶² because there are no corresponding downlink frequencies or description of whether, or how, the system could operate with only the 2020-2025 MHz (Earth-to-space) band.⁶³

E. SpaceX Request to Hold in Abeyance

16. On February 5, 2024, SpaceX submitted a letter requesting that the Space Bureau hold the Modification Application in abeyance while it “submit[s] formal requests for the Commission to reassess its MSS spectrum sharing frameworks for the 1.6/2.4 and 2 GHz bands.”⁶⁴ On February 21 and 22, 2024, SpaceX submitted the petitions for rulemaking.⁶⁵ SpaceX argues that, while its rulemaking

⁵⁷ See *Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems*, Sixth Report and Order, Third Memorandum Opinion and Order, and Fifth Memorandum Opinion and Order, 19 FCC Rcd 20720, para. 3 (2004); *Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz, and 2175-2180 MHz Bands*; *Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands*, Notice of Proposed Rulemaking, 19 FCC Rcd 19263, para. 1 (2004).

⁵⁸ See *Amendment of the Commission’s Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz Bands*, Notice of Proposed Rulemaking and Order on Reconsideration, 28 FCC Rcd 11479, para. 35 (2013).

⁵⁹ See *id.* para. 2.

⁶⁰ See *Amendment of the Commission’s Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, & 2155-2180 MHz Bands*, Report and Order, 29 FCC Rcd 4610, para. 59 (2014). DISH chose to use the adjacent band for downlink operations. See Letter from Jeffrey H. Blum, Senior Vice President & Deputy General Counsel, DISH, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 13-225 (filed June 1, 2016).

⁶¹ *Spire Global, Inc., and Kepler Communications, Inc., Petition to Revise Sections 2.106 and 25.142 of the Commission’s Rules to Expand Spectrum Availability for Small Satellites by adding Mobile-Satellite Service Allocation in the Frequency Band 2020-2025 MHz*, RM-11869 (filed Oct. 30, 2020).

⁶² See Modification Application at 10 (“SpaceX requests a waiver of the U.S. Table of Frequency Allocations to use the 2020-2025 MHz band for uplink for its mobile satellite user terminal consistent with the ITU Region 2 allocation, subject to the outcome of the Kepler/Spire Petition.”).

⁶³ See 47 CFR § 25.114(a)(1).

⁶⁴ SpaceX Request to Hold in Abeyance at 1; see also Letter from David Goldman, Vice President of Satellite Policy, SpaceX, to Marlene H. Dortch, Secretary, FCC, ICFS File Nos. SAT-MOD-20230207-00022 and SES-RWL-20230926-02119 (filed Mar. 13, 2024).

⁶⁵ Petition for Rulemaking of Space Exploration Technologies Corp., Revision of the Big LEO Spectrum Sharing Plan to Encourage Productive MSS Use of 1.6/2.4 GHz Frequencies (filed Feb. 21, 2024); Petition for Rulemaking (continued....)

petitions are pending, the Commission should hold its application and “other pending space station and earth station applications in abeyance and implement a freeze on the filing of new or modification applications for MSS in the 1.6/2.4 GHz and 2 GHz bands.”⁶⁶ SpaceX specifically argues this should apply to the pending MSS applications filed by Globalstar and DISH subsidiary Gamma Acquisition LLC for modification or renewal of their existing authorizations.⁶⁷ EchoStar Corporation, parent company of DISH, submitted a letter in opposition to SpaceX’s request to hold in abeyance, and SpaceX responded to the opposition.⁶⁸

17. We deny SpaceX’s request to keep its Modification Application pending, in abeyance, while it seeks changes to the Commission’s policies and rules that could render the application acceptable for filing. SpaceX has gained no rights or status by the filing of the Modification Application,⁶⁹ and accordingly, holding the application in abeyance would not affect SpaceX’s rights if the Commission were to modify its policies and rules as SpaceX advocates in its petitions for rulemaking. SpaceX’s application was unacceptable when it was filed because the Commission is currently not accepting applications for new MSS entrants in the 1.6/2.4 GHz and 2 GHz bands; therefore, SpaceX’s reference to applications that have been held in abeyance after the institution of an application freeze, but which were acceptable when they were filed, is inapposite.⁷⁰ Should the Commission make the 1.6/2.4 GHz and 2 GHz bands available for additional MSS applicants in the future, SpaceX will be able to reapply under that revised framework. Until then, the Modification Application cannot be processed. To the extent that SpaceX also requests, in the context of the Modification Application, that we hold other applications in abeyance or institute an application freeze, those requests are beyond the scope of this application proceeding and we dismiss them as such with respect to this proceeding, noting they may be addressed as raised in other proceedings.

IV. CONCLUSION AND ORDERING CLAUSES

18. For the reasons discussed above, we conclude that the SpaceX Modification Application is unacceptable for filing, and on our own motion we dismiss it. For this reason, we dismiss as moot the Petition to Dismiss or Deny of DISH Network Corporation, EchoStar Satellite Services LLC, EchoStar Global Pty Ltd, and EchoStar Mobile Limited and related pleadings, including the SpaceX Motion to Strike the DISH Reply to SpaceX’s Opposition to Petition.

19. Accordingly, IT IS ORDERED that the Application of Space Exploration Holdings, LLC, for Modification of Authorization for the SpaceX Gen2 NGSO Satellite System to Add a Mobile-Satellite Service System, ICFS File No. SAT-MOD-20230207-00022, IS DISMISSED, the Petition to Dismiss or Deny of DISH Network Corporation, EchoStar Satellite Services LLC, EchoStar Global Pty Ltd, and EchoStar Mobile Limited and related pleadings ARE DISMISSED AS MOOT, the Space Exploration Holdings, LLC Motion to Strike the DISH Reply to SpaceX’s Opposition to Petition IS DISMISSED AS MOOT, and the request of Space Exploration Holdings, LLC to hold in abeyance IS DENIED in part and

of Space Exploration Technologies Corp., Revision of the Commission’s Sharing Plan to Encourage Productive Satellite Use of 2 GHz Frequencies (filed Feb. 22, 2024).

⁶⁶ SpaceX Request to Hold in Abeyance at 1.

⁶⁷ See *id.* at 2.

⁶⁸ Letter from Jennifer Manner, Senior Vice President, Regulatory Affairs, EchoStar Corporation, to Marlene H. Dortch, Secretary, FCC (filed Feb. 26, 2024); Letter from David Goldman, Vice President of Satellite Policy, SpaceX, to Marlene H. Dortch, Secretary, FCC (filed Mar. 13, 2024).

⁶⁹ See *Chadmoore Communications, Inc. v. FCC*, 113 F.3d 235, 240-41 (D.C. Cir. 1997) (holding that application of a new rule to a pending application “could [not have] impaired a right possessed by [the applicant] because none vested on the filing of its application”).

⁷⁰ SpaceX Request to Hold in Abeyance at 1-2.

DISMISSED in part as discussed herein, pursuant to sections 0.51, 0.261, 25.112, and 25.154 of the Commission's Rules, 47 CFR §§ 0.51, 0.261, 25.112, 25.154.

FEDERAL COMMUNICATIONS COMMISSION

John W. Whaley
Associate Division Chief, Satellite Programs and Policy Division
Space Bureau

Before the
Federal Communications Commission
Washington, D.C. 20554

In re Application of
Mendocino Environmental Center
For Renewal of License for
Low Power FM Station KMEC-LP
Ukiah, California
Facility ID No. 124562
NAL/Acct. No. MB-202441410007
FRN: 0022837652
File No. 0000170650

ORDER

Adopted: March 25, 2024

Released: March 26, 2024

By the Chief, Audio Division, Media Bureau:

I. INTRODUCTION

1. The Media Bureau (Bureau) has before it a request to cancel a Notice of Apparent Liability (NAL) issued to Mendocino Environmental Center (Licensee), licensee of Station KMEC-LP, Ukiah, California (Station), for apparently willfully violating section 73.3539 of the Commission's rules (Rules) by failing to timely file a license renewal application for the Station. As discussed below, we cancel the forfeiture and instead admonish Licensee for the violation.

II. BACKGROUND

2. The Commission's base forfeiture amount for the failure to file a required form is \$3,000. In the NAL, the Bureau proposed a reduced forfeiture amount of \$1,500 based upon the specific circumstances of this case. Licensee was instructed to provide a response within thirty days of receipt of the NAL. The Bureau received Licensee's response on March 4, 2024. Licensee requests cancellation of the NAL due to financial hardship.

III. DISCUSSION

3. As noted in the NAL, the Commission will not consider reducing or cancelling a

1 Mendocino Environmental Center, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, DA 24-127 (MB Feb. 9, 2024) (NAL).

2 See 47 CFR § 73.3539.

3 See Forfeiture Policy Statement and Amendment of Section 1.80(b) of the Rules to Incorporate the Forfeiture Guidelines, Report and Order, 12 FCC Rcd 17087, 17113-15 (1997) (Forfeiture Policy Statement), recon. denied, 15 FCC Rcd 303 (1999); 47 CFR § 1.80(b)(11), Table 1 to Paragraph (b)(11) – Base Amounts for Section 503 Forfeitures.

4 As an LPFM station, the Station is providing a secondary service. See, e.g., La Casa de la Raza, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, DA 22-195 (MB Feb. 25, 2022); Virginia Center for Public Press, Memorandum Opinion and Order and Notice of Apparent Liability, 34 FCC Rcd 9312 (MB 2019) (proposing \$1,500 forfeitures for untimely filed renewal applications for LPFM stations).

5 NAL at 3.

6 Letter from Stephen Scalmanini, General Manager, Mendocino Environmental Center, to Office of Secretary, FCC (March 4, 2024) (NAL Response).

7 Id.

forfeiture in response to claimed inability to pay unless the respondent submits: (1) federal tax returns for the most recent three-year period; (2) financial statements prepared according to generally accepted accounting practices; or (3) some other reliable and objective documentation that accurately reflects the respondent's current financial status.⁸ We accept Licensee's showing that payment of the proposed forfeiture would create a financial hardship. Licensee argues the proposed forfeiture amount exceeds its ability to pay, and in support, submits copies of (1) its bank records for the previous 27 months, and (2) its five most recent filings of Form 990-N with the Internal Revenue Service.⁹ Licensee's financial submissions, and the declaration of its General Manager Stephen Scalmanini, indicate that Licensee operated with a net gain significantly less than the proposed forfeiture.¹⁰ Accordingly, we will cancel the proposed forfeiture due to demonstrated inability to pay. However, we admonish Licensee for its willful violation of section 73.3539 of the Rules.¹¹

IV. ORDERING CLAUSES

4. Accordingly, **IT IS ORDERED** that, pursuant to section 504(b) of the Communications Act of 1934, as amended,¹² and sections 0.61, 0.283, and 1.80(f)(4) of the Commission's rules,¹³ the Notice of Apparent Liability for a Forfeiture (NAL/Acct. No. MB-202441410007) issued to Mendocino Environmental Center **IS CANCELLED** and that Mendocino Environmental Center is instead **HEREBY ADMONISHED** for its violation of section 73.3539 of the Commission's rules.

5. **IT IS FURTHER ORDERED** that copies of this Order shall be sent by First Class and Certified Mail, Return Receipt Requested, to Mendocino Environmental Center, c/o Stephen Scalmanini, 106 West Standley Street, Ukiah, CA 95482.

FEDERAL COMMUNICATIONS COMMISSION

Albert Shuldiner
Chief, Audio Division
Media Bureau

⁸ See *NAL* at 4, para. 12; *Discussion Radio, Inc.*, Memorandum Opinion and Order, 19 FCC Rcd 7433, 7441, para. 28 (2004), *forfeiture reduced on recon.*, 24 FCC Rcd 2206 (MB 2009).

⁹ *NAL Response* at 1 and Attachs. 1-4.

¹⁰ *Id.*

¹¹ See *Corning Christian Radio Corporation*, Order, 37 FCC Rcd 13300 (2022) (admonishing licensee for willful violation of the Commission's rules, and cancelling the \$1,500 forfeiture due to demonstrated inability to pay).

¹² 47 U.S.C. § 504(b).

¹³ 47 CFR §§ 0.61, 0.283, 1.80(f)(4).



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202 / 418-0500
Internet: <https://www.fcc.gov>

DA 24-302

Released: March 26, 2024

ANNOUNCEMENT OF COMMENT AND REPLY COMMENT DATES FOR JOINT CLOSED CAPTIONING DISPLAY SETTINGS PROPOSAL PUBLIC NOTICE

MB Docket No. 12-108

Comments Due: April 15, 2024
Reply Comments Due: April 25, 2024

On March 19, 2024, the Media Bureau released a Public Notice seeking comment on a joint proposal in the record of this proceeding addressing how the Commission should determine if specific closed captioning display settings are readily accessible.¹ The *Joint Closed Captioning Display Settings Proposal PN* set deadlines for filing comments and reply comments at 20 and 30 days, respectively, after publication of the *Joint Closed Captioning Display Settings Proposal PN* in the Federal Register.²

By this Public Notice, the Media Bureau announces that the *Joint Closed Captioning Display Settings Proposal PN* was published in the Federal Register on March 26, 2024.³ Comments must be submitted no later than April 15, 2024. Reply Comments must be submitted no later than April 25, 2024. Commenters should review the filing requirements provided in the *Joint Closed Captioning Display Settings Proposal PN*.⁴ The *Joint Closed Captioning Display Settings Proposal PN* is also available on the Commission's website.⁵

For additional information, contact Diana Sokolow, Diana.Sokolow@fcc.gov, of the Media Bureau, Policy Division, (202) 418-2120.

-FCC-

¹ *Media Bureau Seeks Comment on Joint Closed Captioning Display Settings Proposal*, Public Notice, MB Docket No. 12-108, DA 24-276 (rel. Mar. 19, 2024) (*Joint Closed Captioning Display Settings Proposal PN*).

² *Id.* at 1.

³ *Joint Closed Captioning Display Settings Proposal*, Notice, 89 Fed. Reg. 20965 (Mar. 26, 2024).

⁴ *Joint Closed Captioning Display Settings Proposal PN* at 3.

⁵ See <https://www.fcc.gov/document/media-bureau-seeks-comment-joint-caption-display-settings-proposal>.



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202 / 418-0500
Internet: <https://www.fcc.gov>
TTY: 1-888-835-5322

DA 24-303

Released: March 26, 2024

AGENDA RELEASED FOR THE MARCH 27, 2024 MEETING OF THE COMMUNICATIONS EQUITY AND DIVERSITY COUNCIL AND MEMBERSHIP ANNOUNCED

GN Docket No. 17-208

In this Public Notice, the Wireline Competition Bureau (WCB) announces that Federal Communications Commission (FCC or Commission) Chairwoman Jessica Rosenworcel has appointed members to serve on the Communications Equity and Diversity Council (CEDC or Committee). A list of the current CEDC membership is attached to this Public Notice. With this Public Notice, WCB also announces the anticipated agenda for the first meeting of the CEDC under its new charter, ending June 22, 2025. As announced in the Federal Register and in a Public Notice released March 14, 2024, the meeting is scheduled to be held, consistent with the Federal Advisory Committee Act,¹ on March 27, 2024.²

As detailed in the attachment, the agenda for the meeting will include introducing members of the CEDC, announcing working groups that will assist the CEDC in carrying out its work, receiving a presentation on the FCC's Digital Discrimination proceeding, and receiving guidance from the Commission's Offices of General Counsel and Managing Director regarding federal advisory committee best practices. This agenda may be modified at the discretion of the CEDC Chair and the Designated Federal Officer.

The meeting will be held in a hybrid manner, from 10:00 am to 2:00 pm ET. The public may attend the meeting in person at FCC headquarters at 45 L Street, NE, Washington, DC. Additionally, the meeting will be available to the public for viewing via the Internet at <https://www.fcc.gov/live>. While the CEDC's meeting is open to the public, the FCC headquarters building is not open access, and all guests must check in with and be screened by FCC security at the main entrance on L Street. Attendees are not required to have an appointment but must otherwise comply with protocols outlined at: <https://www.fcc.gov/visit>.

The public may follow the meeting on the Commission's YouTube page at <https://www.youtube.com/user/fccdotgovvideo>. Members of the public may submit questions during the meeting to livequestions@fcc.gov. Members of the public also may submit written comments to the CEDC using the FCC's Electronic Comment Filing System, ECFS, at www.fcc.gov/ecfs. Any comments should be filed in GN Docket No. 17-208.

¹ 5 U.S.C. App. 10.

² Notice of this meeting was published in the Federal Register on March 8, 2024, available at <https://www.federalregister.gov/documents/2024/03/08/2024-04954/meeting-of-the-communications-equity-and-diversity-council>. See also *FCC Announces March 27, 2024 Meeting and Leadership of the Communications Equity and Diversity Council*, Public Notice, DA 24-254 (WCB Mar. 14, 2024).

Open captioning will be provided for this event. Other reasonable accommodations for people with disabilities are available upon request. Requests for such accommodations should be submitted via e-mail to fcc504@fcc.gov or by calling the Consumer & Governmental Affairs Bureau at (202) 418-0530 (voice). Such requests should include a detailed description of the accommodation needed. In addition, please include a way for the Commission to contact the requester if more information is needed to fulfill the request. Please allow at least five days' advance notice for accommodation requests; last-minute requests will be accepted but may not be possible to accommodate.

More information about the CEDC is available at <https://www.fcc.gov/communications-equity-and-diversity-council>. You may also contact Rodney McDonald, Designated Federal Officer (DFO) of the CEDC, (202) 418-7513, Rodney.McDonald@fcc.gov; Diana Coho, Deputy DFO of the CEDC, (717) 338-2848, Diana.Coho@fcc.gov; Jaime McCoy, Deputy DFO of the CEDC, (202) 418-2320, Jaime.McCoy@fcc.gov; or Sima Nilsson, Deputy DFO of the CEDC, (202) 418-2708, Sima.Nilsson@fcc.gov.

– FCC –

COMMUNICATIONS EQUITY AND DIVERSITY COUNCIL

Rodney McDonald, Designated Federal Officer
Diana Coho, Deputy Designated Federal Officer
Jaime McCoy, Deputy Designated Federal Officer
Sima Nilsson, Deputy Designated Federal Officer

Chair:

Heather Gate, Vice President of Digital Inclusion
Connected Nation

Vice Chairs:

Nicol Turner Lee, Ph.D., Director – Center for Technology Innovation, Senior Fellow – Governance Studies Program
Brookings Institution

Susan Au Allen, Chairman, National President and CEO
US Pan Asian American Chamber of Commerce Education Foundation

Members:

Jenna Alsayegh, Senior Director of Strategic Initiatives & Partnerships
USTelecom

Robert Branson, President and CEO
Multicultural Media, Telecom and Internet Council

Robert Brooks, Digital Solutions Specialist
WHUR-FM, Howard University

Edgar Class, Partner, Wiley Rein LLP
Representing the Hispanic National Bar Association

Michele Cober, Director, Strategic Alliances
Verizon

Norma Estela Fernandez, CEO
EveryoneOn

Anisa Green, Director, Federal Regulatory
AT&T

JudeAnne Heath, Executive Director
HOTP - Hispanic Technology & Telecommunications Partnership

David Honig, President and CEO
JulGlo Productions LLC

Ronald Johnson, Ph.D., Senior Advisor and Chief Strategist for Diversity, Equity and Inclusion
Wireless Infrastructure Association

Sherman Kizart, Managing Director and Founder
Kizart Media Partners

Leticia Latino-van Splunteren, CEO
Nuptuno USA

Nicole Lazarre, Vice President of Policy and External Affairs
Charter Communications

Rosa Mendoza, Founder, President and CEO
ALLvanza

Aama Nahuja, Legal Counsel
A Wonder Media Company

Otto Padron, President & CEO
Meruelo Media

Ryan Palmer, Global Digital Equity Strategist & Director
Microsoft

Louis Peraertz, Vice President of Policy
WISPA - Wireless Internet Service Providers Association

Henry M. Rivera, Partner, Wiley Rein, LLP
Representing The Emma L. Bowen Foundation

Steven C. Roberts, Founder & President
The Roberts Companies

Dennis Santiago, Chief Operating Officer
National Diversity Coalition

Brian Scarpelli, Senior Global Policy Counsel
ACT/The App Association

Ellen Schned, Founder & CEO
Strong Women Alliance

Lakecia Foster Stickney, Executive Director, Public Policy
Comcast

Joycelyn Tate, Senior Policy Advisor
Black Women's Roundtable (BWR), National Coalition on Black Civic Participation (NCBCP)

Christopher Terry, Ph.D.

Associate Professor, University of Minnesota, Twin Cities, Hubbard School of Journalism & Mass Communications

J. Augusto Valdez, Partner & Chief Operating Officer

2042 Media

Alisa Valentin, Broadband Policy Director

Public Knowledge

Julie Wenah, Associate General Counsel & Product Lead for Civil Rights, Meta

Representing INCOMPAS

James Winston, President

National Association of Black Owned Broadcasters

Christopher Wood, Executive Director

LGBT Technology Partnership & Institute

ATTACHMENT



COMMUNICATIONS EQUITY AND DIVERSITY COUNCIL

Federal Communications Commission
45 L Street, N.E., Washington, D.C. 20554

March 27, 2024
10:00 a.m. – 2:00 p.m.

AGENDA

- 10:00 am: **Welcome and Opening of Meeting**
Rodney McDonald, Designated Federal Officer, CEDC, Wireline Competition Bureau, FCC
- 10:02 am: **Welcome Remarks**
Jessica Rosenworcel, Chairwoman
Federal Communications Commission
- 10:07 am: Sanford Williams, Deputy Chief of Staff for Chairwoman Rosenworcel
Federal Communications Commission
- 10:12 am: **Introduction of DFO & Deputy DFOs**
Rodney McDonald, Designated Federal Officer, CEDC, Wireline Competition Bureau, FCC

Diana Coho, Deputy Designated Federal Officer, CEDC, Consumer and Governmental Affairs Bureau, FCC

Jaime McCoy, Deputy Designated Federal Officer, CEDC, Wireline Competition Bureau, FCC
- 10:20 am **Introduction of CEDC Chair/Vice Chairs & Opening Remarks**
Rodney McDonald, Designated Federal Officer, CEDC, Wireline Competition Bureau, FCC

Heather Gate, Chair, CEDC, Connected Nation

Nicol Turner Lee, Ph.D., Vice Chair, CEDC, Brookings Institution

Susan Au Allen, Vice Chair, CEDC, US Pan Asian American Chamber of Commerce Education Foundation

-
- 10:35 am **Call to Order of the March 27, 2024 CEDC Meeting**
Heather Gate, Chair, CEDC, Connected Nation
- 10:36 am **Roll Call of CEDC Members**
Heather Gate, Chair, CEDC, Connected Nation
- 10:55 am: **CEDC Member Introductions**
Heather Gate, Chair, CEDC, Connected Nation

Individual Members In Attendance
- 11:45 am: **Introduction of Working Group Members**
Heather Gate, Chair, CEDC, Connected Nation

Individual Working Group Members In Attendance
- 12:00 pm: **Meeting Break**
- 12:15 pm **Overview of Records Requirements**
Darice Gamble, Office of the Managing Director, FCC
- 12:20 pm **Overview of Federal Advisory Committee Act Rules**
Paula Silberthau, Office of General Counsel, FCC
- 12:35 pm **Overview of the Federal Communications Commission’s Digital
Discrimination Proceeding**
Lisa Wilson Edwards, Associate Bureau Chief, Wireline Competition Bureau,
FCC
- 12:50 pm **CEDC Overview**
Rodney McDonald, Designated Federal Officer, CEDC, Wireline Competition
Bureau, FCC
- 1:00 pm **Questions/Comments from the Public**
- 1:10 pm **Closing Remarks**

Heather Gate, Chair, CEDC, Connected Nation

Nicol Turner Lee, Ph.D., Vice Chair, CEDC, Brookings Institution

Susan Au Allen, Vice Chair, CEDC, US Pan Asian American Chamber of
Commerce Education Foundation
- 1:30 pm **Adjournment**
Heather Gate, Chair, CEDC, Connected Nation

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Petition of Vertical Bridge REIT, LLC and
Drake Services, Inc. for Exemption from
47 C.F.R. § 17.47(b)

MEMORANDUM OPINION AND ORDER

Adopted: March 26, 2024

Released: March 26, 2024

By the Deputy Bureau Chief, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. Section 17.47(b) of the Commission’s rules requires antenna structure owners to conduct quarterly inspections of certain lighting systems; section 17.47(c) exempts from that requirement systems that the Wireless Telecommunications Bureau (Bureau) has found to include self-diagnostic features sufficient to make the quarterly inspections unnecessary. On August 22, 2022, Vertical Bridge REIT, LLC (Vertical Bridge) and Drake Services, Inc. (Drake) (collectively the Petitioners) filed a petition for exemption from 47 CFR § 17.47(b) under 17.47(c). In addition, Drake requests that “other tower owners using the Drake System be allowed to obtain the same relief as Vertical Bridge, on an expedited basis, by submitting a signed certification that they are using the Drake System on their towers.”

2. In this Memorandum Opinion and Order, we determine that the Drake Tower Light Monitoring System (DMS) satisfies the criteria of section 17.47(c) and that Vertical Bridge’s antenna

1 47 CFR § 17.47(b).

2 47 CFR § 17.47(c).

3 Petition of Vertical Bridge REIT, LLC and Drake Services, Inc. for Exemption from 47 C.F.R. § 17.47(b), dated and filed Aug. 22, 2022 (Petition). On February 10, 2023, the Bureau’s Competition and Infrastructure Policy Division (CIPD) requested additional information. See Letter from Garnet Hanly, Chief, Competition and Infrastructure Policy Division, Wireless Telecommunications Bureau, to Richard Hickey, Director, Regulatory Compliance, Vertical Bridge REIT, LLC (February 10, 2023). On February 24, 2023, Vertical Bridge supplemented its waiver request with information regarding the technical characteristics and operational capabilities of the Drake System. See Letter from Richard Hickey, Director, Regulatory Compliance, Vertical Bridge REIT, LLC, and David Sheppard, President, Drake Services, Inc. to Garnet Hanly, Chief, Competition and Infrastructure Policy Division, Wireless Telecommunications Bureau (February 24, 2023) (Vertical Bridge Supplement). On October 17, 2023, CIPD sent a second request for additional information. See Letter from Garnet Hanly, Chief, Competition and Infrastructure Policy Division, Wireless Telecommunications Bureau, to Richard Hickey, Director, Regulatory Compliance, Vertical Bridge REIT, LLC (October 17, 2023). On November 9, 2023, Vertical Bridge supplemented its waiver request with additional information regarding the technical characteristics and operational capabilities of the Drake System. See letter from Richard Hickey, Director, Regulatory Compliance, Vertical Bridge REIT, LLC, and David Sheppard, President, Drake Services, Inc., to Garnet Hanly, Chief, Competition and Infrastructure Policy Division, Wireless Telecommunications Bureau (November 9, 2023) (Vertical Bridge Supplement II).

4 Petition at 1.

structures using that system are therefore exempt from the quarterly inspection requirement. We also establish an expedited process by which other users of the DMS may apply for an exemption under 17.47(c). Our actions today should encourage other tower owners to invest in state-of-the-art technologies so that they, too, will become capable of continuous monitoring of both their lighting systems and control devices.

II. BACKGROUND

3. Section 17.47(b) provides that the owner of any antenna structure that is registered with the Commission and that has been assigned lighting specifications pursuant to part 17 of the Commission's rules "[s]hall inspect at intervals not to exceed 3 months all automatic or mechanical control devices, indicators, and alarm systems associated with the antenna structure lighting to insure that such apparatus is functioning properly."⁵ Section 17.47(c) exempts from this requirement "any antenna structure monitored by a system that the Wireless Telecommunications Bureau has determined includes self-diagnostic features sufficient to render quarterly inspections unnecessary, upon certification of use of such system to the Bureau."⁶

4. Vertical Bridge states that it is the "largest privately-owned tower company in the United States, owning over 9,000 structures."⁷ Drake Services is a LED lighting and monitoring systems manufacturer.⁸ The Petition asks us to determine that the self-diagnostic functions of the DMS are sufficiently robust to ensure that the control devices, indicators, and alarm systems on antenna structures using the DMS are operating properly, such that quarterly inspections are unnecessary.⁹ The Petitioners argue that the quarterly inspections of antenna monitoring systems mandated by section 17.47(b) have been rendered unnecessary because of technological advancements associated with the DMS.¹⁰ The Petitioners ask us to provide the same relief granted to other similarly robust systems in the past, and "grant an exemption from Section 17.47(b) so that Vertical Bridge towers using the Drake System will be relieved of all periodic inspection obligations for its towers monitored using the Drake System",¹¹ pursuant to section 17.47(c).¹²

5. Specifically, the Petitioners assert that the DMS is "among the most flexible, technologically-sophisticated monitoring system in the market today",¹³ and that "[s]ince being introduced to the industry in 2019, the Drake System has a flawless record of performance, having

⁵ 47 CFR § 17.47(b).

⁶ 47 CFR § 17.47(c).

⁷ *Petition* at 3.

⁸ *Id.* at 4.

⁹ *Id.* at 10.

¹⁰ *Id.*

¹¹ *Id.*

¹² Before creating the procedure for exemptions in section 17.47(c), the Commission granted limited waivers of section 17.47(b) and permitted antenna structure owners to conduct annual, rather than quarterly, inspections. After 2014, section 17.47(c) rendered such waivers unnecessary. *See 2004 and 2006 Biennial Regulatory Reviews – Streamlining and Other Revisions of Parts 1 and 17 of the Commission's Rules Governing Construction, Marking and Lighting of Antenna Structures; Amendments to Modernize and Clarify Part 17 of the Commission's Rules Concerning Construction, Marking and Lighting of Antenna Structures*, Report and Order, 29 FCC Rcd 9787, 9799-9802 (2014) (*Part 17 Order*).

¹³ *Petition* at 4.

accurately flagged 100 instances in which a Notice to Airman¹⁴ (NOTAM) was required, with zero false positives or notification failures.¹⁵ Petitioners contend that the DMS is not only safe and reliable, but similar to systems that have previously supported waiver grants.¹⁶ Petitioners claim that the DMS employs self-diagnostic functions that are sufficiently robust so as to make unnecessary quarterly inspections to ensure that the control devices, indicators, and alarm systems on the towers are operating properly.¹⁷ Petitioners also maintain that the DMS provides the functional equivalent of a continuous inspection of control devices on all towers it monitors. As a result, Petitioners assert that Drake can detect all failure modes of the obstruction lighting system or monitoring device itself nearly instantaneously.¹⁸ In support of these assertions, the Petitioners describe the alarm notification, 24-hour polling, manual contact, staffing and fail-safe procedures of the systems as set forth below.

6. *Alarm notification.* The DMS is comprised of Radio Transmit Unit Controllers (RTU), cloud-based monitoring platform software (Cloud Server), and a network operations center (NOC). The RTUs activate alarms when the “self-diagnostic function determines that there is a lighting malfunction.”¹⁹ The DMS classifies alarms as either critical or non-critical/informational,²⁰ with beacon/strobe/flashing sidelight failure, beacon/strobe communication failure, photo cell failure, site communication failure, power failure, Sync failure, IR [infrared] failure, low flash energy, and consecutive missed flashes treated as critical,²¹ and with non-flashing side marker failure classified as non-critical.²² The RTU receives alarms from each DMS monitored tower, which are then relayed to the Cloud Server to generate alerts for staff at the NOC.²³ The NOC acknowledges the alarm on the Cloud Server and NOC personnel process the correct notifications and/or alerts within minutes of the receipt of the alarm.²⁴ A NOC technician will respond to the alert and remotely access the monitoring equipment at the site. An evaluation of the alarm is made, and remote diagnostics are performed to rectify and clear the alarm if possible.²⁵ If a NOTAM is warranted, it is then created and documented on the Cloud Server.²⁶ Once the NOTAM has been created, the NOTAM status is changed on the monitoring platform and the alarm alerts are stopped. The initial NOTAM is opened for 72-hours to allow for additional efforts to

¹⁴ Effective December 2, 2021, the Federal Aviation Administration (FAA) changed the acronym NOTAM from Notice to Airmen to the more applicable term Notice to Air Missions, which is inclusive of all aviators and missions. See U.S. Department of Transportation, Federal Aviation Administration, Air Traffic Organization Policy Change JO 7930.2S, CHG 2 (December 2, 2021).

¹⁵ *Petition* at 5.

¹⁶ *Petition* at 5, 10; See also *In the Matter of Requests of American Tower Corporation and Global Signal, Inc., to Waive Section 17.47(b) of the Commission’s Rules*, WT Docket No. 05-326, Memorandum Opinion and Order, 22 FCC Rcd 9743 (2007) (*ATC and Global Tower Waiver Order*) (waiving section 17.47(b) requirements for users of the Eagle and Hark Systems).

¹⁷ *Petition* at 5, 10.

¹⁸ *Petition* at 5, Exhibit 1, pgs. 3, 4.

¹⁹ *Petition* at 6.

²⁰ *Vertical Bridge Supplement* at 1; *Vertical Bridge Supplement II* at 1-2.

²¹ *Vertical Bridge Supplement II* at 1-2.

²² *Id* at 2.

²³ *Petition* at 7; *Vertical Bridge Supplement* at 3.

²⁴ *Petition* at 7, Exhibit 1, pgs. 8, 10, 11; *Vertical Bridge Supplement* at 3.

²⁵ *Petition* at 7, Exhibit 1, pg. 11; *Vertical Bridge Supplement* at 3.

²⁶ *Petition* at 7; *Vertical Bridge Supplement* at 3.

clear the NOTAM.²⁷ If the alarm has not cleared during this initial 72-hour period, the NOTAM is extended for 15 days while field action is undertaken.²⁸ The NOTAM on the monitoring platform remains until a site technician clears the alarm.²⁹ All alarms, events, cases, polled data, and trap logs are recorded in an electronic database and stored for 5 years.³⁰

7. *24-hour polling.* The DMS is programmed to proactively initiate a connection to each monitored site multiple times per hour to verify the connectivity and alarm status.³¹ Every 20 minutes, the cloud server transmits a “Poll” to the site, to confirm connectivity and document all metrics.³² In the event communications are lost, the system will initiate an alert to NOC personnel for further action as noted above.

8. *Manual contact.* The DMS allows NOC technicians to “control lighting systems mode and reset the equipment remotely for any light manufacturer’s equipment.”³³ With direct remote network access to the equipment over their private network, the DMS can reboot, initiate mode changes, or reconfigure other parameters, thereby creating a “fully manageable remote system.”³⁴ As a result, NOC personnel can remotely perform diagnostics and troubleshoot a problem, potentially correcting it remotely.³⁵ If the problem cannot be corrected remotely, a NOTAM is created as noted above and the tower owner is contacted to issue work orders to contractors to repair the failure at the tower site.³⁶

9. *Staffing and Fail-Safe Procedures.* As noted above, the RTUs activate alarms when the self-diagnostic function determines that there is a lighting malfunction. These devices are “microcontroller-based, highly sophisticated and programmable, and are equipped with internal battery backups to permit alarm transmission when power outage occurs at a site.”³⁷ The DMS also allows NOC personnel to remotely perform inspections on the fly to ensure normal operation.³⁸ In addition, Drake monitors server health at both the physical and operating system levels at all times (24 hours a day, year around), including monitoring software (that is external to the server) to ensure that the server components of the system are running properly.³⁹

²⁷ *Vertical Bridge Supplement* at 3.

²⁸ *Vertical Bridge Supplement* at 3-4.

²⁹ *Vertical Bridge Supplement* at 3.

³⁰ *Vertical Bridge Supplement* at 4.

³¹ *Petition* at 5, 7, Exhibit 1, pgs. 3, 4; *Vertical Bridge Supplement* at 3.

³² *Petition* at 7, Exhibit 1, pg. 4; *Vertical Bridge Supplement* at 2.

³³ *Petition* at Exhibit 1, pg. 5.

³⁴ *Id.*

³⁵ *Petition* at 8, Exhibit 1, pgs. 2, 3, 5.

³⁶ *Vertical Bridge Supplement* at 4.

³⁷ *Petition* at 6; *Vertical Bridge Supplement Attachment A.*

³⁸ *Petition* at 8, Exhibit 1, pgs. 2, 3, 5.

³⁹ *Vertical Bridge Supplement* at 4.

10. To monitor the alarms, Drake's NOC and backup NOCs are staffed with trained personnel capable of responding to alarms 24 hours per day, 365 days per year,⁴⁰ which allows personnel to quickly shift to the backup NOC in the event that the primary NOC is compromised.⁴¹ Should the primary NOC become compromised, "alert notifications are sent instantly from the cloud-based phone system to the cell phones of all NOC staff. The back-up NOCs can be remotely activated and made fully operational by staff within 30 minutes."⁴²

11. The primary NOC, which includes a backup natural gas generator that helps prevent power failure at the facility, is located in Paducah, KY.⁴³ In addition, according to Drake, catastrophic failure at the NOC is only an "inconvenient temporary disruption for people, and in no way effects [sic] monitoring services or alarm notifications."⁴⁴ Customers and NOC personnel will have continued access to the monitoring platform from multiple locations because the platform resides on multiple virtual machines located in multiple physical regions, and not on hardware that requires any of Drake's facilities to be operable. The "destruction of all Drake facilities will have no effect on the system because access to the platform is available from any web capable device."⁴⁵ However, should the primary NOC fail, Drake also has backup NOCs in Franklin, TN and Charleston, SC, as well as a business partner in Coteau-du-lac Quebec, Canada, which could provide limited system access on an interim basis while service to one or more of the NOCs is restored.⁴⁶ The existence of multiple NOC centers is an important fail-safe mechanism as it allows a backup center to assume monitoring responsibilities in the event of a catastrophic failure at the primary center, ensuring that robust monitoring of the towers will continue unimpeded.⁴⁷

12. Further, there is battery backup at both the tower sites and the NOC, as well as redundant communications systems available to the DMS.⁴⁸ Facility-wide backup power has been installed both at the primary and backup NOCs, which can provide back-up power indefinitely.⁴⁹ The Drake System DM-RTUs are microcontroller-based and are equipped with internal battery backups to permit alarm transmission when power outage occurs at a tower site.⁵⁰ In addition, the DMS maintains a continuous and permanent two-way link between each of the tower sites and the response center through multiple fiber lines from multiple carriers.⁵¹ The NOC technician "decides which carrier to use for each application based on carrier availability and si[gnal] strength and can manually change carriers at any

⁴⁰ *Petition* at 6, 9, Exhibit 1, pgs. 8, 12. During normal working hours there are at least 3-4 staff members working at the primary NOC, with at least one staff member physically present and two additional staff members on call at all times (24 hours a day, year-round). *Vertical Bridge Supplement* at 3.

⁴¹ *Vertical Bridge Supplement* at 3.

⁴² *Id.*

⁴³ *Vertical Bridge Supplement* at 2.

⁴⁴ *Petition* at Exhibit 1, pg. 5.

⁴⁵ *Id.*

⁴⁶ *Petition* at Exhibit 1, pg. 3; *Vertical Bridge Supplement* at 2-3.

⁴⁷ *Petition* at Exhibit 1, pg. 3.

⁴⁸ *Petition* at 6, Exhibit 1, pgs. 2, 6, 7, 12; *Vertical Bridge Supplement* at 2-3, Attachment A; *Vertical Bridge Supplement II* at 2-3.

⁴⁹ *Vertical Bridge Supplement* at 2.

⁵⁰ *Petition* at 6; *Vertical Bridge Supplement* at Attachment A; *Vertical Bridge Supplement II* at 2-3.

⁵¹ *Petition* at Exhibit 1, pg. 7; *Vertical Bridge Supplement* at 2.

time in the event of signal degradation or system failure”.⁵² The built-in redundancies ensure that the DMS notifications are sent immediately in the event of an alarm.⁵³

III. DISCUSSION

13. We find that the DMS “includes self-diagnostic features sufficient to render quarterly inspections unnecessary”⁵⁴ and is similar to the monitoring systems we have evaluated in other orders. On May 15, 2007, the Commission granted American Tower Corporation (ATC) and Global Signal, Inc. (GSI) waivers of section 17.47(b) to allow annual, rather than quarterly, inspection of towers monitored by specified, technologically advanced monitoring systems.⁵⁵ In the 2014 *Part 17 Order*, the Commission granted exemptions from all inspection obligations to those entities previously granted a waiver for their antenna structures monitored by qualifying systems, as long as they continued to meet the advanced monitoring obligations to which they had already certified.⁵⁶ Since then, the Bureau has, on delegated authority, granted similar waivers to entities demonstrating that their systems were similarly robust, and were operated in a similar manner, to the systems described in the *ATC and Global Tower Waiver Order*.⁵⁷ Accordingly, we find that the DMS, when used in the manner described by Vertical Bridge, justifies an exemption from the quarterly inspection requirement of section 17.47(b) pursuant to section 17.47(c).

14. The technology that the DMS employs is similar to that exhibited by other monitoring systems that we have previously found to be sufficiently robust to support waivers based on the efficacy of their system and backup procedures. The DMS is similar in that it has a continuous and permanent two-way link between the tower site and the response center;⁵⁸ timely reporting of potential problems;⁵⁹ continuously staffed response centers;⁶⁰ 24-hour polling of both lighting and communications systems;⁶¹ on demand interrogation capabilities;⁶² backup response centers;⁶³ and essentially uninterrupted communications between the response center and the towers during power outages.⁶⁴

⁵² *Vertical Bridge Supplement* at 2.

⁵³ *Petition* at Exhibit 1, pg. 3.

⁵⁴ 47 CFR § 17.47(c).

⁵⁵ See *ATC and Global Tower Waiver Order*, 22 FCC Rcd 9743 at 9748 (2007), para. 18.

⁵⁶ *Part 17 Order*, 29 FCC Rcd at 9801, para 34.

⁵⁷ See, e.g., *United States Cellular Corporation Request for Waiver of 47 C.F.R. § 17.47(b)*, Memorandum Opinion and Order, 30 FCC Rcd 5026 (WTB 2015); *Petition of Cellco Partnership For Exemption from 47 CFR § 17.47(b): Vanguard Monitoring System*; *Petition of Cellco Partnership For Exemption from 47 CFR § 17.47(b): QLI Monitoring System*, Memorandum Opinion and Order, 34 FCC Rcd 3759 (WTB 2019); *In the Matter of American Electric Power Service Corporation Request For Waiver of 47 C.F.R § 17.47*, Memorandum Opinion and Order, DA 23-43, released Jan 19, 2023. See also *Part 17 Order*, 29 FCC Rcd at 9801, para 34.

⁵⁸ *Vertical Bridge Supplement* at 2.

⁵⁹ *Petition* at 5, Exhibit 1, pg. 3, 11.

⁶⁰ *Petition* at 6, 9, Exhibit 1, pg. 8; *Vertical Bridge Supplement* at 2.

⁶¹ *Petition* at 5, 7, Exhibit 1, pgs. 3, 4; *Vertical Bridge Supplement* at 2, 3.

⁶² *Petition* at 5, 8, Exhibit 1, pg. 5.

⁶³ *Petition* at 6, 9, Exhibit 1, pg. 3; *Vertical Bridge Supplement* at 2-3.

⁶⁴ *Petition* at 6, Exhibit 1, pg. 2; *Vertical Bridge Supplement* at 2, Attachment A.

15. Based on the record before us, and consistent with previous Commission and Bureau orders,⁶⁵ the Bureau finds that the DMS includes self-diagnostic features sufficient to render quarterly inspections unnecessary.⁶⁶ We conclude, based on the Petitioners' representations, that the DMS is a safe and reliable monitoring system with tracking mechanisms that ensure proper functioning of their remote monitoring technology. Such advanced technology provides the benefits of more rapid response in case of a lighting failure. As a result, the DMS, when used in the manner described in this Order, justifies an exemption from the quarterly inspection requirement of section 17.47(b). Therefore, pursuant to section 17.47(c), Vertical Bridge is exempt from section 17.47(b) with regard to any of its towers monitored by the DMS in the manner described in this Order. This will enable Vertical Bridge to more efficiently carry out its responsibilities under part 17 of the Commission's rules.⁶⁷

16. Further, pursuant to Drake's request, for any other antenna structure owner that employs the DMS in the manner described in this Order, we will grant, in an expedited manner, exemptions from section 17.47(b) upon satisfactory submission and review of a streamlined petition containing the following certifications: (1) the structure is monitored by the DMS under the process described in this Order,⁶⁸ and (2) the owner maintains a facility to receive notifications of failures from the DMS, which will enable the tower owner to carry out its responsibilities under Part 17 of the Commission's rules.⁶⁹ We find the latter certification necessary to ensure that tower owners receiving waivers remain equipped to comply with the Commission's regulations. The certification shall be signed, under penalty of perjury, by a company officer (or partner, sole proprietor or similar person able to act on behalf of the tower owner) with knowledge of the underlying facts. . Our actions today should encourage other tower owners to invest in state-of-the-art technologies so that they, too, will become capable of continuous monitoring of both their lighting systems and control devices.

⁶⁵ See *Petition of Optasite Towers L.L.C. for Waiver of Section 17.47(b) of the Commission's Rules*, Memorandum Opinion and Order, 22 FCC Rcd 18456 (WTB 2007); *In the Matter of Crown Castle USA Inc. Request for Waiver of 47 C.F.R. § 17.47(b)*, Memorandum Opinion and Order, 22 FCC Rcd 21881 (WTB 2007); *In the Matter of Request of Global Tower LLC for Waiver of 47 C.F.R. § 17.47(b)*, Memorandum Opinion and Order, 23 FCC Rcd 16531 (WTB 2008); *In the matter of TowerSentry LLC Request for Waiver of 47 C.F.R. § 17.47(b) and Joint Petition of Diamond Communications LLC and Diamond Towers LLC for Waiver of 47 C.F.R. § 17.47(b)*, Memorandum Opinion and Order, 24 FCC Rcd 10274 (WTB 2009); *In the matter of Request of Mobilitie, LLC for Waiver of 47 C.F.R. § 17.47(b) and Flash Technology Request for Waiver of 47 C.F.R. § 17.47*, Memorandum Opinion and Order, 24 FCC Rcd 11949 (WTB 2009); *American Tower Corporation Request for Waiver of 47 CFR § 17.47*, Memorandum Opinion and Order, 28 FCC Rcd 294 (WTB 2013); *United States Cellular Corporation Request for Waiver of 47 C.F.R. § 17.47(b)*, Memorandum Opinion and Order, 30 FCC Rcd 5026 (WTB 2015); *Petition of Cellco Partnership For Exemption from 47 CFR § 17.47(b): Vanguard Monitoring System; Petition of Cellco Partnership For Exemption from 47 CFR § 17.47(b): QLI Monitoring System*, Memorandum Opinion and Order, 34 FCC Rcd 3759 (WTB 2019); *In the matter of American Electric Power Service Corporation Request for Waiver of 47 C.F.R. § 17.47(b)*, Memorandum Opinion and Order, DA 23-43, released January 19, 2023.

⁶⁶ 47 CFR § 17.47(c).

⁶⁷ See *Part 17 Order*, 29 FCC Rcd at 9800-9801, paras. 31-34.

⁶⁸ Drake notes that "in cases where customers have their own monitoring or NOC facility Drake staff is the backup system for their obstruction lighting alert reporting." See *Petition* at Exhibit 1, pg. 5. We remind Drake that for any further waiver grants for those using the DMS, the Drake NOCs must be the primary and backup NOCs. This waiver grant does not apply to any customers that use their own NOC facility as the primary or backup NOC as they have not been reviewed by the Commission.

⁶⁹ *Part 17 Order*, 29 FCC Rcd at 9801, para. 34.

IV. ORDERING CLAUSE

17. Pursuant to sections 4(i), 303(q), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(q), 303(r), and pursuant to sections 0.131, 0.331 and 17.47(c) of the Commission's Rules, 47 CFR §§ 0.131, 0.331, 17.47(c), the Petition filed by Vertical Bridge REIT, LLC and Drake Services, Inc. IS GRANTED.

FEDERAL COMMUNICATIONS COMMISSION

Kari L. Hicks
Deputy Bureau Chief, Wireless Telecommunications Bureau



PUBLIC NOTICE

Federal Communications Commission
45 L St., N.E.
Washington, D.C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>

DA 24-305
Released: March 27, 2024

**DOMESTIC SECTION 214 APPLICATION FILED FOR THE ACQUISITION OF ASSETS OF
CCI SYSTEMS, INC. BY SPECTRUM MID-AMERICA, LLC, CHARTER FIBERLINK CCO, LLC,
CHARTER FIBERLINK-MICHIGAN, LLC, TIME WARNER CABLE INFORMATION
SERVICES (MICHIGAN), LLC, TIME WARNER INFORMATION SERVICES (WISCONSIN),
LLC, TIME WARNER CABLE BUSINESS LLC, AND SPECTRUM ADVANCED SERVICES, LLC**

STREAMLINED PLEADING CYCLE ESTABLISHED

WC Docket No. 24-31

Comments Due: April 10, 2024
Reply Comment Due: April 17, 2024

By this Public Notice, the Wireline Competition Bureau seeks comment from interested parties on an application filed by CCI Systems, Inc. (CCI), Spectrum Mid-America, LLC (Spectrum), Charter Fiberlink CCO, LLC (Fiberlink CCO), Charter Fiberlink – Michigan, LLC (Fiberlink Michigan), Time Warner Cable Information Services (Michigan), LLC (TWCIS (MI)), Time Warner Cable Information Services (Wisconsin), LLC (TWCIS (WI)), Time Warner Cable Business LLC (TWCB) (Fiberlink CCO, Fiberlink Michigan, TWCIS (MI), TWCIS (WI), and TWCB, collectively, referred to as Charter Telcos), and Spectrum Advanced Services, LLC (Spectrum Advanced) (Spectrum, the Charter Telcos, and Spectrum Advanced, collectively, referred to as the Charter Entities) (CCI and the Charter Entities, together, Applicants), pursuant to section 214(a) of the Communications Act of 1934, as amended, and sections 63.03-04 of the Commission's rules,¹ requesting consent for the acquisition of certain assets of CCI by the Charter Entities.²

¹ See 47 U.S.C. § 214(a); 47 CFR §§ 63.03-04.

² The specific assets involved in this transaction provide telecommunications and other communications services under CCI's "Astrea" brand to customers in rural Michigan and Wisconsin. See Domestic Section 214 Application Filed for the Assignment of Certain Assets of CCI Systems, Inc., to Spectrum Mid-America, LLC, Charter Fiberlink CCO, LLC Charter Fiberlink-Michigan, LLC, Time Warner Cable Information Services (Michigan), LLC, Time Warner Information Services (Wisconsin), LLC Time Warner Cable Business LLC, and Spectrum Advanced Services LLC., WC Docket No. 24-31 (filed Jan. 25, 2024) (Application). On March 14, 2024, Applicants filed a supplement to their domestic section 214 application. Letter from Charles A. Hudak, Counsel for Charter Communications, Inc., and Joshua M. Brobeck, counsel to CCI Systems, Inc., to Marlene H. Dortch, Secretary, FCC (filed Mar. 14, 2024) (Supplement). Any action on this domestic section 214 application is without prejudice to Commission action on other related, pending applications.

CCI, a Michigan corporation, provides competitive telecommunications and other communications services to residential and business customers in more than 60 rural communities in Wisconsin and Northern Michigan under the “Astrea” brand and predecessor brands.³ Astrea also has fiber passing through multiple counties in Wisconsin, Northern Michigan, and Minnesota.⁴

Spectrum does not currently provide telecommunications services and is a wholly-owned subsidiary of Charter Communications, Inc. (Charter Parent). Subsidiaries of Charter Parent provide competitive local exchange carrier (LEC) and other communications services to 32 million residential and business customers across 41 states. The Charter Telcos currently provide service as competitive LECs to customers in Michigan and Wisconsin.⁵ Spectrum Advanced does not provide telecommunications services, but provides other communications services to customers in 41 states. The Charter Entities, each Delaware entities, provide competitive intrastate and interstate telecommunications services and other communications services to business and residential customers in Michigan and Wisconsin.⁶ The Charter Entities are wholly owned, through a series of intervening U.S. limited liability companies, by Charter Communications Holdings, LLC (Charter Communications Holdings), which, in turn, is owned by CCH II, LLC (CCH II) (88.3%) and Advance/Newhouse Partnership (Advance/Newhouse) (10.6%), both Delaware entities. Applicants state that Charter Parent wholly owns CCH II and also holds a 12.42% interest in Advance/Newhouse.⁷ Charter Parent is owned

³ Applicants state that Astrea was formed as Packerland Broadband in 2007 and rebranded in 2019 under the name Astrea. In Michigan, CCI/Astrea provides services in the cities of Crystal Falls, Mackinac Island, Stephenson; towns of Albert, Charlton, Clark, Crystal Falls, Daggett, Garfield, Greenwood, Marquette, Mellen, Menominee, Nadeau, Pickford, Portage, Spalding, and Stephenson; and the villages of Carney, Daggett, and Powers. In Wisconsin, CCI/Astrea provides services in the cities of Augusta, Gillet, Greenwood, Pittsville, and Oconto Falls; the towns of Amberg, Angelica, Arpin, Auburndale, Bagley, Beecher, Blackwell, Brazeau, Bryon, Carson, Chase, Chippewa, Dexter, Elcho, Enterprise, Fifield, Gillett, Goodman, Green Valley, Hansen, Harland, Jacobs, Kekoskee, Lake, Lena, Laona, Leroy, Lincoln, Lomira, Maple Valley, Marshfield, Mellen, Morse, Nashville, Oconto Falls, Pembine, Pound, Schoepke, Sigel, Solon Spring, Spruce, Stephenson, Stiles, Underhill, Upham, Washington, Waubeno, Williamstown, Wonewoc, and Wood; and the villages of Arpin, Auburndale, Bonduel, Brownsville, Butternut, Cecil, Coleman, Crivitz, Fall Creek, Hewitt, Junction City, Lena, Nichols, Pound, Solon Springs, Suring, Union Center, Vesper, Wausaukee, and Wonewoc. Applicants state that Astrea participates in the Affordable Connectivity Program and will continue to participate in the program following the consummation of the proposed transaction.

⁴ Applicants state that Astrea does not provide service in all the counties its fiber passes through. In Minnesota, CCI/Astrea has fiber that passes through St. Louis County. In Northern Michigan, CCI/Astrea has fiber that passes through Alcona, Chippewa, Dickinson, Gogebic, Iron, Mackinac, Menominee, Montmercy, and Oscoda Counties. In Wisconsin, CCI/Astrea has fiber that passes through Ashland, Barron, Bayfield, Brown, Chippewa, Clark, Dane, Dodge, Douglas, Eau Claire, Florence, Fond Du Lac, Forest, Grant, Iowa, Iron, Juneau, Lafayette, Langlade, Marinette, Marathon, Monroe, Oconto, Onieda, Outagamie, Portage, Price, Sauk, Shawano, Washburn, Winnebago, and Wood Counties.

⁵ Applicants state that each of the Charter Telcos provide competitive LEC services except TWBC, which provides service as an interexchange carrier to customers in Michigan and Wisconsin.

⁶ Affiliates of the Charter Entities provide intrastate and interstate telecommunications services, including point-to-point private line telecommunications services, to customers in Alabama, Arizona, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Kansas, Kentucky, Louisiana, Massachusetts, Maryland, Maine, Minnesota, Missouri, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, Virginia, Washington, West Virginia, and Wyoming. Applicants state that Spectrum Advanced does not provide telecommunications services, but provides other communications services to customers in each of these states. Applicants provide additional information on the affiliates of the Charter Entities. See Application at Exh. C; Supplement at 2-4.

by Liberty Broadband Corporation (28.56%),⁸ a U.S. entity, which, in turn, is owned by John Malone (13.96%), a U.S. citizen.⁹

Pursuant to the terms of the proposed transaction, Spectrum will acquire certain assets of CCI, including the assets used by Astrea to provide point-to-point private line telecommunications services to business customers in Michigan and Wisconsin. Following the consummation of the proposed transaction, all of the assets relating to the telephone, cable television, and other communications business of CCI/Astrea in Michigan and Wisconsin, along with CCI/Astrea's existing customers, will be transferred to the Charter Entities.¹⁰

Applicants request streamlined treatment of the proposed transaction under the Commission's rules and assert that a grant of the application would serve the public interest, convenience, and necessity. We accept the application for filing under section 63.03(b)(2)(i) of the Commission's rules.¹¹

Domestic Section 214 Application Filed for the Acquisition of Certain Assets of CCI Systems, Inc., by Spectrum Mid-America, LLC, Charter Fiberlink CCO, LLC, Charter Fiberlink-Michigan, LLC, Time Warner Cable Information Services (Michigan), LLC, Time Warner Information Services (Wisconsin), LLC, Time Warner Cable Business LLC, and Spectrum Advanced Services, LLC, WC Docket No. 24-31 (filed Jan. 25, 2024).

GENERAL INFORMATION

The transfer of control identified herein has been found, upon initial review, to be acceptable for filing as a streamlined application. The Commission reserves the right to return any transfer application if, upon further examination, it is determined to be defective and not in conformance with the Commission's rules and policies. Pursuant to section 63.03(a) of the Commission's rules, 47 CFR § 63.03(a), interested parties may file comments **on or before April 10, 2024**, and reply comments **on or**

⁷ A/NPC Holdings LLC (A/NPC Holdings), a Delaware limited liability company, holds a 99% direct interest in Advance/Newhouse. A/NPC Holdings, in turn, is owned by Newhouse Cable Holdings, LLC (Newhouse Cable Holdings) (61.24%) and Advanced Communications Company LLC (38.76%), both New York limited liability companies. Newhouse Cable Holdings is wholly owned by Newhouse Broadcasting Corporation, a New York corporation.

⁸ Liberty Broadband Corporation wholly owns GCI Communication Corp, a provider of telecommunications and other communications services in Alaska. Applicants state that there is no overlap between affiliates of Liberty Broadband and Advance/Newhouse Partnership and the CCI assets that the Charter Entities are acquiring.

⁹ Applicants provide post-consummation ownership information and charts of the relevant entities sitting above the Charter Entities. Application at Exh. B (Current Holders of at Least Ten (10) Percent of the Equity and Voting Power of the Charter Entities); Supplement at Exh. D (Organizational Charts).

¹⁰ Contemporaneously with the closing of the proposed transaction, Applicants state that Spectrum will (1) transfer to the Charter Telcos certain telephone assets that were used by Astrea to offer or provide its point-to-point private line telecommunications services, including Astrea's existing private line customer base in those communities, and (2) transfer to Spectrum Advanced the assets that were used by Astrea to offer or provide interconnected VoIP services, including Astrea's interconnected VoIP customer base. Applicants state that the proposed transaction will result in Spectrum acquiring Astrea's cable television and Internet assets and that, following the consummation of this proposed transaction, Astrea will no longer provide telecommunications or interconnected VoIP services in Michigan or Wisconsin.

¹¹ 47 CFR § 63.03(b)(2)(i).

before April 17, 2024. Pursuant to section 63.52 of the Commission's rules, 47 CFR § 63.52, commenters must serve a copy of comments on the Applicants no later than the above comment filing date. Unless otherwise notified by the Commission, the Applicants may transfer control on the 31st day after the date of this notice.

Pursuant to section 63.03 of the Commission's rules, 47 CFR § 63.03, parties to this proceeding should file any documents using the Commission's Electronic Comment Filing System (ECFS): <http://apps.fcc.gov/ecfs/>.

In addition, e-mail one copy of each pleading to each of the following:

- 1) Gregory Kwan, Competition Policy Division, Wireline Competition Bureau, gregory.kwan@fcc.gov; and
- 2) Jim Bird, Office of General Counsel, jim.bird@fcc.gov.

People with Disabilities: We ask that requests for accommodations be made as soon as possible in order to allow the agency to satisfy such requests whenever possible. Send an email to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530.

The proceeding in this Notice shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b), 47 CFR § 1.1206(b). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

To allow the Commission to consider fully all substantive issues regarding the application in as timely and efficient a manner as possible, petitioners and commenters should raise all issues in their initial filings. New issues may not be raised in responses or replies.¹² A party or interested person seeking to raise a new issue after the pleading cycle has closed must show good cause why it was not possible for it to have raised the issue previously. Submissions after the pleading cycle has closed that seek to raise new issues based on new facts or newly discovered facts should be filed within 15 days after such facts are discovered. Absent such a showing of good cause, any issues not timely raised may be disregarded by the Commission.

For further information, please contact Gregory Kwan at (202) 418-1191.

-FCC-

¹² See 47 CFR § 1.45(c).

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Implementation of Section 3 of the Cable)
Television Consumer Protection and Competition) MM Docket No. 92-266
Act of 1992)
)
Statistical Report on Average Rates for Basic)
Service, Cable Programming Service, and)
Equipment)

ORDER

Adopted: March 27, 2024

Released: March 27, 2024

Responses Due: May 24, 2024

By the Chief, Office of Economics and Analytics:

I. INTRODUCTION

1. This Order initiates the Commission’s survey soliciting industry input necessary for the statutorily required report on cable industry prices. The Consolidated Appropriations Act of 2018 included the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018 (RAY BAUM’S Act of 2018),¹ which amended section 13 of the Communications Act of 1934 to require the Federal Communications Commission (Commission) to publish a single, biennial “Communications Marketplace Report,” in lieu of several individual reports separately assessing competition among providers of various communications services, including voice, video, audio, and data services.² Among the previous reports now included in the Communications Marketplace Report, to be published in the last quarter of every even numbered year, is information that was previously submitted to Congress as an annual report on cable industry prices.³ That report previously was required annually pursuant to section 623(k) of the Communications Act, prior to amendment by RAY BAUM’S Act of 2018.⁴ The prior report provided statistical data on the average rates for basic cable service, cable programming service, and equipment, as well as a comparison of the average rates of cable systems that the Commission has found are subject to effective competition with those of systems that the Commission has found are not subject to effective competition.⁵ In addition, section 110 of the STELA Reauthorization Act of 2014

¹ Consolidated Appropriations Act, 2018, Pub. L. No. 115-141, Div. P—RAY BAUM’S Act of 2018, §§ 401-404, 132 Stat. 348, 1087-90 (2018) (RAY BAUM’S Act of 2018).

² Div. P—RAY BAUM’S Act of 2018, Title IV: FCC Consolidated Reporting, Section 13.

³ We note here that due to the change from an annual report to making up part of a biennial report, we will move from an annual collection of data to a biennial collection.

⁴ Initially, section 623(k) was adopted as section 3(k) of the 1992 Cable Act, Pub. L. No. 102-385, 106 Stat. 1460, codified at 47 U.S.C. § 543(k).

⁵ 47 U.S.C. § 543(k). The 1992 Cable Act defines basic cable service as that tier of service that includes the retransmission of local television broadcast signals. See 47 U.S.C. § 543(b)(7). Cable programming service is defined as “any video programming provided over a cable system, regardless of service tier, including installation or (continued....)

requires the Commission to report on retransmission consent fees paid by cable operators to broadcast stations or groups.⁶ To implement the requirements of RAY BAUM'S Act of 2018 and address the Commission's continuing obligation to report on cable television rates and related data, the Commission is directing certain cable operators to respond to a price survey questionnaire designed to solicit information concerning rates for basic service, cable programming service, and equipment used to receive such services. The Notice to individuals required by the Privacy Act and the Paperwork Reduction Act is attached to this Order as Appendix A and instructions for completing the questionnaire are attached as Appendix B. The cable operators selected for our sample must complete and file the questionnaire no later than **May 24, 2024**.

2. The survey requests information on the monthly price of basic service, expanded basic service, and the next most popular service as of two dates: January 1, 2023, and January 1, 2024. In addition, the survey requests information on the monthly charge for equipment, the number of subscribers, and the number and types of channels offered.⁷

3. Our survey sample includes a random sample of cable operators in various communities nationwide. A completed questionnaire is required for each community selected in our sample. If more than one community is selected from any cable system, the cable operator must complete a separate questionnaire for each community unit identification (CUID) number selected. All surveys must be filed electronically through our Form 333 web application.

4. Data submitted in response to this survey will be made available to the public in aggregate form as averages representing segments of the industry. Survey data also may be subject to requests for public release filed pursuant to the Freedom of Information Act (FOIA). Nothing in this Order shall be construed as a resolution on the merits of a FOIA request. If an individual respondent

rental of equipment used for the receipt of such video programming, other than (A) video programming carried on the basic service tier, and (B) video programming offered on a per channel or per program basis." 47 U.S.C. § 543(l) (2). Equipment refers to a converter box, remote control, and other equipment necessary to access programming. See 47 U.S.C. § 543(b)(3). Historically, effective competition existed where the Commission made a finding that a multi-channel video programming distributor (MVPD) met one of four tests within its franchise area: (1) fewer than 30% of households subscribed to the service of the cable system (the "low penetration test"); (2) at least two MVPDs served 50% or more of households and at least 15% of those households took service other than from the largest MVPD (the "competing provider test"); (3) a municipal MVPD offered service to at least 50% of households (the "municipal test"); and (4) a local exchange carrier (LEC) or its affiliate (or any MVPD using the facilities of the LEC or its affiliate) offered video programming service (other than direct broadcast satellite service) comparable to the service of an unaffiliated MVPD (the "LEC test"). See 47 U.S.C. § 543(k)(1)(1)(A-D). In 2015, however, the Commission modified its effective competition process and adopted a rebuttable presumption that cable operators are subject to "competing provider" effective competition, as described above. This change was justified by the ubiquitous nature of two unaffiliated Direct Broadcast Satellite (DBS) services, with DBS providers capturing almost 34% of the MVPD subscribers. The Commission concluded that it was thus appropriate to presume that the competing provider test is met, unless a franchise authority demonstrates that the presumption is not valid in a franchise area. See *Amendment to the Commission's Rules Concerning Effective Competition, Implementation of Section 111 of the STELA Reauthorization Act*, Report and Order, 30 FCC Rcd 6574 (2015). The current survey sample accounts for this change in presumption of effective competition.

⁶ Section 110 of the STELA Reauthorization Act of 2014 (STELAR). See Pub. L. No. 113-200, 128 Stat. 2059 (2014) enacted December 4, 2014 (H.R. 5728, 113th Cong.). Specifically, STELAR instructs the Commission to include in its now-biennial report on cable industry prices "the aggregate average total amount paid by cable systems in compensation under section 325 [of the Communications Act of 1934, as amended,]" and to report such information "in a manner substantially similar to the way other comparable information is published" in the report. 47 U.S.C. § 543(k)(2), as amended. Because these data are collected for entire year periods, they are collected for the years ending in 2018 and 2019.

⁷ For further information, see the notice contained in Appendix A of this Order regarding the Privacy Act and Paperwork Reduction Act.

wishes to request confidential treatment of any data provided in connection with this survey, in accordance with sections 0.457 and 0.459 of the Commission's rules,⁸ it should request such confidentiality in writing and identify clearly the specific information it wishes to protect. It also should provide, as required by the rules, a complete explanation of why such treatment is appropriate. A copy of the written request for confidentiality should be sent to the cable price survey team in an e-mail addressed to cablesurvey@fcc.gov. If a respondent does not submit a request for confidentiality, the Commission may release the respondent's data, including identifying information.

5. Accordingly, IT IS ORDERED pursuant to section 623(k) of the Communications Act of 1934, as amended, 47 U.S.C. § 543(k), and section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), that cable operators subject to the price survey requirement described herein shall complete and file the price survey questionnaire no later than **May 24, 2024**.

FEDERAL COMMUNICATIONS COMMISSION

Giulia McHenry
Chief
Office of Economics and Analytics

⁸ 47 CFR §§ 0.457, 0.459.

APPENDIX A

2024 Cable Industry Price Survey

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND
THE PAPERWORK REDUCTION ACT*Privacy Act Statement*

Authority: The solicitation of information in this survey form is authorized by section 623(k) of the Communications Act, as amended.

Purpose: The Commission will use the information collected on this form to report on average prices that cable operators charge for basic cable service, cable programming service, and equipment.⁹ The survey will also collect information on retransmission consent fees, which are aggregate average total amounts paid by cable systems in compensation to television broadcast stations under section 325 of the Communications Act.

Routine Uses: The FCC may release information provided in this form when necessary and appropriate under 5 U.S.C. § 552a(b) of the Privacy Act to: the public in FCC releases of notices or actions or when required to comply with federal laws or FCC regulations requiring public disclosure of the information contained in our records; to third parties, including individuals and businesses in the communications industry and public safety, FCC vendors and their contractors, and to other federal agencies or state, local, U.S. territorial, and Tribal government entities to administer, support, participate in, or receive information related to, FCC programs and activities; or to ensure compliance with the confidentiality and other rules regarding information sharing in the FCC's programs and activities; to other federal agencies or to other administrative or adjudicative bodies before which the FCC is authorized to appear; to federal, state, or local law enforcement when FCC becomes aware of an indication of a violation or potential violation of a civil or criminal statute, law, regulation, or order; to Federal agencies, non-Federal entities, their employees, and agents for the purpose of detecting and preventing fraud, waste, and abuse in Federal programs; to non-federal personnel, including contractors, grantees, and volunteers who have been engaged to assist the FCC in the performance of a contract service, grant, cooperative agreement, or other activity related to this system of records and who need to have access to the records in order to perform their activity; and, to appropriate agencies, entities, and persons when the FCC suspects or has confirmed that there has been a breach of information related to this system.

A complete list of the routine uses can be found in the system of records notice associated with this collection, FCC-2, Business Contacts and Certifications, posted at <https://www.fcc.gov/managing-director/privacy-transparency/privacy-act-information>.

Disclosure: Response to this information is mandatory. Reporting entities failing to file responses in a timely fashion may be subject to penalties under the Communications Act, including sections 502 and 503(b).

⁹ Section 623(k) requires the Commission to compare prices charged by cable operators that are found to be subject to effective competition with those not subject to effective competition. However, the Commission has found only one cable community that is not subject to effective competition. See *Communications Marketplace Report*, GN Docket No. 22-203, 37 FCC Rcd 15514, 15688-89, para. 293 (2022). Thus, the comparison required by section 623(k) is no longer statistically possible.

Paperwork Reduction Act Notice

The solicitation of information in this survey form is authorized by section 623(k) of the Communications Act, as amended. This form has been approved by the Office of Management and Budget, under OMB control number 3060-0647 (expiration date: 05/31/2024).

The public reporting burden for this information collection is estimated to average 7.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and entering the data needed, and completing and reviewing the questionnaire. Suggestions for reducing the burden may be sent to the Commission in an e-mail addressed to cablesurvey@fcc.gov with “Suggestions for Reducing Burden” in the “subject” line. Alternatively, send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Records Management Division, Federal Communications Commission, Washington, DC 20554.

The above notice is required by the Privacy Act of 1974, Pub. L. No. 93-579, 88 Stat. 1897, codified at 5 U.S.C. § 552a(e)(3), and the Paperwork Reduction Act of 1995, Pub. L. No. 104-13, 109 Stat. 163, codified at 44 U.S.C. § 3507.

APPENDIX B

Cable Industry Price Survey

INSTRUCTIONS FOR ACCESSING, COMPLETING, AND SUBMITTING THE WEB-BASED
SURVEY
FCC Form 333

Features of the Web-Based Survey: Some of the features of the web-based survey that you should be aware of before entering data are summarized below. More complete instructions pertaining to each of these features are provided under the relevant headings in the following sections.

- **After You Login:** The survey begins after you select your CUID. You must answer each question to proceed to be able to go to the next page. To navigate forward and backward in the survey, you must use the arrows at the bottom of the page. Do not use your browser back button, that will cause you to exit the survey.
- **Entering Data:** Many fields have internal checks, or “error messages”, associated with them. If you receive an error message, please check to ensure that the data you have entered are correct. If there is an error in your answer, just re-answer the question with the correct response. If you are confident that the answer is correct, please provide a short explanation in the box that appears with the error message on the error message page.
- **Reopening a Submitted Survey to Make Changes:** The contact email will receive a copy of a completed survey. You will also receive a link that will allow you to reopen the existing survey. If it becomes necessary to reopen a survey, and you do not have a link, please contact the cable price survey team at cablesurvey@fcc.gov or (202) 418-0940.

Login Instructions: If the FCC notified your firm that it has been selected to participate in this year’s survey, you must respond to the Cable Price Survey. These instructions explain how you must proceed. The Cable Price Survey collects data on cable prices, prices of equipment and video channels offered.

Providers of cable services were randomly selected to respond to the Cable Price Survey. If you need assistance, the staff in FCC’s Office of Economics and Analytics’ Industry Analysis Division is available to assist you with questions related to the Cable Price Survey. Please contact us with questions at cablesurvey@fcc.gov or 202-418-0940.

1.1 Before You Begin

Throughout the survey, please be aware the interface provides buttons to navigate your submission:

1. Clicking Back will take you to the previous page; clicking forward will take you to the next question. To proceed forward you must answer the questions on the current page. The navigation buttons are located at the bottom of each page. Do not use the back button on your browser, that will exit you from the survey.
2. If you leave the survey before completing it, you may return to complete the survey by clicking on the survey link delivered to you via email.

1.2 Logging In

1. Open a web browser and go to the main FCC Cable Price Survey page (<https://www.fcc.gov/industry-analysis-division/cable-price-survey>) or go directly to the filing interface at [Form 333 Login](#).
2. Under Username, please log in using the username created in CORES (For additional support, please visit the [FCC Registration Help Pages](#). You can also call the FCC Licensing Hotline, (877) 480-3201 Option 4, or visit the [e-support page](#)).

Note: this username can be the same as that used for other FCC data filings for your company.

3. Under Password, please log in using the password associated with the username created in CORES.
4. You can reset your password online at <https://apps.fcc.gov/cores/userLogin.do> or by calling 877-480-3201.

After You Login: To create a new Cable Price Survey Submission after logging in, select your state from the drop-down list, then select the CUID for which you are completing a survey. It is critical that you select the correct CUID, so please make this selection carefully. The particular CUID (or CUIDs) that we picked are located in the FCC Cable Price Survey email that was sent to your company. Continue to fill in the Contact information and then select the forward arrow at the bottom of the page. Most pages have one question or some explanatory information regarding the question and a question or a few questions. You move to the next question using the forward button and go back to previous questions by selecting the back button. The application will not let you go forward without answering the question or questions on that page. If you want to view all the questions you should return to our main Cable Price Survey webpage at: <https://www.fcc.gov/industry-analysis-division/cable-price-survey>. A pdf version of the survey is available at that site. You can go directly to the online survey at: [Form333 Login](#).

Entering Data and Error Checks: Many fields have internal error checks. If you receive an error message, please check that the correct data are entered in the fields that are identified by the checks. In some instances, the check only refers to the current entry, however, in others, the check cross-references data from the current field with data found in another field. If you receive an error message for an entry in a field that has a cross-check with another field, the entry in the other field may be in error, rather than the field associated with the current question. These error messages are included in the application to help you identify typos and possible errors. If you have ensured that your response is correct, but you still receive an error message, we ask that you provide an explanation, or give us more information, for our records. That information can be typed into the box that is on the screen when an error check is activated. Having an error message will not prevent you from making an entry.

When entering data into the web-based form, please note that the web application can only store numeric values in fields where numeric answers are expected. Text and special characters such as dollar signs, percent signs, commas, and letters (such as N/A) should not be used when answering questions where numeric values are required. If the data that we are asking for are not applicable or not available (for example the CUID was recently purchased and historical data are not available), then leave the field blank. In some instances, this may create an “error” message. Please explain in the error message box.

If you have questions about an error message or other questions about how to complete a survey, you may do so by sending an e-mail to cablesurvey@fcc.gov with “Comment on CUID and Question Number (enter the relevant CUID and question number)” in the “Subject” line of your e-mail.

How to Reopen a Completed Survey to Make Edits: The application does not save information as you move through the questions and press the forward arrow. If you close your session or select the back arrow on your web browser, you will lose the information that you entered, as you use the link that we provide when you close or submit your survey. The link to an old survey is provided to the email that is listed on the current survey. You must go forward or backward from each page by using the arrows at the bottom of each page.

How to Submit the Survey to the Commission: Responses must be completed and filed directly on the Commission’s website. Once all data for a particular submission have been entered and reviewed, you must officially “submit” the data to the Commission to complete that filing. The completion of the Certification Section will submit the survey as complete.

Once the system accepts a submission, you will receive an email with a copy of your completed survey and a link address that will allow you to return to the survey if you need to make revisions to your original filing. The application allows revisions to be made to completed and/or submitted surveys, so you may re-enter and revise your submission for a particular CUID at any point in the process (up to the filing deadline), even after you have submitted it as a completed survey.

How to Reopen a Completed Survey to Make Edits: The web-based filing system will allow you to reopen a submitted survey to make changes until the filing deadline. If you wish to amend a submitted survey after the filing deadline, please contact the cable price survey team at cablesurvey@fcc.gov or (202) 418-0940. To reopen a completed survey, you must use the most recent link supplied to you.

In addition to the instructions on how to navigate the FCC Cable Price Survey Form, we also include some additional information on the content of the survey below.

Cable Video Services questions include prices for service prices for particular tiers of service and the associated equipment costs for each service. The service tiers are: Basic Service, Expanded Basic Service and the Next-Most Popular Service offered on the system that serves the community or communities we selected in our survey.

We ask for the number of channels offered for each service tier. We also have a few questions about the particular channels including the number of channels carried under the FCC's public, educational, and governmental (PEG) access rules, the number of channels carried under the FCC's commercial leased access rules and the number of Regional Sports networks carried. If a network is offered with basic service, generally the same network would be offered and counted under expanded basic. Similarly, the number under the next most popular service is generally equal to the number under expanded basic plus any additional channels offered.

For each tier of service we only ask for the price of HD (High Definition) service. For each service cost add the service price and all fees and surcharges required to receive the service tier in HD. Fees such as Broadcast TV and Regional Sports fees are not regulatory pass-through fees and must be included in HD service cost. Exclude only separate equipment lease fees (if there is a separate equipment fee), taxes, and regulatory pass-through fees.¹⁰ Regulatory pass-through fees refer to fees charged to cable operators by regulatory bodies that are then passed on to consumers. In addition, report the total cost of HD service for each tier. For example, if basic service costs \$20 and expanded basic service costs an additional \$45, report a price of \$65 for expanded basic service.

The selected CUIDs are provided to you in an initial email that is directed to a contact email address that we have for your company. Not all companies are selected for this survey, so if you have not received an email from the FCC regarding the Cable Price Survey, you may not have been selected, our email could have been directed to someone else in your company or the email could have been identified as Spam or Junk by your email provider. If you think you should have been selected but did not get an email, you can inquire by sending an email to cablesurvey@fcc.gov and we will get back to you.

Service Tiers

Basic Service: Basic service is the entry level video (cable) TV programming service that subscribers can purchase. Typically, basic service is a "limited basic" which consists only of local broadcast channels; any public, educational, and governmental access channels; and sometimes a few national and/or other channels. In contrast to "limited basic", some operators only offer a "bundled basic" with many popular national networks that other operators might offer separately as expanded basic service. For operators

¹⁰ Prices for necessary equipment are asked for in separate questions.

who do not offer limited basic, you will not be asked to report information for basic service. Whether limited basic or bundled, basic service is the entry level service that is required for all customers.

Expanded Basic Service: In most cases, Expanded Basic service includes the limited basic channels plus many popular national networks.

Next Most Popular Service: The next most popular service (compared to expanded basic service) must offer at least **seven additional** non-premium, national cable networks.

Broadcast Stations and Retransmission Consent

A number of questions refer to local broadcast stations that your cable system carries. The questions are required by Congress and refer to retransmission consent fees paid to broadcasters. We ask that you provide information at the community level or the smallest system level at which records are kept. Below are several terms you'll need to understand to answer the questions.

Cable systems carry local broadcast stations under either retransmission consent agreement or must-carry rights. Under retransmission consent, any cable operator that offers a station to its subscribers must pay retransmission consent fees to the station or obtain another agreement allowing it to carry the station. Under must-carry rights, the cable operator must provide the station to its subscribers but the station cannot require fees.

A broadcast station is identified by its call sign; e.g. WXYZ. It is important to note, however, that one broadcast station may transmit multiple channels. For example, in addition to WXYZ's primary channel of network programming (e.g. CBS network), WXYZ may transmit multiple multicast sub-channels (e.g. WXYZ-DT2 and WXYZ-DT3) which your cable system carries on separate channels. A multicast sub-channel often shows a different network (e.g. QUBO, Comet, MeTV, etc.) than the primary channel. Multicast sub-channels are often identified in the channel lineup by network name, and not always by call sign. To answer these questions, you will need to find out which channels in your channel lineup are multicast sub-channels of broadcast stations. (In the example above, WXYZ would count as one station under either retransmission consent or must-carry, depending on its retransmission consent/must-carry status.)

We also ask for you to provide information on the total payments made to retransmission consent stations in the local market and the number of subscribers that receive those stations. For the broadcast stations identified above, report the total annual amount paid to local broadcasters in retransmission consent fees in 2022 and 2023. Please provide information at the community level or the smallest system level at which records are kept. Do not include other fees paid to broadcasters such as copyright royalties. We also ask for the number of subscribers subject to retransmission consent fees in 2022 and 2023. If subscriber counts are available at the monthly level, report average monthly subscribers under retransmission consent agreement in each year.

Appendix C**FCC Cable Price Survey****Community and System**

Please click to select your state and then CUID from drop down lists. The information in 2 entries below will be imported from the Cable Operations and Licensing System (COALS) database with data as of 1/1/2024. Please ensure that you select the correct CUID.

State (drop-down list of States)

CUID (6-digit community unit identification) (drop-down list of sample CUIDs)

Q1. List one of the 5-digit Zip Codes in the community.

Parent Company and Contact Information.

Q2. Name of ultimate parent entity.

Q3. Name of survey contact person.

Q4. E-mail address of contact person.

Q5. Phone number of contact person.

Q6. Did you operate a video service in this community on **1/1/2023**? (Y/N)

Q7. Did you operate a video service in this community on **1/1/2024**? (Y/N)

Q8. Number of video subscribers nationwide of parent entity on **1/1/2024**.

Local Broadcast Stations and Retransmission Consent Fees

The next questions refer to local broadcast stations that your cable system carries. The questions are required by Congress and refer to retransmission consent fees paid to broadcasters. Please provide information at the community level or the smallest system level at which records are kept. Below are several terms you will need to understand to answer the questions.

Cable systems carry local broadcast stations under either retransmission consent agreement or must-carry rights. Under retransmission consent, any cable operator that offers a station to its subscribers must pay retransmission consent fees to the station or obtain another agreement allowing it to carry the station. Under must-carry rights, the cable operator must provide the station to its subscribers but the station cannot require fees.

A broadcast station is identified by its call sign; e.g. WXYZ. It is important to note, however, that one broadcast station may transmit multiple channels. For example, in addition to WXYZ's primary channel of network programming (e.g. CBS network), WXYZ may transmit multiple multicast sub-channels (e.g. WXYZ-DT2 and WXYZ-DT3) which your cable system carries on separate channels. A multicast sub-channel often shows a different network (e.g. QUBO, Comet, MeTV, etc.) than the primary channel. Multicast sub-channels are often identified in the channel lineup by network name, and not always by call sign. To answer these questions, you will need to find out which channels in your channel lineup are multicast sub-channels of broadcast stations. (In the example above, WXYZ would count as one station under either retransmission consent or must-carry, depending on its retransmission consent/must-carry status.)

Retransmission Consent

Q9. How many stations were carried under retransmission consent agreement on **1/1/2023**?

Q10. How many stations were carried under retransmission consent agreement on **1/1/2024**?

Must Carry

Q11. How many stations were carried under must-carry rights on **1/1/2023**?

Q12. How many stations were carried under must-carry rights on **1/1/2024**?

Multicast Sub-channels

A broadcast station is often identified by its call sign; e.g. WXYZ. It is important to note, however, that one broadcast station may transmit multiple channels. For example, in addition to WXYZ's primary channel of network programming (e.g. CBS network), WXYZ may transmit multiple multicast sub-channels (e.g. WXYZ-DT2 and WXYZ-DT3) which your cable system carries on separate channels. A multicast sub-channel often shows a different network (e.g. QUBO, Comet, MeTV, etc.) than the primary channel. Multicast sub-channels are often identified in the channel lineup by network name, and not always by call sign. To answer these questions, you will need to find out which channels in your channel lineup are multicast sub-channels of broadcast stations. (In the example above, WXYZ-DT2 and WXYZ-DT3 would count as two multicast channels under either retransmission consent or must-carry, depending on its retransmission consent/must-carry status.)

Retransmission Consent

Q13. For the stations carried under retransmission consent agreement, how many multicast sub-channels were carried on **1/1/2023**?

Q14. For the stations carried under retransmission consent agreement, how many multicast sub-channels were carried on **1/1/2024**?

Must Carry

Q15. For the stations carried under must-carry rights, how many multicast sub-channels were carried on **1/1/2023**?

Q16. For the stations carried under must-carry rights, how many multicast sub-channels were carried on **1/1/2024**?

Retransmission Consent Fees

Q17. For the broadcast stations identified above, report the **total annual amount** paid to local broadcasters in retransmission consent fees in **2022**.

(Please provide information at the community level or the smallest system level at which records are kept. Do not include other fees paid to broadcasters such as copyright royalties.)

Q18. Number of subscribers subject to retransmission consent fees in **2022**.

(If subscriber counts are available at the monthly level, report average monthly subscribers under retransmission consent agreement in each year.)

Average Annual Fees per Subscriber (automatically calculated) in 2022 =

Based on historical responses to these retransmission consent questions, average annual fees per subscriber is usually more than \$30 and less than \$350.

If you reported an average annual fees per subscriber that falls outside the range of expected answers, please review your responses for Q17 and Q18 by selecting the back arrow below. You can revise your responses there or if you are sure that the answers to Q17 and Q18 are correct, select the forward arrow. For answers that fall outside the \$30 to \$350 range, please explain why your answers are correct in the box below.

Q19. For the broadcast stations identified above, report the **total annual amount** paid to local broadcasters in retransmission consent fees in **2023**.

(Please provide information at the community level or the smallest system level at which records are kept. Do not include other fees paid to broadcasters such as copyright royalties.)

Q20. Number of subscribers subject to retransmission consent fees in **2023**.

(If subscriber counts are available at the monthly level, report average monthly subscribers under retransmission consent agreement in each year.)

Average Annual Fees per Subscriber (automatically calculated) in 2023 =

Based on historical responses to these retransmission consent questions, average annual fees per subscriber is usually more than \$30 and less than \$350.

If you reported an average annual fees per subscriber that falls outside the range of expected answers, please review your responses for Q17 and Q18 by selecting the back arrow below. You can revise your responses there or if you are sure that the answers to Q19 and Q20 are correct, select the forward arrow. For answers that fall outside the \$30 to \$350 range, please explain why your answers are correct in the box below.

Channel Lineup on 1/1/2024

Q21. Number of channels carried under FCC's **public, educational, and governmental (PEG)** access rules. Please provide a response for:

Basic Service
Expanded Basic Service

Q22. Number of channels carried under FCC's **commercial leased access** rules. Please provide a response for:

Basic Service
Expanded Basic Service

A regional sports network (RSN) carries a substantial number of live games from at least one nearby professional sports team that is a member of the MLB, NBA, or NHL. Examples include NBC Sports Bay Area, Bally Sports Detroit, Spectrum SportsNet, and Altitude Sports. Do not include MLB Extra Innings, NHL Center Ice, NBA League Pass, and NFL Sunday Ticket / Redzone, or pay-per-view events. If a network is offered with basic service, generally the same network would be offered and counted under expanded basic. Similarly, the number under the next most popular service is generally equal to the number under expanded basic plus any additional RSNs offered. The number under "Other Services"

should include any network not accounted for under basic, expanded basic, or the next most popular services.

Q23. Number of **Regional Sports Networks**. Please provide a response for:

Basic Service
Expanded Basic Service
Next Most Popular Service
Other Service

Service and Equipment Prices

Cable Service Tiers

Basic Service

Basic service is the entry level video (cable) TV programming service that subscribers can purchase. Typically, basic service is a "limited basic" which consists only of local broadcast channels; any public, educational, and governmental access channels; and sometimes a few national and/or other channels. In contrast to "limited basic," some operators only offer a "bundled basic" with many popular national networks that other operators might offer separately as expanded basic service. For operators who do not offer limited basic, the bundled basic should be reported as both the basic service and the expanded basic service. Whether limited basic or bundled, basic service is the entry level service that is required for all customers.

Expanded Basic Service

In most cases, expanded basic service includes the limited basic channels plus many popular national networks. However, if you answer "no" to Question 24 or 25 (your basic service is not a limited basic) then basic service and expanded basic service are the same.

Q24. Is basic service in this community a "limited basic" as described above on **1/1/2023**? (Y/N)

Q25. Is basic service in this community a "limited basic" as described above on **1/1/2024**? (Y/N)

Basic Service

Q26. Is basic service tier available in high definition (HD) on **1/1/2023**? (Y/N)

If the service tier is not available in HD, report the cost of the service tier in standard definition (SD) and report the cost of an SD converter box and remote-control. Follow all other HD instructions for SD.

For HD service cost including fees, add the service price and all fees and surcharges required to receive the service tier in HD. Exclude only equipment lease fees, taxes, and regulatory pass-through fees. Regulatory pass-through fees refer to fees charged to cable operators by regulatory bodies that are then passed on to consumers. Fees such as Broadcast TV and Regional Sports fees are not regulatory pass-through fees and must be included in HD service cost.

In addition, report the total cost of HD service for each tier. For example, if basic service costs \$20 and expanded basic service costs an additional \$45, report a price of \$65 for expanded basic service.

Q27. HD Basic Service cost including fees on **1/1/2023**.

For HD converter box and remote-control cost, report the additional monthly lease fee for an HD-capable converter box and remote-control for a subscriber's first TV.

Q28. Is an HD converter box and remote-control included in the HD service cost reported above on **1/1/2023**? (Y/N)

Q29. HD Basic converter box and remote-control cost on **1/1/2023**.

The total cost of HD service and equipment is automatically calculated as the sum of the HD service cost and the HD converter box and remote-control cost. This amount should reflect the total cost (excluding taxes and regulatory pass-through fees) to subscribers to receive the service tier in HD using a converter box and remote control. Please check to ensure that this is the case.

Total cost of Basic HD service and equipment on 1/1/2023 =

Q30. Is basic service tier available in high definition (HD) on **1/1/2024**? (Y/N)

If the service tier is not available in HD, report the cost of the service tier in standard definition (SD) and report the cost of an SD converter box and remote-control. Follow all other HD instructions for SD.

For HD service cost including fees, add the service price and all fees and surcharges required to receive the service tier in HD. Exclude only equipment lease fees, taxes, and regulatory pass-through fees. Regulatory pass-through fees refer to fees charged to cable operators by regulatory bodies that are then passed on to consumers. Fees such as Broadcast TV and Regional Sports fees are not regulatory pass-through fees and must be included in HD service cost.

Q31. HD Basic Service cost including fees on **1/1/2024**.

For HD converter box and remote-control cost, report the additional monthly lease fee for an HD-capable converter box and remote-control for a subscriber's first TV.

Q32. Is an HD converter box and remote-control included in the HD service cost reported above on **1/1/2024**? (Y/N)

Q33. HD Basic converter box and remote-control cost on **1/1/2024**.

The total cost of HD service and equipment is automatically calculated as the sum of the HD service cost and the HD converter box and remote-control cost. This amount should reflect the total cost (excluding taxes and regulatory pass-through fees) to subscribers to receive the service tier in HD using a converter box and remote control. Please check to ensure that this is the case.

Total cost of Basic HD service and equipment on 1/1/2024 =

Expanded Basic Service

In most cases, expanded basic service includes the limited basic channels plus many popular national networks. However, if you answer ""no"" to Question 24 or 25 (your basic service is not a limited basic) then basic service and expanded basic service are the same.

Q34. Is expanded basic service tier available in high definition (HD) on **1/1/2023**? (Y/N)

If the service tier is not available in HD, report the cost of the service tier in standard definition (SD) and

report the cost of an SD converter box and remote-control. Follow all other HD instructions for SD.

For HD service cost including fees, add the service price and all fees and surcharges required to receive the service tier in HD. Exclude only equipment lease fees, taxes, and regulatory pass-through fees. Regulatory pass-through fees refer to fees charged to cable operators by regulatory bodies that are then passed on to consumers. Fees such as Broadcast TV and Regional Sports fees are not regulatory pass-through fees and must be included in HD service cost.

In addition, report the total cost of HD service for each tier. For example, if basic service costs \$20 and expanded basic service costs an additional \$45, report a price of \$65 for expanded basic service.

Q35. HD Expanded Basic Service cost including fees on **1/1/2023**.

For HD converter box and remote-control cost, report the additional monthly lease fee for an HD-capable converter box and remote-control for a subscriber's first TV.

Q36. Is an HD converter box and remote-control included in the HD service cost reported above on **1/1/2023**? (Y/N)

Q37. HD converter box and remote-control cost on **1/1/2023**.

The total cost of HD service and equipment is automatically calculated as the sum of the HD service cost and the HD converter box and remote-control cost. This amount should reflect the total cost (excluding taxes and regulatory pass-through fees) to subscribers to receive the service tier in HD using a converter box and remote control. Please check to ensure that this is the case.

Total cost of Expanded Basic HD service and equipment on 1/1/2023 =

Q38. Is expanded basic service tier available in high definition (HD) on **1/1/2024**? (Y/N)

If the service tier is not available in HD, report the cost of the service tier in standard definition (SD) and report the cost of an SD converter box and remote-control. Follow all other HD instructions for SD.

For HD service cost including fees, add the service price and all fees and surcharges required to receive the service tier in HD. Exclude only equipment lease fees, taxes, and regulatory pass-through fees. Regulatory pass-through fees refer to fees charged to cable operators by regulatory bodies that are then passed on to consumers. Fees such as Broadcast TV and Regional Sports fees are not regulatory pass-through fees and must be included in HD service cost.

In addition, report the total cost of HD service for each tier. For example, if basic service costs \$20 and expanded basic service costs an additional \$45, report a price of \$65 for expanded basic service.

Q39. HD Expanded Basic Service cost including fees on **1/1/2024**.

For HD converter box and remote-control cost, report the additional monthly lease fee for an HD-capable converter box and remote-control for a subscriber's first TV.

Q40. Is an HD converter box and remote-control included in the HD service cost reported above on **1/1/2024**? (Y/N)

Q41. HD converter box and remote-control cost on **1/1/2024**.

The total cost of HD service and equipment is automatically calculated as the sum of the HD service cost and the HD converter box and remote-control cost. This amount should reflect the total cost (excluding taxes and regulatory pass-through fees) to subscribers to receive the service tier in HD using a converter box and remote control. Please check to ensure that this is the case.

Total cost of Expanded Basic HD service and equipment on 1/1 2024 =

Next Most Popular Service

For these questions, the next most popular service (compared to expanded basic service) must offer at least seven additional non-premium, national cable networks.

Q42. Is a next most popular service offered on 1/1/2023? (Y/N)

Q43. Is a next most popular service offered on 1/1/2024? (Y/N)

Q44. Is the next most popular service tier available in high definition (HD) on 1/1/2023? (Y/N)

If the service tier is not available in HD, report the cost of the service tier in standard definition (SD) and report the cost of an SD converter box and remote-control. Follow all other HD instructions for SD.

For HD service cost including fees, add the service price and all fees and surcharges required to receive the service tier in HD. Exclude only equipment lease fees, taxes, and regulatory pass-through fees. Regulatory pass-through fees refer to fees charged to cable operators by regulatory bodies that are then passed on to consumers. Fees such as Broadcast TV and Regional Sports fees are not regulatory pass-through fees and must be included in HD service cost.

In addition, report the total cost of HD service for each tier. For example, if expanded basic service costs \$100 and the next most popular service costs an additional \$45, report a price of \$145 for the next most popular service.

Q45. HD Next Most Popular Service cost including fees on **1/1/2023**.

For HD converter box and remote-control cost, report the additional monthly lease fee for an HD-capable converter box and remote-control for a subscriber's first TV.

Q46. Is an HD converter box and remote-control included in the HD service cost reported above on **1/1/2023**? (Y/N)

Q47. HD converter box and remote-control cost on **1/1/2023**.

The total cost of HD service and equipment is automatically calculated as the sum of the HD service cost and the HD converter box and remote-control cost. This amount should reflect the total cost (excluding taxes and regulatory pass-through fees) to subscribers to receive the service tier in HD using a converter box and remote control. Please check to ensure that this is the case.

Total cost of Next Most Popular HD service and equipment on 1/1/2023 =

Q48. Is the next most popular service tier available in high definition (HD) on **1/1/2024**? (Y/N)

If the service tier is not available in HD, report the cost of the service tier in standard definition (SD) and report the cost of an SD converter box and remote-control. Follow all other HD instructions for SD.

For HD service cost including fees, add the service price and all fees and surcharges required to receive the service tier in HD. Exclude only equipment lease fees, taxes, and regulatory pass-through fees. Regulatory pass-through fees refer to fees charged to cable operators by regulatory bodies that are then passed on to consumers. Fees such as Broadcast TV and Regional Sports fees are not regulatory pass-through fees and must be included in HD service cost.

In addition, report the total cost of HD service for each tier. For example, if expanded basic service costs \$100 and the next most popular service costs an additional \$45, report a price of \$145 for the next most popular service.

Q49. HD Next Most Popular Service cost including fees on **1/1/2024**.

For HD converter box and remote-control cost, report the additional monthly lease fee for an HD-capable converter box and remote-control for a subscriber's first TV.

Q50. Is an HD converter box and remote-control included in the HD service cost reported above on **1/1/2024**? (Y/N)

Q51. HD Next Most Popular converter box and remote-control cost on **1/1/2024**.

The total cost of HD service and equipment is automatically calculated as the sum of the HD service cost and the HD converter box and remote-control cost. This amount should reflect the total cost (excluding taxes and regulatory pass-through fees) to subscribers to receive the service tier in HD using a converter box and remote control. Please check to ensure that this is the case.

Total cost of Next Most Popular HD service and equipment on 1/1/2024 =

Channels

For basic service, report the number of channels, including channels that may require leasing equipment such as a digital converter box. If a network is available in both standard and high definition, count it as one channel.

Do not count audio-only channels such as a music suite. Also, do not count premium, pay-per-view, or video on demand channels.

If no basic service channels in HD were offered, report the number of SD channels.

Q52. Number of Basic Channels on **1/1/2023**.

Q53. Number of Basic Channels on **1/1/2024**.

Q54. Number of Expanded Basic Channels on **1/1/2023**.

Q55. Number of Expanded Basic Channels on **1/1/2024**.

Q56. Number of Next Most Popular Service Channels on **1/1/2023**.

Q57. Number of Next Most Popular Service Channels on **1/1/2024**.

Certification

I certify that I have examined this report and all statements of fact herein are true, complete, and correct to the best of my knowledge, information, and belief, and are made in good faith. Willful false statements made on this form are punishable by fine and/or imprisonment (US Code, Title 18, Section 1001) and/or forfeiture (US Code, Title 47, Section 503).

Name

Title

Date

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Applications of T-Mobile US, Inc. and Ka'ena Corporation
For Consent To Transfer Control of International Section 214 Authorizations
GN Docket No. 23-171

PROTECTIVE ORDER

Adopted: March 27, 2024

Released: March 27, 2024

By the Deputy Chief, Office of International Affairs, Deputy Chief, Wireless Telecommunications Bureau:

1. In this Protective Order, we set forth procedures to (i) limit access to proprietary or confidential information that has been or may be filed in this proceeding, and (ii) more strictly limit access to certain particularly competitively sensitive information, which, if released to competitors or those with whom the Submitting Party or a Third-Party Interest Holder does business, would allow those persons to gain a significant competitive advantage or an advantage in negotiations. The information submitted by participants in this proceeding and information we request as relevant and material to the issues raised constitute the record on which the Commission must base its determinations. While we are mindful of the sensitive nature of some of the information involved, we are also mindful of the general right of the public, and our desire for the public, to participate in this proceeding in a meaningful way. We find that allowing limited access to competitively sensitive materials pursuant to the procedures set forth in this Protective Order allows the public (through appropriate representatives) to do so while also protecting competitively sensitive information from improper disclosure and use. Accordingly, sensibly balancing the public and private interests involved, we conclude that these procedures serve the public interest and adopting them "best conduce[s] to the proper dispatch of the Commission's business and to the ends of justice."

2. Definitions. As used herein, capitalized terms not otherwise defined in this Protective Order shall have the following meanings:

"Acknowledgment" means the Acknowledgment of Confidentiality attached as Appendix B hereto.

"Competitive Decision-Making" means a person's activities, association, or relationship with any of his or her clients involving advice about or participation in the relevant business decisions or the analysis underlying the relevant business decisions of the client in competition with or in a business relationship with the Submitting Party or with a Third-Party Interest Holder.

1 47 U.S.C. § 154(j).

“Confidential Information” means information that is not otherwise available from publicly available sources and that is subject to withholding under the Freedom of Information Act (FOIA), 5 U.S.C. § 552, and the Commission’s implementing rules, unless the Commission determines, *sua sponte* or by request pursuant to paragraph 4 of this Protective Order or sections 0.459 or 0.461 of its rules,² that such information is not entitled to confidential treatment.

“Counsel” means In-House Counsel and Outside Counsel of Record.

“Document” means any written, recorded, electronically stored, or graphic material, whether produced or created by the Submitting Party or another person.

“Highly Confidential Information” means information that is not otherwise available from publicly available sources; that the Submitting Party has kept strictly confidential; that is subject to withholding under the FOIA and the Commission’s implementing rules; and that the Submitting Party or a Third-Party Interest Holder claims constitutes some of its most sensitive business data which, if released to competitors or those with whom the Submitting Party or Third-Party Interest Holder does business, would allow those persons to gain a significant advantage in the marketplace or in negotiations; and that is described in Appendix A to this Protective Order, as the same may be amended from time to time, unless the Commission determines, *sua sponte* or by request pursuant to paragraph 4 of this Protective Order or sections 0.459 or 0.461 of its rules, that any such information is not entitled to confidential treatment.

“In-House Counsel” means an attorney employed by a Participant in this proceeding or employed by an affiliated entity and who is actively engaged in the conduct of this proceeding, provided that such attorney is not involved in Competitive Decision-Making. (In this regard, an In-House Counsel’s employer is considered his or her client.)

“Outside Counsel of Record” or “Outside Counsel” means the attorney(s), firm(s) of attorneys, or sole practitioner(s), as the case may be, retained by a Participant in this proceeding, provided that such attorneys are not involved in Competitive Decision-Making. The term “Outside Counsel of Record” includes any attorney employed by a non-commercial Participant in this proceeding, provided that such attorney is not involved in Competitive Decision-Making.

“Outside Consultant” means a consultant or expert retained for the purpose of assisting Outside Counsel or a Participant in this proceeding, provided that such consultant or expert is not involved in Competitive Decision-Making. The term “Outside Consultant” includes any consultant or expert employed by a non-commercial Participant in this proceeding, provided that such consultant or expert is not involved in Competitive Decision-Making.

“Outside Firm” means a firm, whether organized as a partnership, limited partnership, limited liability partnership, limited liability company, corporation, or otherwise, of Outside Counsel or Outside Consultants.

“Participant” means a person or entity that has filed, or has a good faith intention to file, an application, petition to deny, or material comments in this proceeding.

“Redacted Confidential Document” means a copy of a Stamped Confidential Document where the Confidential Information has been redacted.

“Redacted Highly Confidential Document” means a copy of a Stamped Highly Confidential Document where the Highly Confidential Information has been redacted.

² 47 CFR §§ 0.459, 0.461.

“Reviewing Party” means a person who has obtained access to Confidential Information (including Stamped Confidential Documents) or Highly Confidential Information (including Stamped Highly Confidential Documents) pursuant to paragraphs 7 or 12 of this Protective Order.

“Stamped Confidential Document” means any document, or any part thereof, that contains Confidential Information and that bears the legend (or which otherwise shall have had the legend recorded upon it in a way that brings its attention to a reasonable examiner) “CONFIDENTIAL INFORMATION–SUBJECT TO PROTECTIVE ORDER IN GN DOCKET NO. 23-171 BEFORE THE FEDERAL COMMUNICATIONS COMMISSION.” By designating a document a “Stamped Confidential Document,” a Submitting Party signifies and represents that it contains Confidential Information.

“Stamped Highly Confidential Document” means any document, or any part thereof, that contains Highly Confidential Information and that bears the legend (or which otherwise shall have had the legend recorded upon it in a way that brings its attention to a reasonable examiner) “HIGHLY CONFIDENTIAL INFORMATION–SUBJECT TO PROTECTIVE ORDER IN GN DOCKET NO. 23-171 BEFORE THE FEDERAL COMMUNICATIONS COMMISSION.” By designating a document a “Stamped Highly Confidential Document,” a Submitting Party signifies and represents that it contains Highly Confidential Information.

“Submitting Party” means a person or entity who submits a Stamped Confidential Document or a Stamped Highly Confidential Document.

“Support Personnel” means employees of a Reviewing Party’s Outside Firm and third-party contractors and employees of third-party contractors who are assisting in this proceeding, provided such persons are involved solely in performing clerical or ministerial functions with regard to documents and information connected with this proceeding, including performing one or more aspects of organizing, filing, coding, converting, storing, or retrieving documents or data or designing programs for handling data connected with this proceeding.

“Third-Party Interest Holder” means a person who is not a Submitting Party who has a confidentiality interest in Confidential Information or Highly Confidential Information that is submitted under this Protective Order.

3. *Designation of Information as Confidential or Highly Confidential.* A Submitting Party may designate as Highly Confidential only those types of information described in Appendix A. If a Submitting Party believes that additional types of information should be designated as Highly Confidential, the Submitting Party shall submit a request to amend this order along with a supporting explanation. To the extent the request is granted, an amended order will be issued. In addition, before a Submitting Party may designate particular documents or information as Highly Confidential, it must receive the written approval of the Commission staff, which, based on the Submitting Party’s representations, will make a preliminary determination whether the proposed designation meets the requirements set forth in this Protective Order. By designating documents and information as Confidential or Highly Confidential under this Protective Order, a Submitting Party also will be deemed to have submitted a request that the material not be made routinely available for public inspection under the Commission’s rules.³

4. *Challenge to Designation.* Any person wishing to challenge the designation of a document, portion of a document, or information as Confidential or Highly Confidential must file such a challenge at the Commission and serve it on the Submitting Party and any known Third-Party Interest

³ See 47 CFR § 0.459(a).

Holders. The Commission may also initiate such a review on its own. The Submitting Party and any Third-Party Interest Holders must file any reply within five business days and include a justification for treating the information as Confidential or Highly Confidential, as appropriate. The documents and information challenged will continue to be accorded confidential treatment until the Commission acts on the request and any timely motion for a judicial stay has been acted upon.⁴ Any decision on whether the materials should be accorded confidential treatment does not constitute a resolution of the merits concerning whether such information would be released publicly by the Commission upon an appropriate request under our rules implementing the FOIA.⁵

5. *Submission of Stamped Confidential Documents and Stamped Highly Confidential Documents.* A Submitting Party shall submit to the Secretary's Office one copy of each Stamped Confidential Document and each Stamped Highly Confidential Document it seeks to file and an accompanying cover letter. Before doing so, the Submitting Party shall notify any known Third-Party Interest Holders who have a confidentiality interest in any such Stamped Confidential Document or Stamped Highly Confidential Document. Each page of the Stamped Confidential Document or Stamped Highly Confidential Document shall be stamped "CONFIDENTIAL INFORMATION–SUBJECT TO PROTECTIVE ORDER IN GN DOCKET NO. 23-171 BEFORE THE FEDERAL COMMUNICATIONS COMMISSION" or "HIGHLY CONFIDENTIAL INFORMATION–SUBJECT TO PROTECTIVE ORDER IN GN DOCKET NO. 23-171 BEFORE THE FEDERAL COMMUNICATIONS COMMISSION," as appropriate. The cover letter also shall contain this legend. In addition, with respect to each Stamped Confidential Document and each Stamped Highly Confidential Document submitted, the Submitting Party shall also file through the Commission's Electronic Comment Filing System (ECFS) a copy of the respective Redacted Confidential Document or Redacted Highly Confidential Document and an accompanying cover letter.⁶ Each Redacted Confidential Document or Redacted Highly Confidential Document shall have the same pagination as the Stamped Confidential Document or Stamped Highly Confidential Document from which it is derived. Each page of the Redacted Confidential Document or Redacted Highly Confidential Document and the accompanying cover letter shall be stamped "REDACTED–FOR PUBLIC INSPECTION." To the extent that any page of the filing contains both Confidential Information or Highly Confidential Information and non-confidential information, only the Confidential Information and Highly Confidential Information may be redacted and the page of the unredacted filing shall clearly distinguish among the Confidential Information, the Highly Confidential Information, and the non-confidential information. In addition, two copies of each Stamped Confidential Document and Stamped Highly Confidential Document and the accompanying cover letter shall be delivered, as directed by Commission staff, to (1) Karen Johnson, Karen.Johnson@fcc.gov, Office of International Affairs, Federal Communications Commission, 45 L Street, N.E., Washington, D.C. 20554; and (2) Monica DeLong, Monica.DeLong@fcc.gov, Wireless Telecommunications Bureau, Federal Communications Commission, 45 L Street, N.E., Washington, D.C. 20554.

6. *Copying Sensitive Documents.* If, in the reasonable judgment of the Submitting Party, a Stamped Highly Confidential Document contains information so sensitive that copying of it should be restricted, the Submitting Party may mark the document with the legend "Additional Copying Restricted." Subject to the provisions for access to information in electronic format in paragraph 10, each Outside

⁴ Cf. 47 CFR §§ 0.459(g), 0.461(i).

⁵ See 47 CFR §§ 0.459(h), 0.461.

⁶ If a party is not able to submit a copy of the Redacted Confidential Document or Redacted Highly Confidential Document via ECFS, it must file two copies of the Redacted Confidential Document or Redacted Highly Confidential Document with the Secretary's Office along with the appropriately stamped cover letter.

Firm shall receive only one copy of the document and no more than two additional copies, in any form, shall be made. Application for relief from this restriction against further copying may be made to the Commission, with notice to Counsel of Record for the Submitting Party, which will be granted only for cause.

7. *Procedure for Obtaining Access to Confidential Information and Highly Confidential Information.* Access to Highly Confidential Information (including Stamped Highly Confidential Documents) is limited to Outside Counsel of Record, Outside Consultants, their employees and employees of their Outside Firms, and Support Personnel. Any person other than Support Personnel seeking access to Confidential Information or Highly Confidential Information subject to this Protective Order shall sign and date the Acknowledgment agreeing to be bound by the terms and conditions of this Protective Order, and file the Acknowledgment with the Commission. A copy of the Acknowledgment also shall be delivered to the relevant Submitting Party through its Counsel of Record and any known Third-Party Interest Holders through counsel so that it is received at least five business days prior to such person's reviewing or having access to the Submitting Party's Confidential Information or Highly Confidential Information. Where there are multiple Submitting Parties or Third-Party Interest Holders, a copy of the Acknowledgment must be served on each within the time period stated above.

8. *Procedure for Objecting to the Disclosure of Confidential Information and Highly Confidential Information to a Potential Reviewing Party.*⁷ Each Submitting Party and Third-Party Interest Holder shall have an opportunity to object to the disclosure of its Confidential Information or Highly Confidential Information to a person seeking to review that information pursuant to this Protective Order. A Submitting Party or Third-Party Interest Holder must file any such objection at the Commission and serve it on counsel for the person seeking access within three business days after receiving a copy of that person's Acknowledgment. Persons filing Acknowledgments shall not have access to Confidential Information or Highly Confidential Information before the period for filing objections has passed, unless both the Submitting Party and any known Third-Party Interest Holders waive this requirement. If a Submitting Party files additional documents containing Confidential Information or Highly Confidential Information, the Submitting Party shall notify any known Third-Party Interest Holders who have a confidentiality interest in the information before filing the additional documents. The Submitting Party shall file any objection to the disclosure of that additional Confidential Information or Highly Confidential Information to any Reviewing Party before or contemporaneous with the filing, and any Third-Party Interest Holder shall file any such objection as promptly as practicable. Until any timely objection is resolved by the Commission in favor of the person seeking access and, if a motion for a judicial stay is timely filed, until such a motion is acted upon, a person subject to an objection shall not have access to the relevant Confidential Information or Highly Confidential Information.⁸ If an objection is not timely filed with the Commission, the Commission will nonetheless consider the objection and retains its discretion to prohibit further access to Confidential Information or Highly Confidential Information by the Reviewing Party until the objection is resolved.

⁷ This paragraph describes the procedure for objecting to a specific individual being permitted to review Confidential and Highly Confidential Information pursuant to this Protective Order. If a party timely requests that certain information be entirely withheld from review by *any* individual under the Protective Order, we will not require that the information at issue be disclosed under the Protective Order until the Commission resolves the objection, and if a timely motion for judicial stay is filed, until the court rules upon the stay motion.

⁸ An objection ordinarily will first be ruled upon by the Bureau. If the Bureau rejects the objection, the objecting party will be provided 10 business days to file an Application for Review with the Commission; if an Application for Review is not filed within that time, the Confidential or Highly Confidential Information shall be made available to the Reviewing Party. If an Application for Review is timely filed and is denied by the Commission, the objecting party will be provided 10 business days to seek a judicial stay of the Commission's Order; if a motion for stay is not

(continued....)

9. *Review of Stamped Confidential Documents and Stamped Highly Confidential Documents.* A Submitting Party shall make available for review the Stamped Confidential Documents and Stamped Highly Confidential Documents of such party at the offices of the party's Outside Counsel of Record. Subject to the provisions of paragraph 6, a Reviewing Party shall be provided the following alternatives: (1) a Reviewing Party shall be provided adequate opportunity to inspect the documents on site; (2) a Reviewing Party may inspect the documents on site with the ability to request copies, at cost, of some or all of the documents; or (3) a Reviewing Party may request a complete set of the documents at cost, allowing two business days after the request is made for receipt of the copies. If a Reviewing Party plans on requesting a complete set of documents, it is encouraged to make such a request at the time it submits the Acknowledgment to allow it the opportunity to begin reviewing the documents at the end of the five-day period referred to in paragraph 7. All copies of documents that are removed from the Submitting Party's office must be returned or destroyed in accordance with the terms of paragraph 21.

10. *Review of Highly Confidential Information in Electronic Format.* A Submitting Party shall make available to a Reviewing Party one copy of Highly Confidential Information contained, recorded, or electronically stored on an appropriate electronic storage device (such as a CD-ROM, DVD, flash drive or portable hard drive), which shall be considered a Stamped Highly Confidential Document. A Submitting Party may, but is not required to, transmit the information electronically to a Reviewing Party. A Reviewing Party may temporarily load onto a computer the information in electronic format. Once loaded onto a computer, any files containing Highly Confidential Information shall be password protected immediately. The Highly Confidential Information may be stored on a computer for the duration of the proceeding. All files containing Highly Confidential Information shall be deleted from the computer no later than when proceedings at the Commission are complete. The original disk or other storage medium shall be stored securely and a record kept of any persons given access to it.

11. *Use of Confidential and Highly Confidential Information.* Persons obtaining access to Confidential and Highly Confidential Information under this Protective Order shall use the information solely for the preparation and conduct of this proceeding before the Commission and any subsequent judicial proceeding arising directly from this proceeding and, except as provided herein, shall not use such documents or information for any other purpose, including without limitation business, governmental, or commercial purposes, or in any other administrative, regulatory, or judicial proceedings. Should the Commission reveal any Confidential or Highly Confidential Information in its orders in this proceeding, it will do so either by redacting any such Confidential or Highly Confidential Information from the public version of the order and by making the unredacted version of the order available only to a court and to those persons entitled to access to Confidential or Highly Confidential Information under this Protective Order, as appropriate, or as otherwise permitted by law.

12. *Permissible Disclosure.* A Reviewing Party may discuss and share the contents of Confidential Information and Highly Confidential Information with another Reviewing Party, with Support Personnel, as appropriate, and with the Commission and its staff. A Submitting Party's Confidential Information and Highly Confidential Information may be disclosed to employees and Counsel of the Submitting Party, and a Third-Party Interest Holder's Confidential Information and Highly Confidential Information may be disclosed to employees and Counsel of the Third-Party Interest Holder. Information derived from Confidential Information or Highly Confidential Information shall be treated as Confidential Information or Highly Confidential Information, respectively, unless the Commission determines otherwise.

(Continued from previous page) _____
filed within that time, the Confidential or Highly Confidential Information shall be made available to the Reviewing Party.

13. *Filings with the Commission.* A party making a filing in this proceeding that contains Confidential or Highly Confidential Information shall submit to the Secretary's Office one copy of the filing containing the Confidential or Highly Confidential Information (the "Confidential Filing") and an accompanying cover letter. The cover or first page of the Confidential Filing and each page of the Confidential Filing that contains or discloses only Confidential Information shall be clearly marked "CONFIDENTIAL INFORMATION—SUBJECT TO PROTECTIVE ORDER IN GN DOCKET NO. 23-171 BEFORE THE FEDERAL COMMUNICATIONS COMMISSION." The cover or first page of the Confidential Filing and each page of the Confidential Filing that contains or discloses Highly Confidential Information shall be clearly marked "HIGHLY CONFIDENTIAL INFORMATION—SUBJECT TO PROTECTIVE ORDER IN GN DOCKET NO. 23-171 BEFORE THE FEDERAL COMMUNICATIONS COMMISSION." The accompanying cover letter shall also contain the appropriate legend. The Confidential Filing shall be made under seal and will not be placed in the Commission's public file. The party shall submit a copy of the filing in redacted form, i.e., containing no Confidential or Highly Confidential Information (the "Redacted Confidential Filing"), to the Commission via ECFS.⁹ The Redacted Confidential Filing and the accompanying cover letter shall be stamped "REDACTED—FOR PUBLIC INSPECTION." The cover letter accompanying the Redacted Confidential Filing shall state that the party is filing a redacted version of the filing. Each Redacted Confidential Filing shall have the same pagination as the Confidential Filing from which it is derived. To the extent that any page of the Confidential Filing contains any Confidential Information or Highly Confidential Information, only the Confidential Information or Highly Confidential Information may be redacted and the page of the unredacted Confidential Filing shall clearly distinguish among the Confidential Information, the Highly Confidential Information and the non-confidential information. Two copies of each Confidential Filing and the accompanying cover letter must be delivered, as directed by Commission staff, to (1) Karen Johnson, Karen.Johnson@fcc.gov, Office of International Affairs, Federal Communications Commission, 45 L Street, N.E., Washington, D.C. 20554; and (2) Monica DeLong, Monica.DeLong@fcc.gov, Wireless Telecommunications Bureau, Federal Communications Commission, 45 L Street, N.E., Washington, D.C. 20554. Parties should not provide courtesy copies of pleadings containing Highly Confidential Information to Commission staff unless the Bureau so requests, and any such courtesy copies shall be submitted under seal.

14. *Non-Disclosure of Confidential Information, and Highly Confidential Information.* Except with the prior written consent of the Submitting Party or as provided under this Protective Order, Confidential Information and Highly Confidential Information shall not be disclosed further.

15. *Protection of Stamped Confidential Documents, Stamped Highly Confidential Documents, Confidential Information, and Highly Confidential Information.* A Reviewing Party shall have the obligation to ensure that access to Confidential Information and Highly Confidential Information (including Stamped Confidential Documents and Stamped Highly Confidential Documents) is strictly limited as prescribed in this Protective Order. A Reviewing Party shall have the further obligation to ensure that Confidential Information and Highly Confidential Information are used only as provided in this Protective Order.

⁹ If a party is not able to submit a copy of the Redacted Confidential Filing via ECFS, it must file two copies of the Redacted Confidential Filing with the Secretary's Office along with the appropriately stamped cover letter, as described in this paragraph.

16. *Requests for Additional Disclosure.* If any person requests disclosure of Confidential or Highly Confidential Information outside the terms of this Protective Order, such a request will be treated in accordance with sections 0.442 and 0.461 of the Commission's rules.¹⁰

17. *Client Consultation.* Nothing in this Protective Order shall prevent or otherwise restrict Counsel from rendering advice to their clients relating to the conduct of this proceeding and any subsequent judicial proceeding arising therefrom and, in the course thereof, relying generally on examination of Confidential Information or Highly Confidential Information to which they have access under this Protective Order; *provided, however*, that in rendering such advice and otherwise communicating with such clients, Counsel shall not disclose Confidential Information or Highly Confidential Information.

18. *No Waiver of Confidentiality.* Disclosure of Confidential or Highly Confidential Information as provided herein by any person shall not be deemed a waiver by any Submitting Party of any privilege or entitlement to confidential treatment of such Confidential or Highly Confidential Information. Reviewing Parties, by viewing this material, agree: (1) not to assert any such waiver; (2) not to use Confidential or Highly Confidential Information to seek disclosure in any other proceeding; and (3) that accidental disclosure of Confidential or Highly Confidential Information by a Submitting Party to a Reviewing Party shall not be deemed a waiver of any privilege or entitlement provided that the Submitting Party takes prompt remedial action.

19. *Subpoena by Courts, Departments, or Agencies.* If a court, or a federal or state department or agency, issues a subpoena for or orders the production of Stamped Confidential Documents, Stamped Highly Confidential Documents, Confidential Information, or Highly Confidential Information that a party has obtained under the terms of this Protective Order, such party shall promptly notify each relevant Submitting Party and each known Third-Party Interest Holder of the pendency of such subpoena or order. Consistent with the independent authority of any court, department, or agency, such notification must be accomplished such that each Submitting Party and Third-Party Interest Holder has sufficient opportunity to oppose such production prior to the production or disclosure of any Stamped Confidential Document, Stamped Highly Confidential Document, Confidential Information, or Highly Confidential Information.

20. *Violations of the Protective Order.* Should a Reviewing Party violate any of the terms of this Protective Order, such Reviewing Party shall immediately convey that fact to the Commission and to the relevant Submitting Parties and known Third-Party Interest Holders. Further, should such violation consist of improper disclosure of Confidential or Highly Confidential Information, the violating person shall take all necessary steps to remedy the improper disclosure. The Commission retains its full authority to fashion appropriate sanctions for violations of this Protective Order, including but not limited to suspension or disbarment of Counsel or Consultants from practice before the Commission, forfeitures, cease and desist orders, and denial of further access to Confidential or Highly Confidential Information in this or any other Commission proceeding. Nothing in this Protective Order shall limit any other rights and remedies available to the Submitting Party or any Third-Party Interest Holder at law or in equity against any person using Confidential or Highly Confidential Information in a manner not authorized by this Protective Order.

21. *Termination of Proceeding.* The provisions of this Protective Order shall not terminate at the conclusion of this proceeding. Within two weeks after conclusion of this proceeding and any administrative or judicial review, Reviewing Parties shall destroy or return to the Submitting Party Stamped Confidential Documents and Stamped Highly Confidential Documents and all copies of the

¹⁰ 47 CFR §§ 0.442, 0.461.

same. No material whatsoever containing or derived from Confidential and Highly Confidential Information may be retained by any person having access thereto, except Outside Counsel and Outside Consultants may retain, under the continuing strictures of this Protective Order, two copies of pleadings (one of which may be in electronic format) prepared in whole or in part by that party that contain Confidential or Highly Confidential Information, and one copy of orders issued by the Commission or Bureau that contain Confidential or Highly Confidential Information. All Reviewing Parties shall certify compliance with these terms and shall deliver such certification to Counsel for the Submitting Party and file such certification with the Commission not more than three weeks after conclusion of this proceeding. Such certification shall be made pursuant to 28 U.S.C. § 1746 and is subject to 18 U.S.C. § 1001. The provisions of this paragraph regarding retention of Stamped Confidential Documents and Stamped Highly Confidential Documents and copies of the same and Confidential and Highly Confidential Information shall not be construed to apply to the Commission or its staff.

22. *Questions.* Questions concerning this Protective Order should be addressed to (1) Karen Johnson, Karen.Johnson@fcc.gov, Office of International Affairs; (2) Monica DeLong, Monica.DeLong@fcc.gov, Wireless Telecommunications Bureau; (3) Judith Dempsey, Judith.Dempsey@fcc.gov, Office of Economics and Analytics; or (4) Joel Rabinovitz, Joel.Rabinovitz@fcc.gov, Transaction Team, Office of General Counsel.

23. *Authority.* This Order is issued pursuant to sections 4(j) and 214 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(j), 214, and authority delegated under sections 0.19, 0.351 of the Commission's rules, 47 CFR §§ 0.19, 0.351 and is effective upon its adoption.

FEDERAL COMMUNICATIONS COMMISSION

Nese Guendelsberger
Deputy Chief
Office of International Affairs

Barbara Esbin
Deputy Chief
Wireless Telecommunications Bureau

APPENDIX A**Highly Confidential Information and Documents**

As specified in paragraphs 2 and 3 of the Protective Order, only information and documents set forth in this Appendix and that otherwise meet the definition of Highly Confidential Information or Stamped Highly Confidential Documents may be designated as Highly Confidential. This Appendix will be updated as necessary.

1. Information that details the terms and conditions of or strategy related to a Submitting Party's most sensitive business negotiations or contracts (e.g., marketing, service or product agreements, agreements relating to potential mergers and acquisitions, and comparably sensitive contracts).
2. Information that discusses specific steps that will be taken to integrate companies or discussions of specific detail or disaggregated quantification of merger integration benefits or efficiencies (including costs, benefits, timeline, and risks of the integration).
3. Information that discusses in detail current or future plans to compete for a customer or specific groups or types of customers (e.g., business or wholesale customers), including specific pricing or contract proposals, pricing strategies, product strategies, advertising or marketing strategies, future business plans, procurement strategies, technology implementation or deployment plans and strategies (e.g., engineering capacity planning documents), plans for handling acquired customers, and human resources and staffing strategies.
4. Information that discloses the identity or characteristics of specific customers or of those a company is targeting or with whom a company is negotiating (including identifying information about specific customer facilities, information about customers' levels of demand, and information regarding pricing proposals).
5. Information that provides granular information about a Submitting Party's current or future costs, revenues, marginal revenues, market share, or customers.
6. Detailed information describing or illustrating how a Submitting Party analyzes its competitors, including sources and methods used in these analyses, any limits on use of these analyses or data, and how such analyses or data are used.
7. Information that provides numbers of customers and revenues broken down by customer type (e.g., business) and zip code or market area (e.g., CMA/MSA/RSA, DMA, state, regional cluster).
8. Information that discusses in detail the number or anticipated changes in the number of customers or amount of traffic, including churn rate data, broken down by zip code or market, and detailed information about why customers discontinue service.
9. Information that provides detailed or granular engineering capacity information or information about specific facilities, including collocation sites, cell sites, or maps of network facilities.
10. Information that provides detailed technical performance data and test results.

APPENDIX B**Acknowledgment of Confidentiality****GN Docket No. 23-171**

I am seeking access to [] only Confidential Information or [] Confidential and Highly Confidential Information.

I hereby acknowledge that I have received and read a copy of the foregoing Protective Order in the above-captioned proceeding, and I understand it.

I agree that I am bound by the Protective Order and that I shall not disclose or use Stamped Confidential Documents, Stamped Highly Confidential Documents, Confidential Information, or Highly Confidential Information except as allowed by the Protective Order.

I acknowledge that a violation of the Protective Order is a violation of an order of the Federal Communications Commission (Commission). I further acknowledge that the Commission retains its full authority to fashion appropriate sanctions for violations of this Protective Order, including but not limited to suspension or disbarment of Counsel or Consultants from practice before the Commission, forfeitures, cease and desist orders, and denial of further access to Confidential or Highly Confidential Information in this or any other Commission proceeding.

I acknowledge that nothing in the Protective Order limits any other rights and remedies available to a Submitting Party at law or in equity against me if I use Confidential or Highly Confidential Information in a manner not authorized by this Protective Order.

I certify that I am not involved in Competitive Decision-Making.

Without limiting the foregoing, to the extent that I have any employment, affiliation, or role with any person or entity other than a conventional private law firm (such as, but not limited to, a lobbying or advocacy organization), I acknowledge specifically that my access to any information obtained as a result of the Protective Order is due solely to my capacity as Counsel or Outside Consultant to a party or as an employee of Counsel, Outside Consultant, or Outside Firm, and I agree that I will not use such information in any other capacity.

I acknowledge that it is my obligation to ensure that Stamped Confidential Documents and Stamped Highly Confidential Documents are not duplicated except as specifically permitted by the terms of the Protective Order and to ensure that there is no disclosure of Confidential Information or Highly Confidential Information in my possession, in the possession of those who work for me, or in the possession of other Support Personnel, except as provided in the Protective Order.

I certify that I have verified that there are in place procedures at my firm or office to prevent unauthorized disclosure of Confidential Information and Highly Confidential Information.

Capitalized terms used herein and not otherwise defined shall have the meanings ascribed to them in the Protective Order.

Executed this ___ day of _____, 2024.

[Name]
[Position]
[Firm]
[Telephone]



PUBLIC NOTICE

Federal Communications Commission
45 L St., N.E.
Washington, D.C. 20002

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DA 24-308
Released: March 27, 2024

PUBLIC SAFETY AND HOMELAND SECURITY BUREAU REQUESTS COMMENT ON IMPLEMENTATION OF MEASURES TO PREVENT LOCATION TRACKING VIA THE DIAMETER AND SIGNALING SYSTEM 7 SECURITY PROTOCOLS

PS Docket No. 18-99

Comments Due: April 26, 2024
Reply Comments Due: May 28, 2024

The Federal Communications Commission's Public Safety and Homeland Security Bureau (Bureau) requests comment on communications service providers' implementation of security countermeasures to prevent exploitation of vulnerabilities in the Signaling System 7 (SS7) and Diameter protocols to track the location of consumers through their mobile devices.

Background:

The Signaling System 7 (SS7) and Diameter protocols play a critical role in U.S. telecommunications infrastructure supporting fixed and mobile service providers in processing and routing calls and text messages between networks, enabling interconnection between fixed and mobile networks, and providing call session information such as Caller ID and billing data for circuit switched infrastructure. Over the last several years, numerous reports have called attention to security vulnerabilities present within SS7 networks and suggest that attackers target SS7 to obtain subscribers' location information.¹

The Diameter protocol provides the same services as SS7 and as a result presents similar vulnerabilities. The Diameter protocol was originally used as the standard signaling protocol intended for exchanging authentication, authorization, and accounting information in fixed and mobile networks. Diameter was expanded to include support for network access and IP mobility in local and roaming

¹ See, e.g., Matthew Braga, *Inside SS7, the Insecure Global Cell Network That's Used to Track Phones*, Motherboard (Aug. 27, 2014), https://motherboard.vice.com/en_us/article/inside-ss7-the-insecure-global-cell-network-thats-used-to-track-phones (explaining how SS7 data can be used to track location); 60 Minutes: Hacking Your Phone (CBS television broadcast Apr. 17, 2016), <http://www.cbsnews.com/news/60-minutes-hacking-your-phone/> (demonstrating how SS7 may be used to track a subscriber); Sean Lyngaas, *DHS: 'Nefarious actors' Could Be Exploiting SS7 Flaw*, CyberScoop (Jun. 1, 2018), <https://cyberscoop.com/ss7-stingrays-imsi-catchers-chris-krebs-dhs-ron-wyden/> (describing how IMSI catchers exploit SS7 vulnerabilities to imitate a cell tower to intercept caller location).

situations.² Diameter does not encrypt originating IP addresses during transport, which increases the risk of network spoofing, where an attacker poses as a legitimate roaming partner on a network to gain access to the network.³ While technology is evolving, the SS7 and Diameter protocols are still the foundation for mobile telephone networks, especially for roaming capabilities to be able to interconnect networks. As coverage expands, and more networks and participants are introduced, the opportunity for a bad actor to exploit SS7 and Diameter has increased.⁴

In response to these threats, the Communications Security, Reliability, and Interoperability Council (CSRIC), a federal advisory committee to the FCC, established working groups to assess the security risks associated with the SS7 and Diameter protocols and develop recommendations to mitigate those risks accordingly.⁵ In June 2016, CSRIC V Working Group 10, “Legacy Systems and Services Risk Reduction,” began studying these problems and in March 2017, CSRIC V adopted a final report detailing the vulnerabilities in the SS7 and Diameter protocols and provided specific recommendations for best practices to help prevent exploitation of SS7.⁶ These recommendations included the use of firewalls, monitoring, and filtering to reduce the ability of an attacker to gain access to subscribers’ location and engaging with signaling aggregators, which provide a “wider view of signaling traffic originating from domestic and international entities and terminating in the U.S. telecommunications network.”⁷ The recommendations also included the importance of security assessments and threat information sharing in order to detect incidents of location tracking and increase situational awareness of providers.⁸ CSRIC V also recommended that industry encourage subscribers to use available encryption technologies in order to reduce access by a bad actor.⁹ CSRIC V additionally recommended continuing to examine and address the security practices related to next generation protocols, including Diameter.¹⁰

In 2018, CSRIC VI identified location tracking as one of the primary motivations behind potential attacks in SS7 and Diameter.¹¹ CSRIC VI noted:

“Location tracking in the SS7/Diameter sense does not provide granular location data for a consumer. The information retrieved through location tracking is therefore limited to cell ID or serving MSC/MSS address, which in itself may disclose the city or general area within a city for a target, but not specific GPS coordinates as seen with other attack

² Communications Security, Reliability and Interoperability Council VI: Working Group 3 Network Reliability and Security Risk Reduction, *Recommendations to Mitigate Security Risks for Diameter Networks* at 11 (2018), https://www.fcc.gov/sites/default/files/csric6report_recommendationstomitigateriskdiameterprotocol032018.pdf (CSRIC VI Report).

³ *Id.* at 29.

⁴ *Id.* at 13.

⁵ CSRIC is an advisory committee of the Federal Communications Commission, the mission of which is to make recommendations to the Commission to promote the security, reliability and resiliency of the Nation’s communications systems. FCC, Communications Security, Reliability, and Interoperability Council (CSRIC), <https://www.fcc.gov/about-fcc/advisory-committees/communications-security-reliability-and-interoperability-council-0>.

⁶ Communications Security, Reliability and Interoperability Council V: Working Group 10, Legacy Systems Risk Reductions (2017), <https://www.fcc.gov/sites/default/files/CSRIC5-WG10-FinalReport031517.pdf> (CSRIC V Report).

⁷ *Id.* at 11, 13, 18-19.

⁸ CSRIC V Report at 18-19.

⁹ *Id.* at 19.

¹⁰ *Id.*

¹¹ CSRIC VI Report at 26.

vectors (such as malware on a device where these coordinates can be retrieved). Even this information can be harmful though, depending on the subscriber. VIPs and government officials need to be especially wary of this possibility. . . . Location tracking is the process of attaining individualized information of subscribers' locations to develop pattern maps of the target's whereabouts. . . . If the cell ID and/or location codes are revealed, the attacker has the ability to determine the location of the cell tower through publicly available websites. . . . There are several other ways for retrieving [cell tower or visited network] information, so not every attack is the same. Attackers will use a variety of methods depending on the response received from the network they are attacking."¹²

CSRIC VI also issued recommendations concerning best practices to reduce exploitation of the Diameter protocol which were similar to the SS7 recommendations, and made additional recommendations concerning network administration.¹³ This recommendation advised that network administrators implement secure domains and that security gateways, which interconnect the domains, be deployed at network boundaries to reduce unauthorized access.¹⁴

The Commission has encouraged communications service providers to implement the security countermeasures developed and recommended by CSRIC.¹⁵ In April 2018, the Commission released a Public Notice requesting comment on the progress and effectiveness surrounding the implementation of SS7 protocol security best practices.¹⁶ Commenters included larger communications service providers who described that they have implemented the CSRIC recommendations and other best practices relevant to their networks.¹⁷ In February 2020, the Commission released an additional Public Notice requesting comment on the progress and effectiveness surrounding the implementation of Diameter protocol security

¹² *Id.* at 27.

¹³ *Id.* at 37-38 (recommending the use of message filtering and evaluation of Diameter peer relationships, GSMA security best practices to secure signaling interconnections, threat information sharing, security assessments, and subscriber media encryption support and user authentication).

¹⁴ *Id.* at 38.

¹⁵ In August 2017, the Commission released a Public Notice recommending that communications service providers implement the CSRIC V Working Group 10 SS7 best practices. *See FCC's Public Safety and Homeland Security Bureau Encourages Implementation of CSRIC Signaling System 7 Security Best Practices*, DA 17-799, Public Notice (PSHSB Aug. 24, 2017).

¹⁶ *Public Safety and Homeland Security Bureau Requests Comment on Implementation of Signaling System 7 Security Best Practices*, DA 18-333, Public Notice (PSHSB Apr. 3, 2018).

¹⁷ *See* AT&T Services, Inc. Comments at 3-4 (rec. May 4, 2018) (describing that AT&T has implemented extensive blocking and filtering of malicious SS7 messages, SMS Home Routing, new firewalls and other technologies to monitor and filter traffic, advanced filtering as recommended by GSMA; tested its network to assess threats to its network and responded accordingly; and continued collaboration with the Commission and other agencies and industry to share threat information and responses); CTIA Comments at 7-9 (rec. May 3, 2018) (describing the implementation of CSRIC recommendations and GSMA best practices by various carriers); Sprint Corporation Comments at 4-6 (rec. May 3, 2018) (explaining the measures Sprint has taken to protect its SS7 network including the use of Code Division Multiple Access technology and implementing relevant GSMA best practices, and also noting the particular effectiveness of monitoring and filtering practices to reduce exploitation in SS7); T-Mobile USA, Inc. Comments at 4 (rec. May 3, 2018) (explaining that T-Mobile has implemented CSRIC V recommendations including a "SS7 special-purpose firewall" designed to enhance monitoring and filtering, updated its consumer education materials concerning encryption, and continuing to share threat information with government and industry); Verizon Comments at 1-3 (rec. May 3, 2018) (explaining Verizon has implemented the GSMA recommendations relevant to reduce vulnerabilities posed by other carriers when Verizon's customers roam on GSM networks and also implemented a signaling firewall, penetration testing, consumer education about encryption options, and threat information sharing, among other security measures);

best practices.¹⁸ The same commenters described their implementation of the CSRIC recommendations and other best practices concerning the vulnerabilities of the Diameter protocol.¹⁹ In July 2020, the Commission acknowledged the progress industry made in addressing Diameter security issues, noting the widespread adoption of CSRIC's recommendations across the industry.²⁰

Most recently, in a February 2024 letter addressed to President Biden, Senator Ron Wyden outlined his continued concerns about the ability of foreign authoritarian governments to surveil and track the location of individuals by exploiting vulnerabilities in SS7 and Diameter, and called on the Commission to implement minimum cybersecurity requirements for wireless carriers, among other recommendations.²¹

Request for Comment:

To this point, the Bureau has broadly focused on providers' efforts to reduce or mitigate overall vulnerabilities in the SS7 and Diameter protocols. The Bureau finds it is important to more specifically examine the area of location tracking. To that end, the Bureau seeks renewed public comment, including from communications service providers and other stakeholders, on the implementation and effectiveness of security countermeasures, including but not limited to the CSRIC V and VI recommendations regarding the SS7 and Diameter protocols, with respect to location tracking, including any progress, barriers, and lessons learned, and the extent to which these recommendations are supported by providers. Where applicable, we ask that commenters provide information about how the questions and your answers apply to their own systems and services:

- **Incidents of Location Tracking:** Have there been any successful, unauthorized attempts to access the network user location data of communications service providers operating in the United States to track user location using exploits in the SS7 or Diameter protocols since CSRIC VI's adoption of best practices in 2018? If so, we ask that commenters provide the date(s) of the incident; a description of the location tracking that occurred; a description of the vulnerabilities exploited and the techniques used to access the system; and the identity of the attacker, if known. What actions, if any, have communications service providers taken in

¹⁸ *Public Safety and Homeland Security Bureau Requests Comment on Implementation of Diameter Best Practices*, DA 20-141, Public Notice (PSHSB Feb. 10, 2020).

¹⁹ See AT&T Services, Inc. Comments at 2-3 (rec. Mar. 11, 2020) (explaining AT&T's implementation of extensive blocking and filtering, participation in standards forums to develop global security standards, and sharing of threat information, among other best practices); CTIA Comments at 6-15 (rec. Mar. 11, 2020) (describing providers' implementation of various recommendations); Sprint Corporation Comments at 4-5 (rec. Mar. 11, 2020) (explaining that Sprint has implemented CSRIC recommendations including monitoring and message filtering practices); T-Mobile USA, Inc. Comments at 3-7 (rec. Mar. 11, 2020) (explaining that it has implemented the CSRIC recommendations and the GSMA best practices and guidelines for Diameter internetwork peering and securing its signaling interconnections, among other recommendations); Verizon Comments at 1-5 (rec. Mar. 11, 2020) (explaining how it has implemented each of the CSRIC recommendations).

²⁰ Press Release, Chairman Ajit Pai, FCC, Chairman Pai Announces Industry Progress in Addressing Diameter Network Security Issue (Jul. 27, 2020), <https://www.fcc.gov/document/pai-announces-industry-progress-addressing-diameter-security-issue>.

²¹ Letter from Ron Wyden, U.S. Senator, to Joseph Biden, President of the United States (Feb. 29, 2024), <https://www.wyden.senate.gov/imo/media/doc/wyden-phone-hacking-letter-to-president-biden.pdf> (copying Chairwoman Rosenworcel and other federal agency officials). Senator Wyden has previously called attention to the vulnerabilities in SS7. In 2017, Senator Wyden and Representative Ted Lieu urged the Commission, in light of the CSRIC V report, to implement CSRIC's recommendations, and to continue examining the risks identified in the CSRIC V report through future CSRIC working groups. Letter from Ron Wyden, U.S. Senator, and Ted Lieu, U.S. Representative, to Ajit Pai, Chairman, FCC (Mar. 28, 2017); see also Letter from Ron Wyden, U.S. Senator to Ajit Pai, Chairman, FCC (May 29, 2018) (outlining the threats that SS7 vulnerabilities pose to national security and urging the Commission to take regulatory action over wireless carriers).

response to any unauthorized attempts to access the location repository? Were there any steps that communications service providers could have taken to prevent these incidents before they occurred?

The malicious use of global titles can potentially enable the tracking of phones both domestically and internationally.²² Since CSRIC VI's adoption of best practices in 2018, have there been any incidents in which a leased United States global title was exploited to track the location of a customer in the United States? If so, we ask that commenters provide the date(s) of the incident; a description of the location tracking that occurred; a description of the vulnerabilities exploited and the techniques used to access the system; information on the ownership and leasing of any global titles involved in the incident; and the identity of the attacker, if known

- **Preventing Exploitation of Location Information:** We seek comment on the measures that communications service providers have implemented to protect the location tracking of their customers via the SS7 and Diameter protocols. Which CSRIC recommendations for SS7 or Diameter, or any other industry best practices including the GSMA best practices, concerning location tracking have communications service providers implemented? Have service providers implemented GSMA FS.19 "Diameter Security" requirements in their Authentication, Authorization, and Accounting (AAA) networks? What measures have providers implemented to prevent location information from being exploited by companies with which providers have roaming agreements? Are there specific measures that all providers should be implementing that are not addressed in existing best practices? What barriers have communications service providers encountered in implementing the recommendations? What factors have communications service providers used to determine whether any of the recommendations concerning location tracking are not suitable for their networks? Have smaller providers implemented measures to prevent location information from being exploited, and if not, why? How can the Commission have more visibility into the steps that providers of all sizes are taking to mitigate SS7 and Diameter vulnerabilities and more confidence that those steps are effective? For example, are providers currently conducting third-party audits of their SS7 and Diameter security measures? If so, should the results of those audits be reported to the Commission or other federal agencies?

²² See GSMA, GSMA Global Title Leasing Code of Conduct, <https://www.gsma.com/security/gtleasing/> (last visited on Mar. 19, 2024) ("A global title (GT) is an address used for routing signaling messages (using the Signalling (*sic*) Connection Control Part / SCCP protocol) on telecommunications networks. National authorities allocate numbering resources to communications providers, which reserve and use part of those numbers for use as GTs. In mobile networks, GTs enable information to be exchanged within and between networks, so that mobile services work regardless of whether a user is in his/her home network or roaming.").

- **Leasing of Global Titles:** What vulnerabilities have communications service providers observed related to the leasing, subleasing, or other arrangements involving the conveyance of global titles? Have communications service providers conveyed global titles to entities outside of the United States, and if so, to whom? When entering into an arrangement concerning the leasing, subleasing, or conveying of global titles, do these arrangements limit the third party's ability to further convey the global title or require the implementation of security measures to prevent unauthorized location tracking? What specific measures have been implemented to reduce security risks when leasing, subleasing, or conveying global titles? Are smaller communications service providers leasing, subleasing, or conveying global titles? How can the Commission have more visibility into the conveyance of global titles to ensure that they are not being exploited to obtain the location of subscribers in the United States? For example, should the Commission require the conveyance of global titles to be reported to the Commission?

Procedural Matters

Interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the FCC's Electronic Comment Filing System (ECFS).

- Commenting parties may file comments in response to this Notice in PS Docket No. 18-99.
- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <https://www.fcc.gov/ecfs>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street NE, Washington, D.C., 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. *See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (OMD 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (tty).

Parties wishing to file materials with a claim of confidentiality should follow the procedures set forth in Section 0.459 of the FCC's rules. Casual claims of confidentiality are not accepted. Confidential submissions may not be filed via ECFS but rather should be filed with the Secretary's Office following the procedures set forth in 47 CFR § 0.459. Redacted versions of confidential submissions may be filed via ECFS. Parties are advised that the FCC looks with disfavor on claims of confidentiality for entire documents. When a claim of confidentiality is made, a public, redacted version of the document should also be filed.

We exempt the proceeding initiated by this Notice from the FCC's *ex parte* rules.²³ This exemption serves the public interest by facilitating the full discussion of potentially sensitive matters. In

²³ 47 CFR § 1.1200(a).

the event the Commission were to take further action, any rule that the Commission were to propose would be subject to permit-but-disclose rulemaking procedures before it would be adopted, which would ensure the compilation of a full record.

For further information, contact Rebecca Clinton, Attorney Advisor, Operations and Emergency Management Division, Public Safety and Homeland Security Bureau, (202) 418-7815, rebecca.clinton@fcc.gov.

– FCC –



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
45 L STREET NE
WASHINGTON D.C. 20554

News media information 202-418-0500
Internet: <http://www.fcc.gov> (or <ftp.fcc.gov>)
TTY (202) 418-2555

DA No. 24-309

Report No. TEL-02352

Friday March 29, 2024

International Authorizations Granted

Section 214 Applications (47 CFR §§ 63.18, 63.24); Section 310(b) Petitions (47 CFR § 1.5000)

By the Chief, Telecommunications and Analysis Division, Office of International Affairs:

The following applications have been granted pursuant to the Commission's processing procedures set forth in sections 63.12 and 63.20 of the Commission's rules. 47 CFR §§ 63.12, 63.20.

Unless otherwise noted, these grants authorize the applicants to: (1) become a facilities-based international common carrier subject to 47 CFR §§ 63.21, 63.22 and/or a resale-based international common carrier subject to 47 CFR §§ 63.21, 63.23; (2) assign or transfer control of international section 214 authority in accordance with 47 CFR § 63.24; or (3) exceed the foreign ownership benchmarks applicable to common carrier radio licensees under 47 U.S.C. § 310(b); see Subpart T of Part 1 of the Commission's rules, 47 CFR §§ 1.5000-5004.

THIS PUBLIC NOTICE SERVES AS EACH NEWLY AUTHORIZED CARRIER'S SECTION 214 CERTIFICATE. It contains general and specific conditions, which are set forth below. Newly authorized carriers should carefully review the terms and conditions of their authorizations. Failure to comply with general or specific conditions of an authorization, or with other relevant Commission rules and policies, could result in fines and forfeitures.

Petitions for reconsideration under section 1.106 or applications for review under section 1.115 of the Commission's rules, 47 CFR §§ 1.106, 1.115, in regard to the grant of any of these applications may be filed within 30 (thirty) days of this public notice. See 47 CFR § 1.4(b)(2).

Assignment

Grant of Authority

Date of Action: 03/21/2024

Current Licensee: MCI International LLC**FROM:****TO:** Cable and Wireless BVI Limited

Cable & Wireless (BVI) Limited (C&W BVI) filed an application for consent to assign the minority interests held by MCI International LLC (MCI) and Verizon Hawaii International Inc. (Verizon Hawaii) in the Taino-Carib Cable System, ITC-MOD-20191025-00173, to C&W BVI (together with MCI and Verizon Hawaii, Applicants). The Applicants were previously granted an international section 214 authorization to construct and operate the Taino-Carib Cable System, which was modified to reflect the licensees of the cable as re-licensed (ITC-MOD-20191025-00173). The Applicants filed a supplement on March 13, 2023. The Application was placed on Public Notice on May 5, 2023. See Non Streamlined International Applications/Petitions Accepted For Filing, File No. ITC-ASG-20221215-00156, Public Notice, Report No. TEL-02271NS (IB May 5, 2023).

The Application has been coordinated with the Department of State and other Executive Branch agencies pursuant to section 1.767(b) of the Commission's rules, 47 CFR § 1.767(b), and consistent with the procedures established by the Department of State. See Review of Commission Consideration of Applications under the Cable Landing License Act, IB Docket No. 00-106, Report and Order, 16 FCC Rcd 22167, 22192-93, paras. 51-52 (2001) (Submarine Cable Landing License Report and Order); Commission Announces Department of State's Revised Procedures For Its Consideration of Submarine Cable Landing License Applications, IB Docket No. 16-155, Public Notice, DA 22-435 (IB Apr. 19, 2022). On May 9, 2023, the Department of Justice (DOJ), on behalf of the Committee for the Assessment of Foreign Participation in the United States Telecommunications Services Sector (Committee), filed a letter notifying the Commission that the Committee was reviewing the Application for any national security and law enforcement concerns that may be raised by foreign participation in the United States telecommunications services sector and requested that the Commission defer action on the Application. We deferred action on the Application in response to the Committee's request. On March 7, 2024, the National Telecommunications and Information Administration, on behalf of the Committee, filed a Petition to Adopt Conditions to Authorization and License. The Committee has no objection to the Commission granting the application, provided that the Commission conditions its approval on the assurance of Cable & Wireless (BVI) Limited to abide by the commitments and undertakings set forth in the February 20, 2024, Letter of Agreement (LOA) attached to the Petition to Adopt Conditions to Authorization and License.

MCI is a Delaware limited liability company and Verizon Hawaii is a Delaware corporation. C&W BVI is a company incorporated under the laws of the British Virgin Islands. MCI and C&W BVI are two of six cable landing licensees that jointly hold the cable landing license for the Taino-Carib Cable System. Each of the Applicants is a consortium member of the Taino-Carib Cable System.

The Taino-Carib Cable System is a common carrier fiber-optic submarine cable system that links Puerto Rico with the U.S. Virgin Islands and the British Virgin Islands, and connects at these landing points to other cables extending to the U.S. Mainland, other Caribbean islands, and Central and South America. Together, MCI and Verizon Hawaii hold 10.225% ownership and voting interests in the Taino-Carib Cable System. Currently, C&W BVI holds 14.462% ownership and voting interests in the Taino-Carib Cable System.

Pursuant to the transaction, C&W BVI will acquire all of MCI's and Verizon Hawaii's ownership interests in the cable system. As a result, C&W BVI will hold approximately 24.687% ownership and voting interests in the Taino-Carib Cable System. According to the Application, while C&W BVI's ownership interest in the Taino-Carib Cable System would increase as a result of the transaction, it would remain a minority, non-controlling interest. The transaction will not involve the transfer of control of any cable landing station in the United States. The Applicants state that the proposed transaction will not affect the other licensees or the U.S. cable landing stations of the Taino-Carib Cable System, nor result in a change of control of the cable system.

The following entities or individuals hold 10% or greater equity and voting interests in C&W BVI: (1) Cable & Wireless (West Indies) Limited (Cable & Wireless West Indies), an England entity (100% equity and voting interests in C&W BVI); (2) CWI Group Limited (CWI Group), an England entity (100% equity and voting interests in Cable & Wireless West Indies); (3) Sable Holding Limited (Sable Holding), an England entity (100% equity and voting interests in CWI Group); (4) C&W Senior Secured Parent Limited (C&W Senior Secured), a Cayman Islands entity (100% equity and voting interests in Sable Holding); (5) C&W Senior Finance Limited (C&W Senior Finance), a Cayman Islands entity (100% equity and voting interests in C&W Senior Secured); (6) Cable & Wireless Limited, an England entity (100% equity and voting interests in C&W Senior Finance); (7) Cable & Wireless Communications Limited (Cable & Wireless Communications), an England entity (100% equity and voting interests in Cable & Wireless Limited); (8) LGE Coral Holdco Limited (LGE Coral), an England entity (100% equity and voting interests in Cable & Wireless Communications); (9) Liberty CWC Holdings Limited (Liberty CWC), a Barbados entity (100% equity and voting interests in LGE Coral); (10) LiLAC Services Ltd. (LiLAC Services), a Bermuda entity (100% equity and voting interests in Liberty CWC); (11) Liberty Latin America Ltd., a Bermuda entity (100% equity and voting interests in LiLAC Services); and (12) John C. Malone, a U.S. citizen (26.1% voting interests and 6.1% equity interests in Liberty Latin America Ltd.). Applicants state that no other person or entity owns or controls a 10% or greater direct or indirect interest in C&W BVI.

We grant the Petition to Adopt Conditions to Authorization and License (Petition) filed in this proceeding by the National Telecommunications and Information Administration, on behalf of the Committee for the Assessment of Foreign Participation in the United States Telecommunications Services Sector, on March 7, 2024. Accordingly, we condition grant of the Application on Cable & Wireless (BVI) Limited abiding by the commitments and undertakings set forth in the Letter of Agreement from Alexander Bremner, Director, Cable & Wireless (BVI) Limited, to Under Secretary for Strategy, Policy, and Plans, Office of Strategy, Policy, and Plans, U.S. Department of Homeland Security; and Office of Foreign Investment Review, Director, Undersecretary of Acquisition and Sustainment, U.S. Department of Defense, dated February 20, 2024.

Copies of the Petition and the LOA are publicly available and may be viewed on the FCC website through International Communications Filing System (ICFS) by searching for ITC-ASG-20221215-00156 and accessing "Other filings related to this application" from the Document Viewing area.

A failure to comply and/or remain in compliance with any of these commitments and undertakings shall constitute a failure to meet a condition of the assignment application and the underlying international section 214 authorization, ITC-MOD-20191025-00173, and thus grounds for declaring the international section 214 authorization terminated without further action on the part of the Commission. Failure to meet a condition of the grant of the assignment application or the international section 214 authorization may also result in monetary sanctions or other enforcement action by the Commission.

This authorization is without prejudice to the Commission's action in any other related pending proceedings.

ITC-T/C-20240112-00007 E Monon Telephone Company Inc.
Transfer of Control
Grant of Authority Date of Action: 03/22/2024

Current Licensee: Monon Telephone Company Inc.

FROM: Monon Telephone Company Inc.

TO: Pulaski White Rural Telephone Cooperative Inc

Monon Telephone Company Inc. (Monon), an Indiana corporation that holds an international section 214 authorization to provide global resale service (ITC-214-20070723-00290), filed an application for consent to the transfer of control of Monon to Pulaski-White Rural Telephone Cooperative, Inc. d/b/a LightStream (LightStream). Pursuant to a November 29, 2023 purchase agreement, LightStream will purchase all of the outstanding shares of stock from the shareholders of Monon. As a result, Monon will become a wholly owned subsidiary of LightStream.

LightStream, an Indiana nonprofit corporation, is owned by its members, none of which holds a 10% or greater interest.

This authorization is without prejudice to the Commission's action in any other related pending proceedings.

SURRENDER

ITC-214-19950223-00094 Pronto, the telephone company of the americas

Pronto, the telephone company of the americas notified the Commission of the surrender of its international section 214 authorization.

ITC-214-20131120-00320 NI Satellite, Inc.

NI Satellite, Inc. notified the Commission of the surrender of its international section 214 authorization.

ITC-214-20140828-00258 ALCALLER, INC.

ALCALLER, INC. notified the Commission of the surrender of its international section 214 authorization.

CONDITIONS APPLICABLE TO INTERNATIONAL SECTION 214 AUTHORIZATIONS

(1) These authorizations are subject to the Exclusion List for International Section 214 Authorizations, which identifies restrictions on providing service to particular countries or using particular facilities. The most recent Exclusion List is at the end of this Public Notice. The list applies to all U.S. international carriers, including those that have previously received global or limited global section 214 authority, whether by Public Notice or specific written order. Carriers are advised that the attached Exclusion List is subject to amendment at any time pursuant to the procedures set forth in Streamlining the International Section 214 Authorization Process and Tariff Requirements, IB Docket No. 95-118, 11 FCC Rcd 12884 (1996), para. 18. A copy of the current Exclusion List is maintained in the FCC Reference Information Center and is available at <https://www.fcc.gov/exclusion-list-international-section-214-authorizations>. It is also attached to each Public Notice that grants international Section 214 authority.

(2) The export of telecommunications services and related payments to countries that are subject to economic sanctions may be restricted. For information concerning current restrictions, call the Office of Foreign Assets Control, U.S. Department of the Treasury, (202) 622-2520.

(3) Carriers shall comply with the requirements of Section 63.11 of the Commission's rules, which requires notification by, and in certain circumstances prior notification by, U.S. carriers acquiring an affiliation with foreign carriers. A carrier that acquires an affiliation with a foreign carrier will be subject to possible reclassification as a dominant carrier on an affiliated route pursuant to the provisions of section 63.10 of the rules.

(4) A carrier may provide switched services over its authorized resold private lines in the circumstances specified in section 63.23(d) of the rules, 47 CFR § 63.23(d).

(5) Carriers shall comply with the "No Special Concessions" rule, section 63.14, 47 CFR § 63.14.

(6) Carriers regulated as dominant for the provision of a particular communications service on a particular route for any reason other than a foreign carrier affiliation under section 63.10 of the rules shall file tariffs pursuant to Section 203 of the Communications Act, as amended, 47 U.S.C. § 203, and Part 61 of the Commission's Rules, 47 CFR Part 61. Carriers shall not otherwise file tariffs except as permitted by section 61.19 of the rules, 47 C.F.R. § 61.19. Except as specified in section 20.15 with respect to commercial mobile radio service providers, carriers regulated as non-dominant, as defined in section 61.3, and providing detariffed international services pursuant to section 61.19, must comply with all applicable public disclosure and maintenance of information requirements in sections 42.10 and 42.11.

(7) International facilities-based service providers must file and maintain a list of U.S.-international routes on which they have direct termination arrangements with a foreign carrier. 47 CFR § 63.22(h). A new international facilities-based service provider or one without existing direct termination arrangements must file its list within thirty (30) days of entering into a direct termination arrangement(s) with a foreign carrier(s). Thereafter, international facilities-based service providers must update their lists within thirty (30) days after adding a termination arrangement for a new foreign destination or discontinuing an arrangement with a previously listed destination. See Process For The Filing Of Routes On Which International Service Providers Have Direct Termination Arrangements With A Foreign Carrier, ITC-MS-20181015-00182, Public Notice, 33 FCC Rcd 10008 (IB 2018).

(8) Any U.S. Carrier that owned or leased bare capacity on a submarine cable between the United States and any foreign point must file a Circuit Capacity Report to provide information about the submarine cable capacity it holds. 47 CFR § 43.82(a)(2). See <https://www.fcc.gov/circuit-capacity-data-us-international-submarine-cables>.

(9) Carriers should consult section 63.19 of the rules when contemplating a discontinuance, reduction or impairment of service.

(10) If any carrier is reselling service obtained pursuant to a contract with another carrier, the services obtained by contract shall be made generally available by the underlying carrier to similarly situated customers at the same terms, conditions and rates. 47 U.S.C. § 203.

(11) To the extent the applicant is, or is affiliated with, an incumbent independent local exchange carrier, as those terms are defined in section 64.1902 of the rules, it shall provide the authorized services in compliance with the requirements of section 64.1903.

(12) Except as otherwise ordered by the Commission, a carrier authorized here to provide facilities-based service that (i) is classified as dominant under section 63.10 of the rules for the provision of such service on a particular route and (ii) is

affiliated with a carrier that collects settlement payments for terminating U.S. international switched traffic at the foreign end of that route may not provide facilities-based switched service on that route unless the current rates the affiliate charges U.S. international carriers to terminate traffic are at or below the Commission's relevant benchmark adopted in International Settlement Rates, IB Docket No. 96-261, Report and Order, 12 FCC Rcd 19806 (1997). See also Report and Order on Reconsideration and Order Lifting Stay in IB Docket No. 96-261, FCC 99-124 (rel. June 11, 1999). For the purposes of this rule, "affiliated" and "foreign carrier" are defined in section 63.09.

(13) Carriers shall comply with the Communications Assistance for Law Enforcement Act (CALEA), see 47 CFR §§ 1.20000 et seq.

(14) Every carrier must designate an agent for service in the District of Columbia. see 47 U.S.C. § 413, 47 CFR §§ 1.47(h), 64.1195.

(15) Each carrier shall notify the Commission of any change in its contact information. Such notification shall be filed in the file number(s) for the international section 214 authorization(s) through the International Communications Filing System (ICFS).

Exclusion List for International Section 214 Authorizations

The following is a list of countries and facilities not covered by grant of global section 214 authority under section 63.18(e)(1) of the Commission's Rules, 47 CFR § 63.18(e)(1). Carriers desiring to serve countries or use facilities listed as excluded hereon shall file a separate section 214 application pursuant to section 63.18(e)(3) of the Commission's Rules. See 47 CFR § 63.22(c).

Countries:

None.

Facilities:

Any non-U.S.-licensed space station that has not received Commission approval to operate in the U.S. market pursuant to the procedures adopted in the Commission's DISCO II Order, IB Docket No. 96-111, Report and Order, FCC 97-399, 12 FCC Rcd 24094, 24107-72 paragraphs 30-182 (1997) (DISCO II Order). Information regarding non-U.S.-licensed space stations approved to operate in the U.S. market pursuant to the Commission's DISCO II procedures is maintained at <https://www.fcc.gov/approved-space-station-list>.

This list is subject to change by the Commission when the public interest requires. The most current version of the list is maintained at <https://www.fcc.gov/exclusion-list-international-section-214-authorizations>.

For additional information, contact the Office of International Affairs, Telecommunications and Analysis Division at (202) 418-1480.



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
45 L STREET NE
WASHINGTON D.C. 20554

News media information 202-418-0500
Internet: <http://www.fcc.gov> (or <ftp.fcc.gov>)
TTY (202) 418-2555

DA No. 24-310

Report No. SCL-00457

Friday March 29, 2024

Actions Taken Under Cable Landing License Act

Section 1.767(a) Cable Landing Licenses, Modifications, and Assignments or Transfers of Control of Interests in Cable Landing Licenses (47 CFR § 1.767(a))

By the Chief, Telecommunications and Analysis Division, Office of International Affairs:

Pursuant to an Act relating to the landing and operation of submarine cables in the United States, 47 U.S.C. §§ 34-39 (Cable Landing License Act), Executive Order No. 10530, Exec. Ord. No. 10530 reprinted as amended in 3 U.S.C. § 301, and section 1.767 of the Commission's rules, 47 CFR § 1.767, the following applications ARE GRANTED. These grants of authority are taken under section 0.261 of the Commission's rules. 47 CFR § 0.261. Petitions for reconsideration under section 1.106 or applications for review under section 1.115 of the Commission's rules may be filed within thirty (30) days of the date of this public notice. 47 CFR §§ 1.106, 1.115.

These applications have been coordinated with the Department of State and other Executive Branch agencies pursuant to section 1.767(b) of the Commission's rules and consistent with procedures established with the Department of State. 47 CFR § 1.767(b); see Review of Commission Consideration of Applications under the Cable Landing License Act, IB Docket No. 00-106, Report and Order, 16 FCC Rcd 22167, 22192-93, paras. 51-52 (2001) (Submarine Cable Landing License Report and Order); Commission Announces Department of State's Revised Procedures for its Consideration of Submarine Cable Landing License Applications, IB Docket No. 16-155, Public Notice, DA 22-435 (rel. Apr. 19, 2022).

This public notice serves as each cable landing licensee's Cable Landing License, or modification thereto, pursuant to the Cable Landing License Act and sections 1.767 and 1.768 of the Commission's rules. 47 CFR §§ 1.767, 1.768. Cable landing licensees should review the terms and conditions of their licenses. Failure to comply with these terms and conditions or relevant Commission rules and policies could result in fines or forfeitures.

Assignment

Grant of Authority

Date of Action: 03/21/2024

Current Licensee: MCI International LLC**FROM:****TO:** Cable and Wireless BVI Limited

Cable & Wireless (BVI) Limited (C&W BVI) filed an application for consent to assign the minority interests held by MCI International LLC (MCI) and Verizon Hawaii International Inc. (Verizon Hawaii) in the Taino-Carib Cable System, SCL-LIC-20180702-00019, to C&W BVI (together with MCI and Verizon Hawaii, Applicants). The Applicants filed supplements on December 16, 2022 and March 13, 2023. The Application was placed on Public Notice on May 5, 2023. See Non-Streamlined Submarine Cable Landing License Applications Accepted For Filing, File No. SCL-ASG-20221020-00032, Public Notice, Report No. SCL-00413NS (IB May 5, 2023).

The Application has been coordinated with the Department of State and other Executive Branch agencies pursuant to section 1.767(b) of the Commission's rules, 47 CFR § 1.767(b), and consistent with the procedures established by the Department of State. See Review of Commission Consideration of Applications under the Cable Landing License Act, IB Docket No. 00-106, Report and Order, 16 FCC Rcd 22167, 22192-93, paras. 51-52 (2001) (Submarine Cable Landing License Report and Order); Commission Announces Department of State's Revised Procedures For Its Consideration of Submarine Cable Landing License Applications, IB Docket No. 16-155, Public Notice, DA 22-435 (IB Apr. 19, 2022). On May 9, 2023, the Department of Justice (DOJ), on behalf of the Committee for the Assessment of Foreign Participation in the United States Telecommunications Services Sector (Committee), filed a letter notifying the Commission that the Committee was reviewing the Application for any national security and law enforcement concerns that may be raised by foreign participation in the United States telecommunications services sector and requested that the Commission defer action on the Application. We deferred action on the Application in response to the Committee's request. On March 7, 2024, the National Telecommunications and Information Administration, on behalf of the Committee, filed a Petition to Adopt Conditions to Authorization and License. The Committee has no objection to the Commission granting the application, provided that the Commission conditions its approval on the assurance of Cable & Wireless (BVI) Limited to abide by the commitments and undertakings set forth in the February 20, 2024, Letter of Agreement (LOA) attached to the Petition to Adopt Conditions to Authorization and License.

MCI is a Delaware limited liability company and Verizon Hawaii is a Delaware corporation. C&W BVI is a company incorporated under the laws of the British Virgin Islands. MCI and C&W BVI are two of six cable landing licensees that jointly hold the cable landing license for the Taino-Carib Cable System. Each of the Applicants is a consortium member of the Taino-Carib Cable System.

The Taino-Carib Cable System is a common carrier fiber-optic submarine cable system that links Puerto Rico with the U.S. Virgin Islands and the British Virgin Islands, and connects at these landing points to other cables extending to the U.S. Mainland, other Caribbean islands, and Central and South America. The Taino-Carib consortium is composed of 21 members that are parties to the Taino-Carib Construction and Maintenance Agreement. Each party has a varying degree of voting rights and ownership in the cable corresponding to its level of investment in the cable. Together, MCI and Verizon Hawaii hold 10.225% ownership and voting interests in the Taino-Carib Cable System. Currently, C&W BVI holds 14.462% ownership and voting interests in the Taino-Carib Cable System.

Pursuant to the transaction, C&W BVI will acquire all of MCI's and Verizon Hawaii's ownership interests in the cable system. As a result, C&W BVI will hold approximately 24.687% ownership and voting interests in the Taino-Carib Cable System. According to the Application, while C&W BVI's ownership interest in the Taino-Carib Cable System would increase as a result of the transaction, it would remain a minority, non-controlling interest. The transaction will not involve the transfer of control of any cable landing station in the United States. The Applicants state that the proposed transaction will not affect the other licensees or the U.S. cable landing stations of the Taino-Carib Cable System, nor result in a change of control of the cable system.

The following entities or individuals hold 10% or greater equity and voting interests in C&W BVI: (1) Cable & Wireless (West Indies) Limited (Cable & Wireless West Indies), an England entity (100% equity and voting interests in C&W BVI); (2) CWI Group Limited (CWI Group), an England entity (100% equity and voting interests in Cable & Wireless West Indies); (3) Sable Holding Limited (Sable Holding), an England entity (100% equity and voting interests in CWI Group); (4) C&W Senior Secured Parent Limited (C&W Senior Secured), a Cayman Islands entity (100% equity and voting interests in Sable Holding); (5) C&W Senior Finance Limited (C&W Senior Finance), a Cayman Islands entity (100% equity and voting interests in C&W Senior Secured); (6) Cable & Wireless Limited, an England entity (100% equity and voting interests in C&W Senior Finance); (7) Cable & Wireless Communications Limited (Cable & Wireless Communications), an England entity (100% equity and voting interests in Cable & Wireless Limited); (8) LGE Coral Holdco Limited (LGE Coral), an England entity (100% equity and voting interests in Cable & Wireless Communications); (9) Liberty CWC Holdings Limited (Liberty CWC), a Barbados entity (100% equity and voting interests in LGE Coral); (10) LiLAC Services Ltd. (LiLAC Services), a Bermuda entity (100% equity and voting interests in Liberty CWC); (11) Liberty Latin America Ltd., a Bermuda entity (100% equity and voting interests in LiLAC Services); and (12) John C. Malone, a U.S. citizen (26.1% voting interests and 6.1% equity interests in Liberty Latin America Ltd.). The Applicants state that no other person or entity owns or controls a 10% or greater direct or indirect interest in C&W BVI.

C&W BVI certifies that it accepts and will abide by the routine conditions specified in section 1.767(g) of the Commission's rules, 47 CFR § 1.767(g).

C&W BVI agrees to accept and abide by the reporting requirements set out in section 1.767(l) of the Commission's rules, 47 CFR § 1.767(l).

We grant the Petition to Adopt Conditions to Authorization and License (Petition) filed in this proceeding by the National Telecommunications and Information Administration, on behalf of the Committee for the Assessment of Foreign Participation in the United States Telecommunications Services Sector, on March 7, 2024. Accordingly, we condition grant of the Application on Cable & Wireless (BVI) Limited abiding by the commitments and undertakings set forth in the Letter of Agreement from Alexander Bremner, Director, Cable & Wireless (BVI) Limited, to Under Secretary for Strategy, Policy, and Plans, Office of Strategy, Policy, and Plans, U.S. Department of Homeland Security; and Office of Foreign Investment Review, Director, Undersecretary of Acquisition and Sustainment, U.S. Department of Defense, dated February 20, 2024.

Copies of the Petition and the LOA are publicly available and may be viewed on the FCC website through International Communications Filing System (ICFS) by searching for SCL-ASG-20221020-00032 and accessing "Other filings related to this application" from the Document Viewing area.

A failure to comply and/or remain in compliance with any of these commitments and undertakings shall constitute a failure to meet a condition of the assignment application and the underlying cable landing license, SCL-LIC-20180702-00019, and thus grounds for declaring the cable landing license terminated without further action on the part of the Commission. Failure to meet a condition of the grant of the assignment application or the cable landing license may also result in monetary sanctions or other enforcement action by the Commission.

This authorization is without prejudice to the Commission's action in any other related pending proceedings.



PUBLIC NOTICE

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TTY (202) 418-2555

DA No. 24-311

Friday March 29, 2024

Report No. SAT-01811

Satellite Licensing Division and Satellite Programs and Policy Division Information

Actions Taken

The Commission, by its Space Bureau, took the following actions pursuant to delegated authority. The effective date of these actions is the release date of this Notice, except where an effective date is specified.

| | | | | |
|------------------------|---|-------|--------------------|----------------------------|
| SAT-MOD-20220819-00089 | E | S3098 | SES Americom, Inc. | |
| Modification | | | | 01/05/2023 - 01/05/2038 |
| Grant of Authority | | | | Effective Date: 03/20/2024 |

Nature of Service: Fixed Satellite Service

On March 20, 2024, the Satellite Programs and Policy Division granted, with conditions, the modification request of SES Americom, Inc. to operate the SES-20 space station from the 103.05° W.L. orbital location instead of the 135° W.L. orbital location. SES-20 provides fixed-satellite service in the 3.7-4.2 GHz (space-to-Earth), and 5.925-6.425 (Earth-to-space) frequency bands. Telemetry, tracking, and command will be conducted using the 6421.0 MHz and 6423.5 MHz (Earth-to-space), and 4197.25 MHz and 4199.5 MHz (space-to-Earth) center frequencies.

| | | | | |
|------------------------|---|-------|--------------------|----------------------------|
| SAT-MOD-20220819-00090 | E | S3099 | SES Americom, Inc. | |
| Modification | | | | 12/01/2022 - 12/01/2037 |
| Grant of Authority | | | | Effective Date: 03/26/2024 |

Nature of Service: Fixed Satellite Service

On March 26, 2024, the Satellite Programs and Policy Division, granted, with conditions, the modification request of SES Americom, Inc. to operate the SES-21 space station from the 131° W.L. orbital location instead of the 103.05° W.L. orbital location. SES-21 provides fixed-satellite service in the 3.7-4.2 GHz (space-to-Earth), and 5.925-6.425 (Earth-to-space) frequency bands. Telemetry, tracking, and command will be conducted using the 6421.0 MHz (Earth-to-space), and 4197.25 MHz and 4199.5 MHz (space-to-Earth) center frequencies.

| | | | | |
|------------------------|---|-------|--------------|----------------------------|
| SAT-MOD-20230531-00128 | E | S2917 | Viasat, Inc. | |
| Modification | | | | |
| Withdrawn | | | | Effective Date: 03/28/2024 |

Nature of Service: Fixed Satellite Service

| | | | | |
|-----------------------------|---|-------|---------------------------|----------------------------|
| SAT-STA-20240315-00058 | E | S3092 | Astranis Projects USA LLC | |
| Special Temporary Authority | | | | |
| Grant of Authority | | | | Effective Date: 03/25/2024 |

On March 25, 2024, the Satellite Programs and Policy Division granted, with conditions, Astranis Projects USA LLC's request to extend its special temporary authority for up to 30-days to conduct telemetry, tracking and command (TT&C) functions related to drifting the Arcturus space station from the 163° W.L. orbital location to the 78° E.L. orbital location. TT&C is performed using the 19701-19703 MHz and 19704-19706 MHz (space-to-Earth), and 28351-28353 MHz and 28354-28356 MHz (Earth-to-space) frequency bands.

INFORMATIVE

SAT-LOA-20230228-00042 S3160 MethaneSAT LLC

The Satellite Programs and Policy Division has determined that MethaneSAT LLC has met the launch and begin operations milestone associated with its grant of authority to construct, deploy and operate a non-geostationary orbit space station, MethaneSAT-1 (Call Sign S3160), and may release the bond associated with this authorization. See 47 CFR §§ 25.164(a) and (f) and 25.165(d).

For more information concerning this Notice, contact the Satellite Licensing Division and Satellite Programs and Policy Division at (202) 418-0719.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
Connect America Fund) WC Docket No. 10-90
Regulation of Business Data Services for Rate-of-) WC Docket No. 17-144
Return Local Exchange Carriers)

ORDER

Adopted: March 29, 2024

Released: March 29, 2024

By the Chief, Pricing Policy Division, Wireline Competition Bureau:

I. INTRODUCTION

1. In this Order, we grant a petition filed by Filer Mutual Telephone Company (Filer Mutual), a rate-of-return incumbent local exchange carrier (carrier), seeking waiver of section 69.3(e)(6) and (i)(1) of the Commission’s rules.1 These sections of the Commission’s rules require telephone companies to provide certain notifications concerning tariff participation to the National Exchange Carrier Association, Inc. (NECA) by March 1 of the relevant tariff year.2 Because Filer Mutual missed the March 1 notification date, it seeks a waiver of these rules so that it may withdraw from the NECA traffic-sensitive tariff pool for their business data service (BDS) offerings effective July 2024.3 For the reasons discussed below, we find that Filer Mutual demonstrates good cause for a limited waiver of the Commission’s rules to withdraw its BDS offerings from the NECA traffic-sensitive tariff pool.4

II. BACKGROUND

2. In the Rate-of-Return BDS Order, the Commission allowed rate-of-return carriers receiving Alternative Connect America Cost Model (A-CAM) or fixed high-cost universal service support (electing carriers) to voluntarily elect to transition their BDS offerings from rate-of-return to incentive regulation pursuant to section 61.50 of the Commission’s rules.5 Under incentive regulation, electing carriers are no longer required to provide burdensome cost studies justifying their BDS rates or required to file tariffs for certain BDS offerings, enabling them to pass those cost savings on to their customers or

1 Letter from Bob Kraut, General Manager, Filer Mutual Telephone Company, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90, 17-144 (filed Mar. 14, 2024) (Petition); Letter from Bob Kraut, General Manager, Filer Mutual Telephone Company, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90, 17-144 (filed Mar. 20, 2024) (Filer Mutual Mar. 20 Letter); Letter from Bob Kraut, General Manager, Filer Mutual Telephone Company, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90, 17-144 (filed Mar. 22, 2024) (Filer Mutual Mar. 22 Letter); see 47 CFR §§ 1.3, 69.3(e)(6), (i)(1).

2 47 CFR §§ 69.3(e)(6), (i)(1).

3 Petition at 1.

4 See 47 CFR § 1.3. The NECA traffic-sensitive pool is contained in NECA F.C.C. Tariff No. 5. Other BDS offerings are tariffed in NECA F.C.C. Tariff No. 6.

5 Regulation of Business Data Services for Rate-of-Return Local Exchange Carriers et al., WC Docket No. 17-144 et al., Report and Order, Further Notice of Proposed Rulemaking, and Second Further Notice of Proposed Rulemaking, 33 FCC Rcd 10403, 10404, para. 1 (2018) (Rate-of-Return BDS Order); 47 CFR § 61.50; see 47 CFR§ 69.801(a) (defining business data services).

invest in their networks.⁶ To prevent internal cost-shifting among study areas, the Commission required “electing carriers to elect incentive regulation at the holding company-level for study areas in all states where that carrier receives fixed support.”⁷ Although a voluntary election, the Commission made election irrevocable, prohibiting carriers from returning their study areas to rate-of-return regulation.⁸ The Commission provided eligible carriers with two initial opportunities to elect incentive regulation in 2019 and 2020.⁹ The Commission also provided eligible carriers that accept future offers of A-CAM support or that otherwise transition away from legacy support mechanisms with an additional opportunity to elect incentive regulation for their BDS offerings effective July 1 in the year following their election.¹⁰

3. The Commission acknowledged in the *Rate-of-Return BDS Order* that most rate-of-return carriers establish their BDS rates by participating in the NECA traffic-sensitive tariff pool, which sets BDS rates based on projected aggregate costs (or average schedule settlements) and demand for pool members targeted to earn the authorized rate of return.¹¹ The Commission required that carriers electing incentive regulation remove their BDS offerings from the NECA traffic-sensitive tariff pool, but allowed electing carriers to continue participating in the tariff pool for access services other than BDS.¹² For pool participants accepting future offers of A-CAM support and electing BDS incentive regulation, the Commission established rules requiring that carriers notify NECA by March 1 of their election year consistent with section 69.3 of the Commission’s rules.¹³ Section 69.3(e)(6) and (i)(1) provide that a carrier participating in NECA tariffs that elects to file its own tariff and withdraw from a NECA tariff shall notify NECA of this election to withdraw by March 1 of the relevant tariff year.¹⁴

4. In the *Enhanced A-CAM Order*, the Commission adopted the Enhanced A-CAM program as a voluntary path for A-CAM carriers and legacy rate-of-return carriers to elect to receive model-based universal service support beginning January 1, 2024.¹⁵ The Commission acknowledged that, “[p]ursuant to the *Rate-of-Return BDS Order*, Enhanced A-CAM recipients that have not already done so will also be eligible to move their business data services offerings to incentive regulation.”¹⁶ In authorizing Enhanced A-CAM recipients, the Bureau reminded NECA carriers accepting Enhanced A-CAM support and

⁶ *Rate-of-Return BDS Order*, 33 FCC Rcd at 10405, para. 4.

⁷ *Id.* at 10413, para. 22; 47 CFR § 61.50(a) (“A rate-of-return carrier may elect to offer business data services subject to incentive regulation pursuant to this section [section 61.50] only if all affiliated rate-of-return carriers meeting the requirements of...[section 61.50(b)]...make the election. A carrier’s election under this section is irrevocable.”).

⁸ *Rate-of-Return BDS Order*, 33 FCC Rcd at 10413, para. 25.

⁹ *Id.* at 10412-13, para. 23.

¹⁰ *Id.* at 10411, para. 20.

¹¹ *Id.* at 10416-17, para. 34. The rates for carriers participating in the NECA traffic-sensitive pool are contained in NECA F.C.C. Tariff No. 5.

¹² *Rate-of-Return BDS Order*, 33 FCC Rcd 10415, para. 30; 47 CFR § 61.50(d).

¹³ *Rate-of-Return BDS Order*, 33 FCC Rcd at 10445, para. 119 (citing 47 CFR § 69.3(e)(6), (i)(1)).

¹⁴ 47 CFR § 69.3(e)(6) (“a telephone company or group of telephone companies may file a tariff that is not an association tariff...provided: . . . a telephone company or companies that elect to file such a tariff shall notify the association not later than March 1 of the year the tariff becomes effective”); 47 CFR § 69.3(i)(1) (“a telephone company or group of affiliated companies that participates in one or more association tariffs during the current tariff year and that elects to file...optional incentive regulation tariffs effective July 1 of the following tariff year shall notify the association by March 1 of the following tariff year that it is withdrawing from association tariffs, subject to the terms of this section, to participate in . . . optional incentive regulation.”).

¹⁵ See *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, Notice of Proposed Rulemaking, and Notice of Inquiry, FCC 23-60, at 2, para. 2 (July 24, 2023) (*Enhanced A-CAM Order*).

¹⁶ See *id.* at 39, para. 91 (citing *Rate-of-Return BDS Order*, 33 FCC Rcd 10421-22, para. 44).

electing BDS incentive regulation that they “must notify NECA by March 1, 2024 that they will not participate in the NECA traffic-sensitive tariff pool for their BDS offerings effective July 1, 2024” but may continue to participate in the traffic-sensitive tariff pool for access services other than BDS.¹⁷

5. On March 14, 2024, Filer Mutual filed a petition for waiver of sections 69.3(e)(6) and (i)(1) of the Commission’s rules “so that it may transition certain business data service (BDS) offerings out of rate-of-return regulation and into an incentive regulation framework effective July 1, 2024.”¹⁸ Filer Mutual has two affiliated study areas receiving model-based universal service support that participate in the NECA traffic-sensitive tariff pool for their BDS offerings: Filer Mutual Telephone Company d/b/a TruLeap Technologies – Nevada (SAC 552220) (Filer Mutual-Nevada)¹⁹ and Filer Mutual Telephone Company d/b/a TruLeap Technologies – Idaho (SAC 472220) (Filer Mutual-Idaho).²⁰ Filer Mutual-Nevada was authorized to receive A-CAM II support in 2019.²¹ Filer Mutual-Idaho was authorized to receive Enhanced A-CAM support beginning January 1, 2024, “making the company eligible to transition certain BDS offerings to incentive regulation under section 61.50 of the Commission’s rules.”²²

6. Although Filer Mutual intended to transition certain BDS offerings to incentive regulation and thus, withdraw from the NECA traffic-sensitive tariff pool, it “inadvertently missed the March 1st deadline to notify NECA.”²³ Filer Mutual explains that it was “focused on the May 1st deadline for notifying the Wireline Competition Bureau of the company’s election” and had a number of regulatory filings due on March 1 that it was also focused on completing.²⁴ Once Filer Mutual discovered that it had missed the deadline, it promptly notified NECA on March 4 and took immediate steps to exit the NECA traffic-sensitive pool, including seeking a waiver of the notification deadline contained in section 69.3 of the Commission’s rules.²⁵

¹⁷ *Wireline Competition Bureau Authorizes 368 Companies in 44 States to Receive Enhanced Alternative Connect America Cost Model Support to Expand Rural Broadband*, WC Docket No. 10-90, Public Notice, DA 23-1025, at 3-4 (WCB Oct. 30, 2023) (*Enhanced A-CAM Authorizations PN*) (citing *Rate-of-Return BDS Order*, 33 FCC Rcd at 10445, para. 119; 47 CFR § 69.3 (e)(6), (i)(1)); see *Enhanced A-CAM Order* at para. 91. The Bureau required carriers participating in the NECA common line tariff pool, which is separate from the traffic-sensitive tariff pool, to notify NECA by November 17, 2023 that they are withdrawing from the NECA common line pool effective January 1, 2024. *Enhanced A-CAM Authorizations PN* at 3; see 47 CFR § 69.3(e)(9) (otherwise requiring carriers to notify NECA by March 1 that the carrier elects to file its own common line tariff).

¹⁸ Petition at 1.

¹⁹ Filer Mutual March 22 Letter at 1.

²⁰ See NECA F.C.C. Tariff No. 5, 91st rev. p. 17-29.4.1, § 17.3.10(A)(1) (eff. Feb. 1, 2024).

²¹ Filer Mutual March 22 Letter at 1. *Wireline Competition Bureau Authorizes 171 Rate-of-Return Companies to Receive \$491 Million Annual in Alternative Connect America Cost Model II Support to Expand Rural Broadband*, WC Docket No. 10-90, Public Notice, DA 19-808, at 1 & n.2 (WCB Aug. 22, 2019); FCC, CAF – A-CAM 2.5.2 - Authorization Report Version 6.2 (dated Feb. 15, 2022), <https://docs.fcc.gov/public/attachments/DOC-359222A1.xlsx> (listing Filer Mutual (SAC 552220) as an A-CAM recipient).

²² Petition at 2; see *Enhanced A-CAM Authorizations PN* at 1 n.2 (citing FCC, *Enhanced A-CAM – Authorization Report Version 1* (dated Oct. 30, 2023), <https://www.fcc.gov/document/enhanced-cam-authorization-report>) (listing Filer Mutual (SAC 472220) as an Enhanced A-CAM recipient).

²³ Petition at 2.

²⁴ Filer Mutual Mar. 20 Letter at 2. Filer Mutual further noted that, during this same timeframe, it was preparing a bulk challenge addressing more than 460 discrepancies in the location data contained in Version 4 of the Broadband Serviceable Location Fabric. *Id.*

²⁵ *Id.*

III. DISCUSSION

7. Generally, the Commission's rules may be waived for good cause shown.²⁶ The Commission may exercise its discretion to waive a rule where the particular facts make strict compliance inconsistent with the public interest.²⁷ In addition, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.²⁸ Waiver of the Commission's rules is appropriate when special circumstances warrant a deviation from the general rule, and such deviation will serve the public interest.²⁹

8. We find that good cause exists to waive section 69.3(e)(6) and (i)(1) of the Commission's rules to allow Filer Mutual to exit the NECA traffic-sensitive pool and elect BDS incentive regulation. The circumstances described by Filer Mutual involve an administrative oversight that the carrier diligently attempted to correct shortly after learning of the error. We conclude that these circumstances, combined with the hardship Filer Mutual would endure if they are not permitted to exit the NECA traffic-sensitive pool and elect BDS incentive regulation this year renders strict compliance with the March 1 procedural deadline inconsistent with the public interest.

9. At the outset, we acknowledge that the NECA notification deadline contained in section 69.3(e)(6) and (i)(1) serves an important purpose.³⁰ The March 1 notification deadline is necessary to provide NECA with adequate time to review and process cost, demand, and revenue data, calculate support and pool settlements, reband, and determine rate levels and take any other steps needed to prepare for the July 1 annual access charge tariff filings on behalf of remaining pool members.³¹ Absent special circumstances, NECA pool members must ordinarily comply with the Commission's filing deadlines and timely notify NECA of pool elections.

10. Although Filer Mutual missed the March 1 deadline, Filer Mutual and its consultant acted in good faith, recognizing their error in failing to provide timely notice to NECA, and diligently attempted to remedy this error by cooperating with Commission staff and NECA to provide actual notice of their election to withdraw from the NECA traffic-sensitive pool. Upon learning of the error on March 4, Filer Mutual promptly requested that NECA accept the company's late-filed election to exit the NECA traffic-sensitive pool for its BDS offerings.³² After NECA denied this request, Filer Mutual "contacted staff in the FCC's Wireline Competition Bureau . . . to inquire about the possibility of a waiver of the March [1st] deadline to notify NECA."³³ While we are concerned that Filer Mutual failed to meet the March 1st deadline, we recognize their good faith efforts to promptly remedy the administrative oversight.

11. We further find that denying Filer Mutual this one-time opportunity to move its BDS offerings to incentive regulation based on its minor delay in notifying NECA of its election would result in undue hardship. Carriers are not able to elect BDS incentive regulation on a routine basis and may only do so during specific election periods. Filer Mutual-Idaho was not eligible to elect BDS incentive regulation in 2019 and 2020 because it was receiving high-cost support through a legacy support mechanism, Connect America Fund Broadband Loop Support (CAF BLS), as opposed to model-based or

²⁶ 47 CFR § 1.3.

²⁷ *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

²⁸ *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166.

²⁹ *Northeast Cellular*, 897 F.2d at 1166.

³⁰ 47 CFR §§ 69.3(e)(6), (i)(1).

³¹ See *Rate-of-Return BDS Order*, 33 FCC Rcd at 10444, para. 118 (explaining NECA's preparation for purposes of a tariff filing implementing elections of BDS incentive regulation that involves "cost studies for the remaining pool members, calculate support for existing members, reband, and undertake other steps").

³² Filer Mutual Mar. 20 Letter at 2.

³³ See *id.*

other fixed universal service support, and, as a result, was ineligible to elect BDS incentive regulation at that time.³⁴ Because Filer Mutual-Idaho recently elected to receive Enhanced A-CAM support, it is now, for the first time, eligible to elect BDS incentive regulation. Consistent with section 61.50(a) of the Commission's rules and the *Rate-of-Return BDS Order*, as an affiliate of Filer Mutual-Idaho receiving A-CAM support, Filer Mutual-Nevada, may also exit the NECA traffic-sensitive pool and move its BDS offerings to incentive regulation this year.³⁵

12. We agree with Filer Mutual that deviation from the March 1 deadline “will serve the public interest because it will allow Filer to elect BDS incentive regulation, and that election, in turn, will benefit Filer’s customers and service area.”³⁶ Filer Mutual explains that, by moving its BDS offerings from cost-based rate-of-return to incentive regulation, Filer Mutual will realize “efficiencies gained from reducing regulatory burdens,” enabling Filer Mutual to “pass . . . cost savings on to their customers” consistent with the goals of the *Rate-of-Return BDS Order*.³⁷ Filer Mutual must be able to withdraw its BDS offerings from the NECA traffic-sensitive tariff to be able to move their BDS rates from rate-of-return to incentive regulation. Accordingly, permitting Filer Mutual to move its BDS offerings to incentive regulation despite its notification delay would serve the public interest.

13. Taking hardship, equity, and overall implementation of policy into consideration, we conclude that the hardship Filer Mutual would face remaining in the pool and unable to move its BDS offerings to incentive regulation indefinitely outweighs the need to strictly enforce the March 1 deadline. We find that strict enforcement, requiring Filer Mutual to remain in the NECA traffic-sensitive pool due to an administrative oversight of just a few days, would unnecessarily penalize Filer Mutual and be inconsistent with the public interest benefits gained by Filer Mutual in transitioning its BDS offerings from rate-of-return to more efficient incentive regulation.

14. Furthermore, we find that granting a limited waiver for one carrier will not adversely affect NECA’s ability to prepare for the July 1 annual access charge tariff filings on behalf of remaining pool members. Within a few days of the filing deadline, Filer Mutual notified NECA of its intent to elect to exit the traffic-sensitive pool for its BDS offerings.³⁸ We believe that, as long as Filer Mutual immediately notifies NECA regarding the extent to which it is withdrawing its BDS offerings from the NECA traffic-sensitive tariff pool and related tariffs, such notice and the release date of this waiver order should provide NECA with sufficient time to prepare for the July 1 annual access tariff filing for remaining pool members.

15. For these reasons, we find that good cause exists to waive section 69.3(e)(6) and (i)(1) of the Commission’s rules to enable Filer Mutual to exit the NECA traffic-sensitive pool for its BDS offerings and move their BDS offerings from rate-of-return to incentive regulation.³⁹ We condition this limited waiver on Filer Mutual immediately notifying NECA regarding the extent to which it is withdrawing BDS offerings provided by Filer Mutual-Nevada and Filer Mutual-Idaho from NECA F.C.C. Tariffs No. 5 and 6. Upon receipt of such notice, we direct NECA to allow Filer Mutual to withdraw the BDS offerings of its two affiliated study areas, Filer Mutual-Nevada (SAC 552220) and Filer Mutual-Idaho (SAC 472220), from the NECA traffic-sensitive tariff pool effective concurrent with the effective date of the July 2024 annual access charge tariff filing.

³⁴ See FCC, Enhanced A-CAM – Authorization Report Version 1 (dated Oct. 30, 2023), <https://www.fcc.gov/document/enhanced-cam-authorization-report> (listing Filer Mutual Telephone Company’s then-current funding mechanism as CAF BLS before transitioning to Enhanced A-CAM support).

³⁵ See *Rate-of-Return BDS Order*, 33 FCC Rcd at 10413, para. 22; 47 CFR § 61.50(a).

³⁶ Filer Mutual Mar. 20 Letter at 2.

³⁷ *Id.*; see *Rate-of-Return BDS Order*, 33 FCC Rcd at 10405, 10415, paras. 4, 30.

³⁸ Filer Mutual Mar. 20 Letter at 2.

³⁹ See 47 CFR § 69.3(i)(1), (e)(6).

IV. ORDERING CLAUSES

16. ACCORDINGLY, IT IS ORDERED that, pursuant to sections 1, 4(i) and (j), 5, and 201-209 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i)-(j), 155, 201-209, and sections 0.91, 0.291, and 1.3 of the Commission's rules, 47 CFR §§ 0.91, 0.291, that section 69.3(e)(6) and (i)(1) and of the Commission's rules, 47 CFR § 69.3(e)(6) and (i)(1), ARE WAIVED for the limited purposes specified herein and this Order IS ADOPTED.

17. IT IS FURTHER ORDERED, that Filer Mutual Telephone Company immediately notify the National Exchange Carrier Association, Inc. regarding the extent to which it is withdrawing its business data service offerings from NECA F.C.C. Tariff Nos. 5 and 6.

18. IT IS FURTHER ORDERED, that, upon receipt of notification from Filer Mutual Telephone Company, the National Exchange Carrier Association, Inc. shall remove relevant business data service offerings provided by Filer Mutual Telephone Company from the National Exchange Carrier Association, Inc. F.C.C. Tariffs Nos. 5 and 6.

19. IT IS FURTHER ORDERED, that pursuant to section 1.102(b)(1) of the Commission's rules, 47 CFR § 1.102(b)(1), this Order SHALL BE EFFECTIVE upon release.

FEDERAL COMMUNICATIONS COMMISSION

Victoria S. Goldberg
Chief, Pricing Policy Division
Wireline Competition Bureau



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

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STREAMLINED RESOLUTION OF REQUESTS UNDER THE SECURE AND TRUSTED COMMUNICATIONS NETWORKS REIMBURSEMENT PROGRAM

WC Docket No. 18-89

By this Public Notice, the Wireline Competition Bureau (Bureau) grants, pursuant to delegated authority, the following petitions requesting to extend certain deadlines under the Secure and Trusted Communications Networks Reimbursement Program (Reimbursement Program).

As directed by the Secure and Trusted Communications Networks Act of 2019, as amended (Secure Networks Act), the Commission established the Reimbursement Program to reimburse providers of advanced communications service with ten million or fewer customers for reasonable costs incurred in the removal, replacement, and disposal of covered communications equipment or services from their networks that pose a national security risk, i.e., communications equipment or services produced or provided by Huawei Technologies Company (Huawei) or ZTE Corporation (ZTE), that were obtained by providers on or before June 30, 2020.¹ The Reimbursement Program is funded by a \$1.9 billion congressional appropriation,² which is less than the \$5.6 billion in collective funds requested by applicants to the program.³ Because demand exceeded available funding, the Secure Networks Act

¹ Secure and Trusted Communications Networks Act of 2019, Pub. L. No. 116-124, § 4(a)-(c), 134 Stat. 158 (2020) (codified as amended at 47 U.S.C. §§ 1601-1609). The Commission adopted rules implementing the Secure Networks Act on December 10, 2020. *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, WC Docket No. 18-89, Second Report and Order, 35 FCC Rcd 14284 (2020) (*2020 Supply Chain Order*). On July 13, 2021, the Commission amended its rules, consistent with amendments to the Secure Networks Act included in the Consolidated Appropriations Act, 2021. *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, WC Docket No. 18-89, Third Report and Order, 36 FCC Rcd 11958, 11959, para. 2 (2021) (*2021 Supply Chain Order*). The Commission later clarified that, for purposes of the Reimbursement Program, covered communications equipment or services are limited to the communications equipment or services produced or provided by Huawei or ZTE that were obtained by providers on or before June 30, 2020. See *2021 Supply Chain Order*, 36 FCC Rcd at 11959, 11965, paras. 2 and 18; see also generally *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs – Huawei Designation*, PS Docket No. 19-351, Order, 35 FCC Rcd 6604 (PSHSB 2020); *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs – ZTE Designation*, PS Docket No. 19-352, Order, 35 FCC Rcd 6633 (PSHSB 2020).

² Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, § 906, 134 Stat. 1182 (2020) (CAA). Section 906 provides that “[t]here is appropriated to the Federal Communications Commission, out of amounts in the Treasury not otherwise appropriated, for fiscal year 2021, to remain available until expended— . . . (2) \$1,900,000,000 to carry out the Secure and Trusted Communications Networks Act of 2019 (47 U.S.C. 1601 et seq.), of which \$1,895,000,000 shall be used to carry out the program established under section 4 of that Act (47 U.S.C. 1603).”

³ See *Wireline Competition Bureau Announces the Grant of Applications for the Secure and Trusted Communications Networks Reimbursement Program*, WC Docket No. 18-89, Public Notice, DA 22-774, at 1-2 (WCB July 18, 2022) (*SCRIP Granted Applications Public Notice*) (explaining that “[e]ach applicant was required to (continued....)

required the Bureau to implement a prioritization scheme where funding was allocated first to approved applicants with 2,000,000 or fewer customers (Priority 1 applicants).⁴ Because demand from Priority 1 applicants alone exceeded the congressional appropriation, Commission rules required that allocations to Priority 1 applicants be pro-rated on an equal basis.⁵ Consequently, recipients received funding allocations for approximately 39.5% of their reasonable and supported estimated costs for removing, replacing, and disposing of covered communications equipment and services.⁶

Reimbursement Program recipients must complete the removal, replacement, and disposal of covered communications equipment and services within one year from the initial disbursement of funds to the recipient.⁷ Pursuant to section 4(d)(6)(C) of the Secure Networks Act, the Commission may grant recipients extensions of this term on an individual basis.⁸ The Commission delegated authority to the Bureau to grant or deny individual petitions for an extension of a recipient's term.⁹ The Bureau "may grant an extension for up to six months after finding, that due to no fault of such recipient, such recipient is unable to complete the permanent removal, replacement, and disposal by the end of the term" and "may grant more than one extension request to a recipient if circumstances warrant."¹⁰ This can occur, for example, due to the lack of funding to fully reimburse recipients, which can require recipients to revise their plans in ways that cause them to need more time to remove, replace, and dispose of covered equipment,¹¹ in addition to delays in receiving the necessary equipment to replace their covered equipment, which likewise can require a recipient to need more time to meet its obligations under the Reimbursement Program.¹² The detailed rationales for these decisions are explained in the Bureau's prior orders.

(Continued from previous page) _____

include in its application estimates for the costs that it will reasonably incur for the permanent removal, replacement, and disposal of covered communications equipment and services" and identifying that, across all filed applications, applicants sought a total of "approximately \$5.6 billion in gross program support").

⁴ See 47 U.S.C. § 1603(d)(5)(C); 47 CFR § 1.50004(f)(1); *SCRIP Granted Applications Public Notice* at 2-3.

⁵ The Commission's rules provide that "[i]f there is insufficient funding to fully fund all requests in a particular prioritization category, then the [Bureau] will pro-rate the available funding among all eligible providers in that prioritization category." 47 CFR § 1.50004(f)(1); see also 47 U.S.C. § 1603(d)(5)(A) ("[T]he Commission shall make reasonable efforts to ensure that reimbursement funds are distributed equitably among all applicants for reimbursements under the Program according to the needs of the applicants, as identified by the applications of the applicants.").

⁶ See 47 CFR § 1.50004(f)(1); see also *SCRIP Granted Applications Public Notice* at 2-3.

⁷ 47 U.S.C. § 1603(d)(6)(A); 47 CFR § 1.50004(h).

⁸ See 47 U.S.C. § 1603(d)(6)(C).

⁹ See 47 U.S.C. § 1603(d)(6)(C); 47 CFR § 1.50004(h)(2) ("Individual extensions. Prior to the expiration of the removal, replacement and disposal term, a Reimbursement Program recipient may petition the Wireline Competition Bureau for an extension of the term. The Wireline Competition Bureau may grant an extension for up to six months after finding, that due to no fault of such recipient, such recipient is unable to complete the permanent removal, replacement, and disposal by the end of the term. The Wireline Competition Bureau may grant more than one extension request to a recipient if circumstances warrant.").

¹⁰ 47 CFR § 1.50004(h)(2); see also *2020 Supply Chain Order*, 35 FCC Rcd at 14354-56, paras. 171, 173 and n.501.

¹¹ Recipients should be aware of the lack of full funding will not necessarily be a sufficient showing for repetitive extension requests. See *infra* n.15.

¹² See, e.g., *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, WC Docket No. 18-89, Order, DA 23-875, para. 7 (WCB Sept. 22, 2023) (*Stealth Extension Order*) (granting an extension based on supply chain issues); *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, WC Docket No. 18-89, Order, DA 23-938, paras. 12-16 (WCB Oct. 10, 2023) (*WorldCell et al. Extension Order*) (granting extensions based in both funding issues and supply chain issues); *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, WC Docket No. 18-89, Order, DA 23-1016, paras. 12-16 (WCB Oct. 27, 2023) (*Point/SI Wireless* (continued...))

The Bureau strongly encourages recipients that intend to file a petition for an extension to do so as promptly as possible after determining that their circumstances meet the standard for an extension established in the statute and the Commission's implementing rules, and well in advance of the recipient's deadline, so the Bureau is able to fully consider and grant or deny the petition before the recipient's term expires.

Consistent with the Commission's goal of streamlining its internal review processes,¹³ and further pursuant to our delegated authority,¹⁴ we announced in our *January 2024 Streamlined Resolution Public Notice* that we would, with that Public Notice, begin issuing a Public Notice, as necessary but not more frequently than monthly, disposing of pending petitions which seek an extension of an applicants' removal, replacement, and disposal terms that do not involve complicated and/or controversial issues in a manner consistent with Commission and/or Bureau precedent.¹⁵ Accordingly, we hereby grant the pending petitions listed below for an extension of a recipient's term to remove, replace, and dispose of its covered equipment.¹⁶

Recipient – AST Telecom d/b/a Bluesky, SCRP0001027

(Continued from previous page) _____
Extension Order) (granting extensions based on both funding issues and supply chain issues); *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, WC Docket No. 18-89, Order, DA 23-1110, paras. 8-11 (WCB Nov. 28, 2023) (*Triangle Telephone/Triangle Communication Extension Order*) (granting extension of time requests by Triangle Telephone Cooperative Association Inc. and Triangle Communication System, Inc. based on supply chain issues); *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, WC Docket No. 18-89, Order, DA 23-1196, para. 5 (WCB Dec. 21, 2023) (*GigSky, Inc. Extension Order*) (granting extension of time request by GigSky, Inc. based on funding issues).

¹³ See *Report on FCC Process Reform*, GN Docket No. 14-25 (Staff Working Group, Feb. 14, 2014) (*Process Reform Report*).

¹⁴ See 47 CFR §§ 0.91, 0.291, 1.50004(h)(2).

¹⁵ *Streamlined Resolution of Requests Under the Secure and Trusted Communications Networks Reimbursement Program*, WC Docket No. 18-89, Public Notice, DA 24-88, at 3 (WCB Jan. 31, 2024) (*January 2024 Streamlined Resolution Public Notice*). This approach further speeds the disposition of petitions seeking extension of the removal, replacement, and disposal term and to ensure the continued efficient administration of the Reimbursement Program, while at the same time fulfilling our obligation to thoroughly review the record before us. *Id.* Prior to issuance of the *January 2024 Streamlined Resolution Public Notice*, we had resolved petitions for extensions of recipients' removal, replacement, and disposal terms in stand-alone orders addressing each petition. The Bureau routinely resolves other matters in the manner of the *January 2024 Streamlined Resolution Public Notice*, as appropriate. See, e.g., *Streamlined Process for Resolving Requests for Review of Decisions by the Universal Service Administrative Company*, CC Docket Nos. 96-45 and 02-6, WC Docket Nos. 02-60, 06-122, 08-71, 10-90, 11-42, and 14-58, Public Notice, 29 FCC Rcd 11094 (WCB 2014) (stating that the Bureau will resolve certain Universal Service Fund matters in a streamlined public notice).

¹⁶ To the extent the requests cited in this Public Notice seek extensions of time based on grounds other than funding issues and supply chain issues, this Public Notice does not address those grounds. In addition, we expressly reject any suggestion in the requests that a recipient is required to meet its statutorily mandated removal, replacement, and disposal obligations only if full funding is made available by Congress. Recipients should be aware of the lack of full funding will not necessarily be a sufficient showing for repetitive extension requests, as recipients should continually be making progress toward completing their projects by the end of their removal, replacement, and disposal term. The Bureau will evaluate the sufficiency of each individual extension request at the time it is filed in determining whether to grant or deny it. A recipient's obligation to complete the permanent removal, replacement, and disposal of covered communications equipment or services exists regardless of the amount of funding it may receive through the Reimbursement Program pursuant to the Secure Networks Act. Within 10 days following the expiration of the removal, replacement, and disposal term, a recipient must file a final certification with the Commission indicating whether it has fully complied with all terms and conditions of the Reimbursement Program. 47 U.S.C. § 1603(e)(4)(A); 47 CFR § 1.50004(m)(1).

Grounds for individual term extension – AST Telecom d/b/a Bluesky (Bluesky) requests a six-month extension of its deadline to remove, replace, and dispose of covered equipment and services in its network under 47 CFR § 1.50004(h)(2). Bluesky contends that its ability to complete the removal, replacement, and disposal of covered equipment and services by its current deadline has, through no fault of its own, been materially affected by supply chain issues, namely by unusually long delays for the delivery of necessary equipment. Among other things, Bluesky originally expected to receive all new equipment and materials at once, but instead has experienced long manufacturing and shipment lead times so that equipment and materials have arrived in multiple shipments over a longer period than expected. Further delays have been caused by coordination and clearance issues and missing components in shipments.¹⁷ In addition, Bluesky states that the lack of full funding for the required work has resulted in uncertainty and prevented it from using more effective methods of project implementation and transportation for equipment.¹⁸ As a result of these factors, Bluesky contends that it will need additional time to complete its work. The Bureau finds Bluesky’s showing persuasive and that its situation is consistent with the situation of other recipients that have been granted extensions on similar grounds of supply chain issues and lack of full funding,¹⁹ and accordingly grants the requested extension.

New removal, replacement, and disposal term (RRD term) expiration date – Bluesky’s deadline to remove, replace, and dispose of covered equipment and services in its network under 47 CFR § 1.50004(h)(2) IS EXTENDED from April 18, 2024 to October 18, 2024.

Recipient – Gallatin Wireless Internet, LLC, SCRP0001039

Grounds for individual term extension – Gallatin Wireless Internet, LLC (Gallatin) requests a six-month extension of its deadline to remove, replace, and dispose of covered equipment and services in its network under 47 CFR § 1.50004(h)(2).²⁰ Gallatin contends that its ability to complete the removal, replacement, and disposal of covered equipment and services by its current deadline has, through no fault of its own, been materially affected by supply chain issues. In particular, Gallatin states that it has experienced unexpected performance issues with new customer premises equipment (CPE), resulting in a drawn-out testing period and extra time needed for its vendor to fix the issues.²¹ These problems have led to unexpected delays, since CPE replacement cannot commence until the performance of the replacement equipment is optimal. The Bureau finds Gallatin’s showing persuasive and that its situation is consistent with the situation of other recipients that have been granted extensions on similar grounds,²² and accordingly grants the requested extension.

¹⁷ Request of AST Telecom for Extension of Time, WC Docket No. 18-89 (filed March 1, 2024).

¹⁸ *Id.* at 3.

¹⁹ See *WorldCell et al. Extension Order* at 5-7, paras. 11-15; *Point/SI Wireless Extension Order* at 5-6, paras. 12-14; *GigSky Extension Order* at 2, paras. 4-5; *January 2024 Streamlined Resolution Public Notice* at 5 (as to the lack of full funding); see *Stealth Extension Order* at 3-5, paras. 6-11; *WorldCell et al. Extension Order* at 7-8, paras. 16-19; *Point/SI Wireless Extension Order* at 6-7, paras. 15-18; *Triangle Extension Order* at 4-5, paras. 8-11; *January 2024 Streamlined Resolution Public Notice* at 4-5 (as to supply chain issues).

²⁰ Request of Gallatin Wireless Internet, LLC for Extension of Time, WC Docket No. 18-89 (filed March 11, 2024).

²¹ *Id.* at 1.

²² See *Stealth Extension Order* at 3-5, paras. 6-11; *WorldCell et al. Extension Order* at 7-8, paras. 16-19; *Point/SI Wireless Extension Order* at 6-7, paras. 15-18; *Triangle Extension Order* at 4-5, paras. 8-11; *January 2024 Streamlined Resolution Public Notice* at 4-5.

New RRD term expiration date – Gallatin’s deadline to remove, replace, and dispose of covered equipment and services in its network under 47 CFR § 1.50004(h)(2) IS EXTENDED from March 23, 2024 to September 23, 2024.

Recipient – Gogo Business Aviation LLC, SCRP0001134

Grounds for individual term extension – Gogo Business Aviation LLC (Gogo) requests a six-month extension of its deadline to remove, replace, and dispose of covered equipment and services in its network under 47 CFR § 1.50004(h)(2).²³ Gogo states that it has encountered ongoing supply chain issues arising from high demand, material scarcity, and labor shortages, particularly in machine manufacturing, which continue to cause a lack of availability of necessary equipment and extended lead times. Gogo states that these disruptions are particularly significant because it has aviation operations, which call for custom radio equipment, rather than off-the-shelf solutions, for both its ground infrastructure and its airborne components.²⁴ This fact also makes Gogo reliant on a network of highly specialized suppliers which, mirroring the aviation market more broadly, have continued to experience supply chain constraints and labor shortages, leading to longer lead times and delays for Gogo when seeking to replace its covered equipment.²⁵ Gogo further notes that replacing its covered equipment will require the use of newly developed software and hardware that will require lab testing and equipment authorization, rather than commercial off-the-shelf parts and equipment, but that its ground-based equipment vendor is experiencing delays in lead times from its component manufacturer.²⁶ Regarding the lack of full funding, Gogo states that the lack of full funding causes it to order only the minimum number of replacement components it needs at a given time, which in turn leads to delays, and that at least one of its suppliers has stated that it will not provide certain systems Gogo needs unless Gogo is able to place larger orders (at the scale Gogo would need to fully replace its covered equipment).²⁷ As a result of these factors, Gogo contends that it will need additional time to complete its work. The Bureau finds Gogo’s showing persuasive and that its situation is consistent with the situation of other recipients that have been granted extensions on similar grounds of supply chain issues and lack of full funding,²⁸ and accordingly grants the requested extension.

New RRD term expiration date – Gogo’s deadline to remove, replace, and dispose of covered equipment and services in its network under 47 CFR § 1.50004(h)(2) IS EXTENDED from July 21, 2024 to January 21, 2025.

Recipient – Mediacom Communications Corporation, SCRP0001140

Grounds for individual term extension – Mediacom Communications Corporation (Mediacom) requests a third three-month extension of its deadline to remove, replace, and dispose of covered

²³ Request of Gogo Business Aviation LLC for Extension of Time, WC Docket No. 18-89 (filed March 22, 2024).

²⁴ *Id.* at 1.

²⁵ *Id.* at 1-2.

²⁶ *Id.* at 2.

²⁷ *Id.* at 3.

²⁸ See *WorldCell et al. Extension Order* at 5-7, paras. 11-15; *Point/SI Wireless Extension Order* at 5-6, paras. 12-14; *GigSky Extension Order* at 2, paras. 4-5; *January 2024 Streamlined Resolution Public Notice* at 5 (as to the lack of full funding); see *Stealth Extension Order* at 3-5, paras. 6-11; *WorldCell et al. Extension Order* at 7-8, paras. 16-19; *Point/SI Wireless Extension Order* at 6-7, paras. 15-18; *Triangle Extension Order* at 4-5, paras. 8-11; *January 2024 Streamlined Resolution Public Notice* at 4-5 (as to supply chain issues).

equipment and services in its network under 47 CFR § 1.50004(h)(2).²⁹ Mediacom contends that its ability to complete the removal, replacement, and disposal of covered equipment and services by its current deadline has, through no fault of its own, been materially affected by supply chain issues and the lack of full funding. In particular, Mediacom states that delivery delays for equipment have been material enough to have an overall impact that cannot be overcome within the period allowed by the last three-month extension Mediacom received. Mediacom also states that the lack of full funding for the required work has created uncertainty that contributes to the delays it has experienced, including in migrating its services as required before any removal or destruction work can commence.³⁰ The Bureau finds Mediacom's showing persuasive and that its situation is consistent with the situation of other recipients that have been granted extensions on similar grounds,³¹ and accordingly grants the requested extension.

New RRD term expiration date – Mediacom's deadline to remove, replace, and dispose of covered equipment and services in its network under 47 CFR § 1.50004(h)(2) IS EXTENDED from April 15, 2024 to July 15, 2024.

Recipient – NE Colorado Cellular, Inc., dba Viaero Wireless, SCRP0001110; SCRP0001113; SCRP0001114; SCRP0001115; SCRP0001118; and SCRP0001119, SCRP0001120; SCRP0001122; SCRP0001123; SCRP0001124; SCRP0001125; SCRP0001126; and SCRP0001135, SCRP0001141

Grounds for individual term extension – NE Colorado Cellular, Inc., dba Viaero Wireless (NE Colorado) requests a six-month extension of its deadline to remove, replace, and dispose of covered equipment and services in its network under 47 CFR § 1.50004(h)(2) as to each of the above-identified applications. NE Colorado contends that its ability to complete the removal, replacement, and disposal of covered equipment and services by its current deadline has, through no fault of its own, been materially affected by the lack of full funding for the required work, including undertaking necessary activities to install a replacement network, and that it will need additional time to complete its work.³² It also states that some Reimbursement Program participants use the same vendors in the marketplace for removal and disposal work, which can cause delays.³³ The Bureau finds NE Colorado's showing persuasive and that its situation is consistent with the situation of other recipients that have been granted extensions on similar grounds,³⁴ and accordingly grants the requested extension.

New RRD term expiration dates – NE Colorado's deadline to remove, replace, and dispose of covered equipment and services in its network under 47 CFR § 1.50004(h)(2) IS EXTENDED as follows:

- For File No. SCRP0001110, from May 3, 2024 to November 3, 2024;
- For File No. SCRP0001113, from June 3, 2024 to December 3, 2024;
- For File No. SCRP0001114, from June 3, 2024 to December 3, 2024;

²⁹ Request of Mediacom Communications Corporation for Extension of Time, WC Docket No. 18-89 (filed March 18, 2024).

³⁰ *Id.* at 3.

³¹ See *WorldCell et al. Extension Order* at 5-7, paras. 11-15; *Point/SI Wireless Extension Order* at 5-6, paras. 12-14; *GigSky Extension Order* at 2, paras. 4-5; *January 2024 Streamlined Resolution Public Notice* at 5.

³² Requests of NE Colorado Cellular Inc. for Extension of Time, WC Docket No. 18-89, at 3 (filed for each of the listed Applications on March 15, 2024).

³³ *Id.* at 3-4.

³⁴ See *WorldCell et al. Extension Order* at 5-7, paras. 11-15; *Point/SI Wireless Extension Order* at 5-6, paras. 12-14; *GigSky Extension Order* at 2, paras. 4-5; *January 2024 Streamlined Resolution Public Notice* at 5.

- For File No. SCRP0001115, from June 10, 2024 to December 10, 2024;
- For File No. SCRP0001118, from June 6, 2024 to December 6, 2024;
- For File No. SCRP0001119, from June 7, 2024 to December 7, 2024;
- For File No. SCRP0001120, from June 15, 2024 to December 15, 2024;
- For File No. SCRP0001122, from June 10, 2024 to December 10, 2024;
- For File No. SCRP0001123, from June 7, 2024 to December 7, 2024;
- For File No. SCRP0001124, from June 13, 2024 to December 13, 2024;
- For File No. SCRP0001125, from June 10, 2024 to December 10, 2024;
- For File No. SCRP0001126, from June 3, 2024 to December 3, 2024;
- For File No. SCRP0001135, from June 7, 2024 to December 7, 2024; and
- For File No. SCRP0001141, from May 18, 2024 to November 18, 2024.

Recipient – WorldCell Solutions, LLC, SCRP0001137

Grounds for individual term extension – WorldCell Solutions, LLC (WorldCell) requests a second extension of its deadline, by approximately four months, to remove, replace, and dispose of covered equipment and services in its network under 47 CFR § 1.50004(h)(2).³⁵ WorldCell contends that its ability to complete the removal, replacement, and disposal of covered equipment and services by its current deadline has, through no fault of its own, been materially affected by supply chain issues, namely unanticipated delays in delivery of necessary equipment that have extended into April 2024, impacting other deadlines, and that it will need additional time to complete its work.³⁶ The Bureau finds WorldCell’s showing persuasive and that its situation is consistent with the situation of other recipients that have been granted extensions on similar grounds,³⁷ and accordingly grants the requested extension.

New RRD term expiration date – WorldCell’s deadline to remove, replace, and dispose of covered equipment and services in its network under 47 CFR § 1.50004(h)(2) IS EXTENDED from May 20, 2024 to September 30, 2024.

For additional information concerning this Public Notice, please contact Ty Covey in the Competition Policy Division, Wireline Competition Bureau, at ty.covey@fcc.gov or (202) 418-1372.

- FCC -

³⁵ Request of WorldCell, Inc. for Extension of Time, WC Docket 18-89 (filed Jan. 23, 2024), <https://www.fcc.gov/ecfs/document/102291886526004/3>. WorldCell previously requested, and we granted, an approximate six-month extension of its deadline on grounds of delays related to a lack of full funding for the required work and supply chain issues. See *WorldCell et al. Extension Order*.

³⁶ Request of WorldCell, Inc. for Extension of Time at 1-3.

³⁷ See *Stealth Extension Order* at 3-5, paras. 6-11; *WorldCell et al. Extension Order* at 7-8, paras. 16-19; *Point/SI Wireless Extension Order* at 6-7, paras. 15-18; *Triangle Extension Order* at 4-5, paras. 8-11; *January 2024 Streamlined Resolution Public Notice* at 4-5.



PUBLIC NOTICE

Federal Communications Commission
45 L St., N.E.
Washington, D.C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>

DA 24-314
Released: March 29, 2024

**DOMESTIC SECTION 214 APPLICATION FILED FOR THE
TRANSFER OF CONTROL OF BUCKLAND TELEPHONE COMPANY TO
HANSON COMMUNICATIONS, INC.**

NON-STREAMLINED PLEADING CYCLE ESTABLISHED

WC Docket No. 24-57

Comments Due: April 12, 2024
Reply Comment Due: April 19, 2024

By this Public Notice, the Wireline Competition Bureau seeks comment from interested parties on an application filed by Buckland Telephone Company (Buckland) and Hanson Communications, Inc. (HCI) (together, Applicants), pursuant to section 214(a) of the Communications Act of 1934, as amended, and sections 63.03-04 of the Commission's rules,¹ requesting consent for the transfer of control of Buckland to HCI.²

Buckland, an Ohio corporation, provides service as a rural incumbent local exchange carrier (LEC) to approximately 378 access lines in the Allen and Auglaize counties of Ohio.³ Buckland also provides other communications services in the same service area and has been designated as an Eligible Telecommunications Carrier in Ohio.⁴

HCI, a Minnesota corporation, does not directly offer domestic telecommunications services but, through its eight wholly-owned incumbent LECs, provides service to approximately 10,500 access lines in Minnesota, Nebraska, South Dakota, and Ohio.⁵ The following U.S. citizens hold a ten% or

¹ See 47 U.S.C. § 214(a); 47 CFR §§ 63.03-04.

² Domestic Section 214 Application Filed for the Transfer of Control of Buckland Telephone Company to Hanson Communications, Inc., WC Docket No. 24-57 (filed Feb. 27, 2024) (Application). On March 22, 2024 Applicants filed a supplement to their domestic section 214 application. Letter from Salvatore Taillefer, counsel to Hanson Communications, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 23-401 (filed Mar. 22, 2024) (Supplement). Any action on this domestic section 214 application is without prejudice to Commission action on other related, pending applications.

³ Application at 5; Supplement at 2.

⁴ Application at 5.

⁵ *Id.* HCI wholly owns the following eight incumbent LECs: Clara City Telephone Company, Sacred Heart Telephone Company, Fort Randall Telephone Company d/b/a Mt. Rushmore Telephone Company, Hanson Communications of Ohio, LLC, Starbuck Telephone Company, Telephone Service Company (TSC), The Middle Point Home Telephone Company, and Zumbrot Telephone Company. Application at Exh. C (Hanson

(continued...)

greater interest in HCI: Bruce Hanson (20.51%); Mark Hanson (23.18%); and Susan Anderson (20.51%).⁶

Pursuant to the terms of the proposed transaction, HCI will purchase all outstanding shares of Buckland, except for certain shares already held by HCI, in conjunction with a reverse-subsidary merger between Buckland and a wholly-owned subsidiary of HCI formed specifically for this purpose.⁷ Buckland will be the surviving entity of the merger and will continue to operate as a direct, wholly-owned subsidiary of HCI.⁸

Applicants assert that the proposed transaction is consistent with the public interest, convenience, and necessity.⁹ Because the proposed transaction is more complex than those accepted for streamlined treatment, and in order to analyze whether the proposed transaction would serve the public interest, we accept the Application for non-streamlined processing.¹⁰

Domestic Section 214 Application Filed for the Transfer of Control of
Buckland Telephone Company to Hanson Communications, Inc.,
WC Docket No. 24-57 (filed Feb. 27, 2024).

GENERAL INFORMATION

The application identified herein has been found, upon initial review, to be acceptable for filing. The Commission reserves the right to return any application if, upon further examination, it is determined to be defective and not in conformance with the Commission's rules and policies.

Interested parties may file comments **on or before April 12, 2024**, and reply comments **on or before April 19, 2024**. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by paper.

- **Electronic Filers:** Comments may be filed electronically by accessing ECFS at <http://apps.fcc.gov/ecfs/>.
- **Paper Filers:** Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Communications, Inc. ILEC Affiliate Chart); Supplement at 2 (providing the service area for each of HCI's wholly-owned incumbent LECs). Applicants state that neither HCI nor any of its affiliates holding at least a 10% or greater interest in HCI hold a 10% or greater interest in any other provider of telecommunications services. Supplement at 1.

⁶ Application at 4.

⁷ *Id.*

⁸ *Id.*

⁹ Application at 7-9. Applicants note that there is an adjacency of service areas between Buckland's service area and HCI's affiliate, TSC. Application at 5; *id.* at Exh. B (Buckland Telephone Service Company Study Area Adjacency).

¹⁰ 47 CFR § 63.03(c)(1)(v).

- Filings can be sent by commercial overnight courier or by first-class or overnight U.S. Postal Service mail.¹¹ All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, DC 20554.

People with Disabilities: We ask that requests for accommodations be made as soon as possible in order to allow the agency to satisfy such requests whenever possible. Send an email to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530.

In addition, e-mail one copy of each pleading to each of the following:

- 1) Tracey Wilson, Competition Policy Division, Wireline Competition Bureau, tracey.wilson@fcc.gov;
- 2) Gregory Kwan, Competition Policy Division, Wireline Competition Bureau, gregory.kwan@fcc.gov; and
- 3) Jim Bird, Office of General Counsel, jim.bird@fcc.gov.

The proceeding in this Notice shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b), 47 CFR § 1.1206(b). Participants in this proceeding should familiarize themselves with the Commission’s *ex parte* rules.

To allow the Commission to consider fully all substantive issues regarding the application in as timely and efficient a manner as possible, petitioners and commenters should raise all issues in their initial filings. New issues may not be raised in responses or replies.¹² A party or interested person seeking to raise a new issue after the pleading cycle has closed must show good cause why it was not possible for it to have raised the issue previously. Submissions after the pleading cycle has closed that seek to raise new issues based on new facts or newly discovered facts should be filed within 15 days

¹¹ Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (OS 2020).

¹² See 47 CFR § 1.45(c).

after such facts are discovered. Absent such a showing of good cause, any issues not timely raised may be disregarded by the Commission.

For further information, please contact Gregory Kwan at (202) 418-1191.

-FCC-

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Clear Rate Communications) Complaint No. 6888768
)
Complaint Regarding)
Unauthorized Change of)
Subscriber’s Telecommunications Carrier)

ORDER

Adopted: March 28, 2024

Released: March 29, 2024

By the Associate Division Chief, Consumer Policy Division, Consumer and Governmental Affairs Bureau:

1. In this Order, we consider a complaint alleging that Clear Rate Communications (Clear Rate) changed Complainant’s telecommunications service provider without obtaining authorization and verification from Complainant as required by the Commission’s rules.¹ We conclude that Clear Rate’s actions violated the Commission’s slamming rules, and we grant Complainant’s complaint.

2. Section 258 of the Communications Act of 1934, as amended (the Act), prohibits the practice of “slamming,” the submission or execution of an unauthorized change in a subscriber’s selection of a provider of telephone exchange service or telephone toll service.² The Commission’s implementing rules require, among other things, that a carrier receive individual subscriber consent before a carrier change may occur.³ Specifically, a carrier must: (1) obtain the subscriber’s written or electronically signed authorization in a format that satisfies our rules; (2) obtain confirmation from the subscriber via a toll-free number provided exclusively for the purpose of confirming orders electronically; or (3) utilize an appropriately qualified independent third party to verify the order.⁴ The Commission has also adopted rules to limit the liability of subscribers when an unauthorized carrier change occurs, and to require carriers involved in slamming practices to compensate subscribers whose carriers were changed without authorization.⁵

¹ See Informal Complaint No. 6888768 (Mar. 16, 2024); see also 47 CFR §§ 64.1100 – 64.1190.

² 47 U.S.C. § 258(a).

³ See 47 CFR § 64.1120.

⁴ See *id.* § 64.1120(c). Section 64.1130 details the requirements for letter of agency form and content for written or electronically signed authorizations. *Id.* § 64.1130.

⁵ These rules require the unauthorized carrier to absolve the subscriber where the subscriber has not paid his or her bill. If the subscriber has not already paid charges to the unauthorized carrier, the subscriber is absolved of liability for charges imposed by the unauthorized carrier for service provided during the first 30 days after the unauthorized change. See *id.* §§ 64.1140, 64.1160. Any charges imposed by the unauthorized carrier on the subscriber for service provided after this 30-day period shall be paid by the subscriber to the authorized carrier at the rates the subscriber was paying to the authorized carrier at the time of the unauthorized change. *Id.* Where the subscriber has paid charges to the unauthorized carrier, the Commission’s rules require that the unauthorized carrier pay 150 percent of those charges to the authorized carrier, and the authorized carrier shall refund or credit to the subscriber 50 percent of all charges paid by the subscriber to the unauthorized carrier. See *id.* §§ 64.1140, 64.1170.

3. The Commission’s slamming rules prohibit misrepresentations on sales calls to further reduce the incidence of slamming.⁶ Under the rules, upon a finding of material misrepresentation during the sales call, the consumer’s authorization to change carriers will be deemed invalid even if the carrier has some evidence of consumer authorization of a carrier switch, e.g., a third-party verification (TPV) recording. Sales misrepresentations may not be cured by a facially valid TPV.⁷ The rule provides that a consumer’s credible allegation of misrepresentation shifts the burden of proof to the carrier to provide evidence to rebut the consumer’s claim regarding misrepresentation. The Commission made clear that an accurate and complete recording of the sales call may be the carrier’s best persuasive evidence to rebut the consumer’s claim that a misrepresentation was made on the sales call.⁸

4. We received Complainant’s complaint alleging that Complainant’s telecommunications service provider had been changed to Clear Rate without her authorization.⁹ In the complaint, Complainant stated that they were slammed and that there was an “incorrect representation of services and saving for phone lines.”¹⁰ Complainant further explained that “on 11/20/23 someone by the name of ‘Clarissa’ called our office claiming to be from Verizon. She knew our account information, the number of phone lines, address, phone numbers, monthly bill totals and other information.”¹¹ Complainant was told that they could save money on their business lines by switching from corporate to a small business plan. Complainant explained that they “were assured multiple times when we asked that yes this was Verizon and we would not be changing service providers.”¹² She thought she was saving money with Verizon, not changing carriers to Clear Rate.

5. Pursuant to our rules, we notified Clear Rate of the complaint, directing the company to address the allegation of misrepresentation and to provide evidence to rebut the claim.¹³ Clear Rate responded, stating that Complainant agreed to and authorized the carrier switch, and that the terms and conditions of service were described in detail for Complainant on the TPV call.¹⁴ Clear Rate also provided two audio recordings—the TPV recording and a recording Clear Rate characterized as a “quality assurance call.” Clear Rate did not address Complainant’s misrepresentation claim and did not provide a recording of the sales call or any other evidence related to the sales call.

6. Based on the evidence in the record, we find Complainant’s allegation of a sales call misrepresentation to be credible. We further find that Clear Rate has failed to provide persuasive evidence to rebut Complainant’s misrepresentation claim and therefore that Complainant’s authorization to change carriers is invalid. As the Commission stated in the *2018 Slamming Order*, “[w]hen a consumer’s decision to switch carriers is predicated on false information provided in a sales call, that

⁶ *Id.* § 64.1120(a)(1)(i)(A).

⁷ See *Protecting Consumers from Unauthorized Carrier Changes and Related Unauthorized Charges*, 33 FCC Rcd 5773, 5778-80, paras. 17-19 (2018) (*2018 Slamming Order*); 47 CFR § 64.1120(a)(1)(i)(A).

⁸ See *2018 Slamming Order*, 33 FCC Rcd at 5781, para. 23. The Commission also stated that a carrier is uniquely positioned via its access to sales scripts, recordings, training, and other relevant materials relating to sales calls to proffer evidence to rebut a consumer’s claims. *Id.*

⁹ See Informal Complaint No. 6888768.

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ 47 CFR § 1.719 (Commission procedure for informal complaints filed pursuant to section 258 of the Act); *id.* § 64.1150 (procedures for resolution of unauthorized changes in preferred carrier). In the notification, we directed Clear Rate to respond to the specific misrepresentation allegation and to provide any evidence to rebut it.

¹⁴ See Clear Rate Response to Informal Complaint No. 6888768 (Mar. 19, 2024); see also 47 CFR § 64.1160.

consumer's authorization to switch carriers can no longer be considered binding."¹⁵ We therefore find that Clear Rate's actions resulted in an unauthorized change in Complainant's telecommunications service provider, as defined by the rules, and we discuss Clear Rate's liability below.¹⁶

7. Clear Rate must remove all charges incurred for service provided to Complainant for the first 30 days after the alleged unauthorized change in accordance with the Commission's liability rules.¹⁷ We have determined that Complainant is entitled to absolution for the charges incurred during the first 30 days after the unauthorized change occurred and that neither the Complainant's authorized carrier nor Clear Rate may pursue any collection against Complainant for those charges.¹⁸ Any charges imposed by Clear Rate on the Complainant for service provided after this 30-day period shall be paid by the Complainant to the authorized carrier at the rates the Complainant was paying the authorized carrier at the time of the unauthorized change of their telecommunications service provider.¹⁹

8. Accordingly, IT IS ORDERED that, pursuant to section 258 of the Communications Act of 1934, as amended, 47 U.S.C. § 258, and sections 0.141, 0.361, and 1.719 of the Commission's rules, 47 CFR §§ 0.141, 0.361, 1.719, the complaint filed against Clear Rate Communications IS GRANTED.

9. IT IS FURTHER ORDERED that, pursuant to section 64.1170(d) of the Commission's rules, 47 CFR § 64.1170(d), Complainant is entitled to absolution for the charges incurred during the first 30 days after the unauthorized change occurred and that Clear Rate Communications may not pursue any collection against Complainant for those charges.

10. IT IS FURTHER ORDERED that this Order is effective upon release.

FEDERAL COMMUNICATIONS COMMISSION

Dana Bowers
Associate Division Chief
Consumer Policy Division
Consumer and Governmental Affairs Bureau

¹⁵ 2018 *Slamming Order*, 33 FCC Rcd at 5779, para. 18 (citing *Advantage Forfeiture Order*, 32 FCC Rcd 3723, 3725-30, paras. 7-13 (2017) (finding that the carrier's TPV recordings did not disprove that unlawful misrepresentations were made during the telemarketing calls and further, that questions posed during the separate TPV calls did not cure those misrepresentations)).

¹⁶ If Complainant is unsatisfied with the resolution of the complaint, Complainant may file a formal complaint with the Commission pursuant to section 1.721 of the Commission's rules, 47 CFR § 1.721. Such filing will be deemed to relate back to the filing date of Complainant's informal complaint so long as the formal complaint is filed within 45 days from the date this order is mailed or delivered electronically to Complainant. *See id.* § 1.719.

¹⁷ *See id.* § 64.1160(b).

¹⁸ *See id.* § 64.1160(d).

¹⁹ *See id.* § 64.1140, 64.1160.



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information: 202-418-0500

Internet: www.fcc.gov

TTY: 888-835-5322

DA 24-316

Released: April 1, 2024

FCC ANNOUNCES A TRIBAL WORKSHOP HOSTED BY THE EASTERN SHAWNEE TRIBE OF OKLAHOMA, WEDNESDAY, MAY 15, 2024

By this Public Notice, the Federal Communications Commission (FCC) announces an upcoming in-person workshop for Tribal Nations. This event is designed to provide information that will help Tribal Nations identify and evaluate opportunities to develop more robust broadband infrastructure and services in Tribal communities. It is also designed to provide information about FCC policies and programs to address the lack of adequate communications services on Tribal lands nationwide.

FCC staff will provide presentations on a broad range of important FCC initiatives that support the deployment of communications infrastructure and services in Tribal communities (e.g., Broadband Data Collection, the Universal Service Fund and FCC programs, including the E-Rate Tribal Library Program). Participants will also receive updates on other FCC proceedings including the FCC's recently released [Notice of Proposed Rulemaking](#) (NPRM), FCC 24-30, seeking comment on a proposal to adopt a new Emergency Alert System (EAS) event code for Missing and Endangered Persons. There will also be discussion on how to follow FCC rulemakings and file comments in FCC proceedings so that Tribal Nations can help inform the FCC and ensure that Native views and interests are heard in the FCC's decision-making process.

Tribal government leaders, Tribal service providers and IT managers, government and community planners and managers, Tribal enterprise specialists, and representatives of Tribal social service agencies, schools, and libraries are all persons who should consider attending this event. The workshop, to be hosted by the Eastern Shawnee Tribe of Oklahoma, will be held Wednesday, May 15, 2024, at the Indigo Sky Casino and Resort, 70220 East HWY 60, Wyandotte, OK 74370.

Registration is free. To register for the workshop, please send your name, title, Tribal affiliation, and contact information, with the subject line "May Workshop" to Tribal.Events@fcc.gov. Any questions about the workshop may be directed to the Office of Native Affairs and Policy: Lloyd Collier, Lloyd.Collier@fcc.gov or Renee Coles, Renee.Coles@fcc.gov. Walk-ins can also be accommodated.

Reasonable accommodations for people with disabilities are available upon request by sending an e-mail to: FCC504@fcc.gov or calling the Consumer and Governmental Affairs Bureau at 202-418-0530 (voice). Include a description of the accommodation you will need and

tell us how to contact you if we need more information. Please make your request as early as possible as we may be unable to fulfill last minute requests.

-FCC-



Federal Communications Commission
Washington, D.C. 20554

April 2, 2024

DA 24-318
In Reply Refer to:
1800B3-RDM
Released: April 2, 2024

La Iglesia de Dios Pentecostes, Inc.
5053 US-31
Columbus, IN 47201
(sent by electronic mail to: radiotorrefuertecolumbus@gmail.com)

Columbus Community Radio Corporation
1325 Washington Street
Columbus, IN 47201
(sent by electronic mail to: whum985@hotmail.com)

In re: **La Iglesia de Dios Pentecostes, Inc.**
New LPFM, Columbus, IN
Facility ID No. 778273
Application File No. 0000231806

Informal Objection

Dear Applicant and Objector:

We have before us the application filed by La Iglesia de Dios Pentecostes, Inc. (Iglesia) for a construction permit for a new low power FM (LPFM) station at Columbus, Indiana (Application).¹ We also have before us an Informal Objection filed by Columbus Community Radio Corporation (CCRC), seeking dismissal of the Application (Objection),² and an Opposition filed by Iglesia in response to the Objection (Opposition).³ For the reasons set forth below, we deny the Objection and grant the Application.

Background. Iglesia filed the Application during the 2023 LPFM Filing Window.⁴ As is required for all applications for a new LPFM construction permit, Iglesia certified in its Application that neither it nor any party to the Application “has engaged in any manner, individually or with other persons, groups, organizations, or other entities, in the unlicensed operation of any station in violation of Section 301 of the Communications Act of 1934, as amended, 47 U.S.C. Section 301.”⁵

¹ Application File No. 0000231806.

² Pleading File No. 0000237103 (filed Jan. 29, 2024). CCRC refiled the same information in a second Informal Objection on February 1, 2024. Pleading File No. 0000237974.

³ Pleading File No. 0000238288 (filed Feb. 5, 2024).

⁴ *Media Bureau Announces Filing Procedures and Requirements for November 1 – November 8, 2023, Low Power FM Filing Window*, Public Notice, DA 23-642 (MB July 31, 2023). Based on a request from LPFM advocates, the Bureau subsequently delayed the window until December 6, 2023. *Media Bureau Announces Revised Dates for LPFM New Station Application Filing Window*, Public Notice, DA 23-984 (MB Oct. 17, 2023). The Bureau subsequently extended the close of the window until December 15, 2023. *Media Bureau Announces Extension of LPFM New Station Application Filing Window*, Public Notice, DA 23-1150 (MB Dec. 11, 2023).

⁵ See Application at Legal Certifications Section, Unlicensed Operation Question.

In its Objection, CCRC argues that Rafael Gonzalez (Gonzalez), a party to the Application,⁶ was “shut down by the FCC’s Chicago Field Office for unlicensed FM broadcasting,” and that Iglesia lacked candor to the Commission when it certified in the Application that Gonzalez had never engaged in any manner in the unlicensed operation of a radio station.⁷ The Objection includes the text of a May 2, 2014, Notice of Unlicensed Operation (NOUO) addressed to Gonzalez.⁸ The NOUO specifies that on April 3, 2014, an agent from the Chicago Office of the Commission’s Enforcement Bureau (EB) “confirmed by direction finding techniques that radio signals on frequency 93.5 MHz were emanating from [Gonzalez’s] residence in Columbus, Indiana. The Commission’s records show that no license was issued for operation of a broadcast station on 93.5 MHz at this location in Columbus, Indiana.”⁹

In the Opposition, Gonzalez confirms that in April 2014, an agent from the Commission’s Chicago Field Office visited his church in Columbus, Indiana, to investigate unlicensed broadcasting on 93.5 MHz.¹⁰ Gonzalez acknowledges that he showed the agent a transmitter that was operating without authorization, but asserts the transmitter was owned and operated by a visitor named Sergio Ramos, not by Gonzalez.¹¹ Gonzalez explains that when the agent instructed him to turn off the transmitter, he did, and Ramos removed the transmitter the following day.¹² Gonzalez suggests that he was “gullible and naïve.”¹³ Gonzalez further argues that because the NOUO states “you are hereby warned,” and “[n]o one was ever Cited or Fined [sic],” he “was not guilty of radio piracy.”¹⁴ CCRC did not file a Reply to the Opposition.

Discussion. Pursuant to section 309(d) of the Communications Act of 1934, as amended (Act),¹⁵ petitions to deny and informal objections must provide properly supported allegations of fact that, if true, would establish a substantial and material question of fact that grant of the application would be *prima facie* inconsistent with the public interest.¹⁶

Section 632(a)(1)(B) of the Making Appropriations for the Government of the District of Columbia for Fiscal Year 2001 Act provides that the Commission must “prohibit any applicant from obtaining a low power FM license if the applicant has engaged in any manner in the unlicensed operation

⁶ See Application at Parties to the Application.

⁷ See Objection at 1.

⁸ See Objection at 1-2 (quoting *Rafael Gonzalez*, Notice of Unlicensed Operation (Enf. Bur. Chicago Office, May 2, 2014) (available at <https://docs.fcc.gov/public/attachments/DOC-327586A1.pdf>)).

⁹ See NOUO at 1.

¹⁰ See Opposition at 1.

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.* Gonzalez also argues that because Iglesia itself was only founded in 2023, as noted in a document provided in the Objection, the NOUO thus predates its establishment and concerned another entity. Because we resolve the Objection on other grounds, we do not address this argument.

¹⁵ 47 U.S.C. § 309(d).

¹⁶ See, e.g., *WWOR-TV, Inc.*, Memorandum Opinion and Order, 6 FCC Rcd 193, 197 n.10 (1990), *aff’d sub nom. Garden State Broad. L.P. v. FCC*, 996 F. 2d 386 (D.C. Cir. 1993), *rehearing denied* (Sep. 10, 1993); *Gencom, Inc. v. FCC*, 832 F.2d 171, 181 (D.C. Cir. 1987); *Area Christian Television, Inc.*, Memorandum Opinion and Order, 60 RR 2d 862, 864, para. 6 (1986) (petitions to deny and informal objections must contain adequate and specific factual allegations sufficient to warrant the relief requested).

of any station in violation of Section 301 [of the Act].”¹⁷ Section 73.854 of the Commission’s rules and FCC Form 2100, Schedule 318 implement this mandate by requiring an LPFM applicant to certify under penalty of perjury that neither the applicant, *nor any party to the application*, has engaged in any manner in unlicensed operation of any station.¹⁸ Furthermore, if an application is dismissed pursuant to section 73.854, the applicant is barred from seeking *nunc pro tunc* reinstatement of the application and/or changing its directors to resolve the basic qualification issues.¹⁹ There is no requirement that an administrative agency make a formal finding that a party to an application has engaged in unlicensed operation of a radio station.²⁰ Whether the Commission exercises its prosecutorial discretion to not conduct forfeiture proceedings does not settle the question of an applicant’s eligibility to hold an LPFM license.²¹

The Objection, which relies entirely on the NOUO, does not conclusively establish that Gonzalez engaged in the unlicensed operation of a broadcast station in violation of section 301 of the Act.²² Iglesia explained in its Opposition that Sergio Ramos, not Gonzalez, operated the unlicensed radio station in question. CCRC did not refute Iglesia’s explanation and offered no evidence that Gonzalez himself engaged in the operation of an unlicensed radio station. Therefore, we cannot conclude that Gonzalez violated section 301 of the Act. Because we find that there is insufficient evidence to establish a substantial and material question of fact whether Gonzalez engaged in the operation of an unlicensed radio station, we conclude Iglesia is not barred from obtaining an LPFM license. Accordingly, we deny

¹⁷ See Pub. L. No. 106-553, 114 Stat. 2762 (2000) (Appropriations Act), amended by Pub. L. No. 111-371, 124 Stat. 4072 (2011). See also 47 CFR § 73.854 (implementing the Appropriations Act); *Ruggiero v. FCC*, 278 F.3d 1323 (D.C. Cir. 2002), *rev’d en banc*, 317 F.3d 239 (D.C. Cir. 2003) (holding that the Appropriations Act provision barring anyone who had ever operated an unlicensed radio station from obtaining an LPFM license was reasonably tailored to satisfy a substantial governmental interest in ensuring that those who are granted such licenses comply with broadcasting regulations, and did not violate the First Amendment or the equal protection guarantee of the Fifth Amendment).

¹⁸ See *Creation of a Low Power Radio Service*, Second Report and Order, 16 FCC Rcd 8026, 8030, para. 11 (2001) (*Second Report and Order*); 47 CFR § 73.854; FCC Schedule 318, Legal Certifications Section, Unlicensed Operations Question.

¹⁹ See 47 CFR § 73.854

²⁰ See *Second Report and Order*, 16 FCC Rcd 8026, 8030, para.11 (2001) (“We note that the statutory language is not limited to applicants and licensees that have been found to have engaged in unauthorized operations by the Commission. Accordingly, an applicant will be ineligible to hold an LPFM license if it has engaged in unlicensed operation regardless of whether the Commission has made a specific finding that the party has engaged in such conduct.”). See also *WKMJ Radio Live The People Station, Inc.*, Letter Order, 30 FCC Rcd 7427,7429 (MB 2015) (*WKMJ Letter*), *rev. denied*, Memorandum Opinion and Order, 30 FCC Rcd 13779, *recon. dismissed*, Memorandum Opinion and Order, 31 FCC Rcd 4306 (2016).

²¹ See *WKMJ Letter Order*, 30 FCC Rcd at 7429 (MB 2015) (*Dennis Kelly, Esq.*) (denying reconsideration of a decision dismissing an LPFM application where a party to the application had received a NOUO but the Commission had not engaged in forfeiture proceedings against the party). See also 47 U.S.C. § 503; *Heckler v. Chaney*, 470 U.S. 821, 831 (1985) (“[A]n agency’s decision not to prosecute or enforce, whether through civil or criminal process, is a decision generally committed to an agency’s absolute discretion.”).

²² Compare *WKMJ Letter Order*, 30 FCC Rcd at 7428-29 (dismissing an application for a new LPFM station where a local police case report and a notice of unauthorized operations issued by FCC field agents showed that applicant’s CEO and 50 percent voting shareholder, Kervenson Joseph, was observed by police officers and FCC field agents actually operating an unlicensed radio station). See also *Kervenson Joseph*, Notice of Unlicensed Operation (Enf. Bur. Tampa Office, December 19, 2013) (Joseph was “present at and allowed an inspection of the unlicensed station when it was on the air,” and “voluntarily relinquished the station transmitter to [FCC field] agents.”).

the Objection, and grant the Application.

Conclusion/Action. Accordingly, **IT IS ORDERED** that the Informal Objections filed on January 29, 2024 (Pleading File No. 0000237103) and February 1, 2024 (Pleading No. 0000237974) by Columbus Community Radio Corporation **ARE DENIED**.

IT IS FURTHER ORDERED that the application of La Iglesia de Dios Pentecostes, Inc. for a construction permit for a new low power FM station at Columbus, Indiana (Application File No. 0000231806) **IS GRANTED**.

Sincerely,

Albert Shuldiner
Chief, Audio Division
Media Bureau

cc (via electronic mail):
John Owen Broomall (johnbroomall@yahoo.com)
(Legal Representative for La Iglesia de Dios Pentecostes, Inc.)



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-319

Released: April 2, 2024

PUBLIC SAFETY AND HOMELAND SECURITY BUREAU ANNOUNCES COMMENT AND REPLY DATES FOR RESILIENT NETWORKS NORS AND DIRS REPORTING

PS Docket Nos. 21-346 and 15-80 and ET Docket No. 04-35

Comments Due: April 29, 2024

Reply Comments Due: May 28, 2024

By this *Public Notice*, the Public Safety and Homeland Security Bureau notifies interested parties that comments on the rules proposed in the *Second Report and Order and Second Further Notice of Proposed Rulemaking (FNPRM)*, FCC 24-5, are due on **April 29, 2024**, and reply comments are due on **May 28, 2024**.¹ The *FNPRM* seeks comment on proposed rules to require TV and radio broadcasters to report in NORS and DIRS subject to a simplified reporting process. The Commission also seeks comment on whether to require broadband Internet access service (BIAS) providers to report in DIRS and the extent to which FirstNet should be subject to report in the Network Outage Reporting System (NORS) and Disaster Information Reporting System (DIRS). The Commission also seeks comment on whether to require satellite providers to report in DIRS, whether providers required to file in DIRS should be required to supply the Commission with “after action” reports detailing how their networks fared during the DIRS activation, and whether such providers should be required to provide the location of mobile recovery assets during a disaster response.

Filing Procedures. Comments and reply comments may be filed using the Commission’s Electronic Comment Filing System (ECFS), or by filing paper copies.² Comments and reply comments should refer to PS Docket Nos. 21-346 and 15-80 and ET Docket No. 04-35.

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <https://www.fcc.gov/ecfs/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the

¹ *Resilient Networks; Amendments to Part 4 of the Commission’s Rules Concerning Disruptions to Communications; New Part 4 of the Commission’s Rules Concerning Disruptions to Communications*, PS Docket Nos. 21-346 and 15-80 and ET Docket No. 04-35, Second Report and Order and Second Further Notice of Proposed Rulemaking, FCC 24-5 (Jan. 25, 2024). A summary of the *FNPRM* was published in the Federal Register on March 29, 2024, stating that comments on these proposed rules would be due 30 days after the date on which the Federal Register publication occurred, and that reply comments would be due 60 days after Federal Register publication. See Federal Communications Commission, *Amendments to Resilient Networks; Disruptions to Communications; New Considerations Concerning Disruptions to Communications*, 89 Fed. Reg. 22106 (Mar. 29, 2024).

² See Federal Communications Commission, *Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (May 1, 1998).

Secretary, Federal Communications Commission.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, DC 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.³
- During the time the Commission's building is closed to the general public and until further notice, if more than one docket or rulemaking number appears in the caption of a proceeding, paper filers need not submit two additional copies for each additional docket or rulemaking number; an original and one copy are sufficient.

People with Disabilities. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

Ex Parte Rules. This proceeding shall continue to be treated as a “permit-but-disclose” proceeding in accordance with the Commission's *ex parte* rules.⁴ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

Additional Information. For additional information on this proceeding, contact James Wiley, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau, (202) 418-1678, or by email to James.Wiley@fcc.gov, or Logan Bennett, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau, (202) 418-7790, or by email to Logan.Bennett@fcc.gov.

³ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (2020).

⁴ 47 CFR §§ 1.1200 *et seq.*



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
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News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-320

Released: April 2, 2024

WIRELESS TELECOMMUNICATIONS BUREAU SEEKS COMMENT ON PETITION FOR RULEMAKING TO EXPAND WIRELESS BROADBAND IN 900 MHz BAND

WT Docket No. 24-99
RM-11977

Comments Due: May 2, 2024
Reply Comments: May 18, 2024

On February 28, 2024, ten entities filed a petition for rulemaking asking the Commission to provide an option for 5/5 megahertz broadband networks in paired 896-901 MHz and 935-940 MHz spectrum (900 MHz band).¹ In this *Public Notice*, the Wireless Telecommunications Bureau seeks comment on the Petition.

Background. On May 14, 2020, the Commission realigned the 900 MHz band to make available six megahertz of low-band spectrum for the development of critical wireless broadband technologies and services, while reserving the remaining four megahertz of spectrum for continued narrowband operations.² The *900 MHz R&O* created a 3/3 megahertz broadband segment and adopted a transition mechanism based primarily on negotiations between prospective broadband licensees and existing narrowband incumbent licensees. The Commission considered a 5/5 megahertz broadband segment, but did not adopt it at that time, recognizing the need for continued narrowband operations and to observe the interference environment in adjacent bands after broadband deployment.³

Petition for Rulemaking. Petitioners ask that the Commission now allow the option of expanded 5/5 megahertz broadband networks in the 900 MHz band. They state expanded 5/5 megahertz broadband will support growing demand for wide-area, private, and secure wireless broadband networks for utilities, critical infrastructure, and business enterprise entities, among other benefits.⁴ They suggest that the Commission adopt a framework to authorize these networks by an initial application for a 5/5 megahertz license or by expanding an existing 3/3 megahertz license in the 900 MHz broadband segment upon a showing that all covered incumbents are cleared from the band.⁵ Under Petitioner's proposed plan,

¹ Petition of Ameren Services Company, et al. for Rulemaking, INBOX-1.401 (filed Feb. 28, 2024), <https://www.fcc.gov/ecfs/search/search-filings/filing/10229148220602> (Petition). The petitioners are Ameren Services Company; Anterix, Inc.; Enterprise Wireless Alliance; Evergy, Inc.; Lower Colorado River Authority; Portland General Electric; San Diego Gas & Electric; Southern Communications Services, Inc.; Utility Broadband Alliance; and Xcel Energy Services, Inc. (Petitioners).

² See *Review of the Commission's Rules Governing the 896-901/935-940 MHz Band*, WT Docket No. 17-200, Report and Order, Order of Proposed Modification, and Orders, 35 FCC Rcd 5183 (2020) (*900 MHz R&O*).

³ *Id.* at 5198, para. 33.

⁴ Petition at 1.

⁵ *Id.* at 11.

Petitioners assert narrowband incumbents would remain protected under the existing framework in the rules and would only vacate an existing narrowband segment to allow 5/5 megahertz broadband operations if the relevant parties made a private agreement to do so. Petitioners suggest that no changes are necessary to the incumbent interference, technical, or performance requirement rules to implement 5/5 megahertz broadband operations.⁶

We seek comment generally on the Petition and its request that the Commission provide an option for 5/5 megahertz broadband networks in the 900 MHz band through a voluntary transition process. In particular, we seek comment on whether existing rules would be sufficient to protect incumbent narrowband operations from interference, as well as whether those rules would be sufficient to protect operations in adjacent spectrum bands.

For this proceeding, we herein open a docket and assign a rulemaking number, as is typically assigned to petitions for rulemaking.

Filing Requirements. Pursuant to sections 1.403 and 1.405 of the Commission's rules,⁷ interested parties may file comments and reply comments on or before the dates indicated above and must reference **WT Docket No. 24-99**. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.⁸

- *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the ECFS: <https://www.fcc.gov/ecfs/>.
- *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
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Ex Parte Rules. This proceeding shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.¹⁰ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two

⁶ *Id.*

⁷ 47 CFR §§ 1.403, 1.405.

⁸ See *Electronic Filing of Documents in Rulemaking Proceedings*, GC Docket No. 97-113, Report and Order, 13 FCC Rcd 11322 (1998); 63 FR 24121 (1998).

⁹ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (OMD 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

¹⁰ See 47 CFR § 1.1200 *et seq.*

business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must: (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made; and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with section 1.1206(b) of the Commission's rules. In proceedings governed by section 1.49(f) of the rules or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

Availability of Documents. Comments, reply comments, and *ex parte* submissions will be available via ECFS. Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.

Additional Information. For further information regarding this Public Notice, please contact Jason Koslofsky, Attorney Advisor, Mobility Division, Wireless Telecommunications Bureau, at Jason.Koslofsky@fcc.gov.

- FCC -

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
One Ministries, Inc.
For Modification of the Television Market of
Station KQSL, Fort Bragg, California
)
)
) MB Docket No. 23-4
) CSR 9006-A
)

ORDER ON RECONSIDERATION

Adopted: April 2, 2024

Released: April 3, 2024

By the Chief, Media Bureau:

I. INTRODUCTION

1. One Ministries, Inc., (One Ministries or Petitioner), licensee of commercial television station KQSL(DT), Fort Bragg, California (Facility ID No. 8378) (KQSL or Station), filed a Petition for Reconsideration (PFR) pursuant to section 1.106 of the Commission’s rules requesting that the Media Bureau (Bureau) reconsider its Memorandum Opinion and Order (Bureau Order) denying One Ministries’ Petition requesting modification of the Station’s television market to include communities in Santa Rosa, California (Communities or Santa Rosa Communities) served by the relevant Comcast cable system in the area. The PFR is opposed by Comcast. One Ministries filed a Reply. For the reasons stated below, the PFR is denied.

II. BACKGROUND

A. The Bureau Order

2. One Ministries filed its Petition in 2022 to modify KQSL’s television market to include the Santa Rosa Communities served by Comcast on which KQSL was not being carried on a mandatory

1 One Ministries, Inc. Petition for Reconsideration for Modification of the Television Market of Station KQSL, Fort Bragg, California, MB Docket No. 23-4, CSR 9006-A (filed May 26, 2023).

2 47 CFR § 1.106.

3 One Ministries, Inc., For Modification of the Television Market of Station KQSL, Fort Bragg, California, Memorandum Opinion and Order, DA 23-361, (rel. April 28, 2023), 2023 WL 3433758 (Bureau Order).

4 One Ministries, Inc. Petition for Special Relief for Modification of the Television Market of Station KQSL, Fort Bragg, California, MB Docket No. 23-4 (filed Dec. 19, 2022), (KQSL Petition or Petition).

5 The Communities are Santa Rosa (CA0658) and Santa Rosa (CA0255). Bureau Order at 2023 WL 3433758, at *11, n.3.

6 The Petitioner has stated that according to the Commission’s Cable Operations and Licensing Systems (COALS) database, Comcast does business in the communities at issue herein under the name “Comcast of California/Connecticut/Michigan.” Bureau Order at n.2. For ease of reference, we will refer to the relevant cable system as “Comcast” throughout this proceeding.

7 Opposition to Petition for Reconsideration of One Ministries, Inc. for Modification of the Television Market of Station KQSL, Fort Bragg, California, MB Docket No. 23-4, CSR 9006-A (filed June 8, 2023) (Comcast Opposition).

8 Reply in Support of Petition Reconsideration of One Ministries, Inc. for Modification of the Television Market of Station KQSL, Fort Bragg, California, MB Docket No. 23-4, CSR-9006-A (filed June 15, 2023) (Reply).

basis.⁹ The Petitioner stated that Santa Rosa was located in the San Francisco-Oakland-San Jose Designated Market Area (DMA) and was, therefore, presumptively part of KQSL's market.¹⁰ Comcast opposed the Petition.¹¹ KQSL is licensed to Fort Bragg, California¹² and its primary broadcast location is a site on top of Cahto Peak, near Laytonville, California.¹³ It constructed a distributed transmission system (DTS) that supplemented KQSL's original transmitter with one in Geyserville, California.¹⁴ The Petitioner asserted that, as a result, KQSL extended its signal further south, therefore allowing broader coverage across Sonoma County.¹⁵ The Petitioner particularly noted that the DTS transmitter site was now located 23 miles from Santa Rosa, thus claiming further support for its inclusion in the Station's market, while yet acknowledging that the Stations' 41 dBu noise limited service contour (NLSC) did not reach Santa Rosa.¹⁶ One Ministries has described itself as an independent, Christian television station that invested in delivering programming about Santa Rosa that is originating from the Station's main studio located there in order to better serve the Communities, which it asserted were not well served by other stations in the DMA.¹⁷ The Petitioner further contended that this was reflected in KQSL's viewership in Sonoma County, which demonstrated a strong connection between the Station and the Communities.¹⁸

3. The Bureau considered the Petition pursuant to the statutory directive to "afford particular attention to the value of localism" by evaluating certain factors.¹⁹ The Bureau evaluated the information the Petition presented with respect to each of the five market modification factors described in the statute and did not find sufficient support to modify KQSL's market to add the Santa Rosa Communities. Regarding the first statutory factor, historical carriage, the Bureau found that this factor weighed only slightly in favor of the modification because the Station was carried in Santa Rosa by one MVPD, U-Verse, for slightly over a decade and was at that time carried on an adjacent Comcast system for fewer than two years.²⁰ The Bureau found that the second statutory factor, local service, weighed firmly against modification. Specifically, the Station's NLSC did not cover the Santa Rosa Communities despite expansion of its DTS, and the Bureau also noted that relying on translator coverage could not compensate for the lack of over-the-air coverage by the primary signal.²¹ Regarding geographic proximity, the Bureau determined that the Petitioner incorrectly emphasized the distances between the Santa Rosa Communities and its secondary DTS transmitter in Geyserville, rather than the greater distance between Santa Rosa and KQSL's primary transmitter located in Fort Bragg, the Station's Community of License.²² Additionally, the Bureau found that the Petitioner failed to show meaningful economic connections between Fort Bragg and the Santa Rosa Communities.²³ The Bureau did recognize that KQSL was airing more locally-

⁹ See *supra* n.4 and *Bureau Order*, 2023 WL 3433758, at *1, para. 1.

¹⁰ *Bureau Order* at *1, para. 1.

¹¹ *Id.*

¹² *Id.* at *2, para. 5. KQSL's main studio is located at 2240 Professional Drive in Santa Rosa. *Id.* at n.14.

¹³ *Bureau Order* at *2, para. 5. See also FCC File No. BLCDDT-20090610AAS.

¹⁴ *Bureau Order* at *3, para. 6. See also LMS File Nos. 0000058621 and 0000187371.

¹⁵ *Bureau Order* at *3, para. 6.

¹⁶ *Id.* at *3, para. 6, 8, and *6, para. 17.

¹⁷ *Id.* at *3, para. 6.

¹⁸ *Id.*

¹⁹ 47 U.S.C. § 534(h)(1)(C)(ii)(I)-(V).

²⁰ *Bureau Order* at *5, para. 15.

²¹ *Id.* at *8, para. 25.

²² *Id.*

²³ *Id.*

produced and locally-focused programming, but found that “standing alone,” this was not sufficient to demonstrate that the Station “provided coverage or other local service” to the Santa Rosa Communities.²⁴ With regard to the third statutory factor, promoting consumer access to in-state stations, the Bureau found that this factor weighed in favor of the modification, but did not find sufficient evidence to give this factor increased weight.²⁵ As to the fourth factor, carriage of other eligible stations, the Bureau found that Comcast already carried a large number of stations that served the Santa Rosa Communities and, consistent with precedent, assigned no weight to this factor.²⁶ Regarding the fifth factor, viewing patterns, the Bureau found that Petitioner’s evidentiary submission was not indicative of significant viewership and found that this factor weighed against the market modification.²⁷ Based on the overall evaluation of the facts, the Bureau denied the Petition.²⁸

B. The PFR and Related Pleadings

4. One Ministries asserts in its PFR that the *Bureau Order* failed to consider the effect of excluding Santa Rosa from KQSL’s market on localism, which it states is the essential component of the market determination process.²⁹ The Petitioner states that while the Commission may include additional communities within or exclude communities from a station’s television market, Congress instructed the Commission when considering such requests, to “afford particular attention to the value of localism.”³⁰ The Petitioner notes the five factors that the Commission may consider in this regard, but notes that these factors are not exhaustive and should not be applied in a formulaic fashion, which it asserts was the case in this matter.³¹

5. The Petitioner argues that the Bureau incorrectly discounted KQSL’s historical carriage, while acknowledging the Bureau’s recognition of the carriage of KQSL on U-Verse and the carriage of the Station on an adjacent Comcast system for a short period of time.³² The Petitioner provides no new information regarding this issue that may not have been available at the time. The Petitioner disagrees with the Bureau’s weighing of this first statutory factor as only slightly in favor of the modification and argues that it should have weighed strongly in favor of the request.³³

6. The Petitioner also asserts that the Bureau incorrectly applied the second statutory factor in finding that KQSL fails to provide local service to the Santa Rosa Communities.³⁴ According to One Ministries, the Bureau improperly elevated predicted coverage and geographic factors over the actual service that it contends KQSL provides to Santa Rosa.³⁵ The Petitioner asserts that the Bureau failed to give proper weight to what it terms as the significant amount of programming on KQSL that is produced

²⁴ *Id.*

²⁵ *Id.* at *9, para. 27.

²⁶ *Id.* at *10, para. 32.

²⁷ *Id.* at *11, para. 37.

²⁸ *Id.* at *11, para. 38.

²⁹ PFR at 2.

³⁰ *Id.*; see 47 U.S.C. § 534(h)(1)(i) & (ii).

³¹ *Id.* at 2-3.

³² *Id.* at 4-5.

³³ *Id.* at 5.

³⁴ *Id.*

³⁵ *Id.* at 6. One Ministries also argues that the Bureau improperly disregards the 23 mile proximity of Santa Rosa to the Station’s Geyserville DTS transmitter in its analysis of the geographic proximity prong of the second statutory factor. *Id.* at 12. The Bureau’s determination regarding this issue is discussed above, *supra* para. 3.

in and directed at Santa Rosa.³⁶ Additionally, the Petitioner states that the Bureau failed to account for what it again terms as significant support for carriage of the Station from Santa Rosa residents and businesses.³⁷ The Petitioner also claims that the Bureau ignored evidence that KQSL's signal is available over the air in Santa Rosa, notwithstanding its lack of predicted coverage.³⁸

7. The Petitioner also argues that the Bureau incorrectly applied the fourth statutory factor in finding that other stations carried by Comcast adequately serve the Santa Rosa Communities and improperly afforded no weight to this factor.³⁹ Finally, the Petitioner asserts that the Bureau incorrectly concluded that the fifth factor weighs against the Station.⁴⁰

8. In opposition, Comcast argues that One Ministries once again renews its failed arguments in its PFR seeking to use DTS to shift the service of KQSL from its community of license in Fort Bragg toward the geographically distant Santa Rosa Communities.⁴¹ Comcast asserts that the Petitioner merely restates arguments already fully presented and considered by the Bureau.⁴² Comcast argues that because One Ministries' PFR "fails to identify any material error in the Bureau Order," the Petitioner's request should be denied.⁴³

9. In reply, the Petitioner argues that Comcast wants to portray KQSL as just another station seeking to add a community in the same DMA to which the station provides no local service.⁴⁴ The Petitioner contends that KQSL is not just another station and Comcast amplifies what it asserts are the material errors in the Bureau Order by not acknowledging the unique and local service that KQSL provides to Santa Rosa.⁴⁵ The Petitioner argues that its PFR provides a valid basis for reconsideration and it has demonstrated so by its analysis of the statutory factors.⁴⁶

³⁶ *Id.* at 7. The Petitioner disagrees with the Bureau's analysis and conclusion regarding the local programming offered by KQSL, but does not identify a material error regarding the Bureau's ultimate finding.

³⁷ *Id.* at 10. The Petitioner offered several dozen supportive comments in this proceeding as recognized by the Bureau Order. *See Bureau Order* at *7, para. 23, n. 92. Compared to the entire population of Santa Rosa, the number of comments received would be considered miniscule by comparison to the entire population, yet were fully considered by the Bureau.

³⁸ *Id.* at 11. The Petitioner first noted the anecdotal evidence of off-air reception in Santa Rosa via measuring signal strength from a signal strength meter on the roof of the KQSL Santa Rosa studio in its Reply pleading in the underlying proceeding. *See Reply* at 8-9, n.27. The Bureau considered this submission, despite Comcast's inability to reply as this was a new matter raised in a responsive pleading, and determined that it was irrelevant, just as with translator coverage, because of KQSL's failure to place a NLSC over the Santa Rosa Communities.

³⁹ *Id.* at 16. As the Bureau has noted with regard to this factor, it is generally interpreted as enhancing a station's market modification petition if other stations do not sufficiently serve the communities at issue; however, other stations' service to the communities rarely has counted against a petition. *Bureau Order* at *9, para. 28. No further evidence has been provided by One Ministries to challenge the Bureau's determination and weighing of this factor, and the Petitioner merely reiterates its previous claims.

⁴⁰ *Id.* at 17. The Bureau considered the Petitioner's evidentiary submission with regard to this factor and found it lacking to indicate significant viewership. *Bureau Order* at *11, para. 37. The Petitioner again reiterates its claims, and disagrees with the Bureau's weighing of the factor. According to the Petitioner, even if significant viewing could not be found, the Bureau should have accounted for KQSL's status as a specialty station by effectively disregarding this factor, thereby not affording it the same weight as other factors. *Id.* at 18.

⁴¹ Comcast Opposition at i.

⁴² *Id.* While Comcast does address each of the Petitioner's arguments, we need not restate them here.

⁴³ Comcast Opposition at 2.

⁴⁴ Reply at 1.

⁴⁵ *Id.* at 1-2.

⁴⁶ *Id.* at 2.

III. DISCUSSION

10. Petitions for Reconsideration of decisions made pursuant to delegated authority are generally acted on by the same designated authority, and thus may be dismissed or denied by that authority when procedurally defective.⁴⁷ The Commission's rules explain that such a petition will "plainly not warrant consideration" if, among other possible reasons, it fails "to identify any material error, omission, or reason warranting reconsideration" or relies "on arguments that have been fully considered and rejected by the Commission within the same proceeding."⁴⁸ Even under those circumstances, a petition may be considered if it relies upon changed circumstances or facts or arguments not previously known by the petitioner.⁴⁹ Though a Petitioner may disagree with the Bureau's findings in a particular case, we will not grant reconsideration merely for the purpose of again debating matters on which we have deliberated upon and fully addressed.⁵⁰

11. The Petitioner has not shown any material error or omission in the *Bureau Order* or raised facts not known or not existing at the time its Petition was filed. The Petitioner simply disagrees with the weight the Bureau afforded the evidence presented. The Bureau considered all of the evidence submitted and arguments presented by the Petitioner in the underlying proceeding and analyzed them in conjunction with the statutory market modification criteria, paying particular attention to the value of localism.⁵¹ In the PFR, the Petitioner merely restates its version of the facts previously presented to the Bureau, and reiterates arguments previously considered and rejected in the *Bureau Order*. Nothing in the PFR alters the conclusion made in the *Bureau Order* that the facts do not support the grant of the underlying Petition to modify the market of KQSL, Fort Bragg, California, to include the Santa Rosa Communities served by Comcast.

IV. ORDERING CLAUSES

12. Accordingly, **IT IS ORDERED**, pursuant to section 614(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 534, and section 1.106 of the Commission's rules, 47 CFR § 1.106, that the captioned Petition for Reconsideration (MB Docket No. 23-4, CSR 9006-A) filed by One Ministries, Inc., **LLC IS DENIED**.

⁴⁷ 47 CFR. § 1.106(a)(1) ("Petitions requesting reconsideration of other final actions taken pursuant to delegated authority will be acted on by the designated authority or referred by such authority to the Commission.").

⁴⁸ 47 CFR § 1.106(p)(1),(3), adopted in *Amendment of Certain of the Commission's Part 1 Rules of Practice and Procedure and Part 0 Rules of Commission Organization*, Report and Order, 26 FCC Rcd 1594, 1606, para. 27 (2011) ("[f]or a similarly procedurally defective or repetitive petition directed to a bureau or office (rather than the full Commission) seeking reconsideration of a staff-level decision, we delegate authority to the relevant bureau or office to dismiss or deny the petition.").

⁴⁹ 47 CFR. § 1.106(b)(2), (c).

⁵⁰ *WWIZ, Inc.*, Memorandum Opinion and Order, 37 FCC 685, 686 (1964), *aff'd sub nom. Lorain Journal Co. v. FCC*, 351 F.2d 824 (D.C. Cir. 1965), *cert. denied*, 383 U.S. 967 (1966) (*WWIZ*). See also *Bennett Gilbert Gaines and WCBM Maryland, Inc.*, 8 FCC Rcd 3986 (Rev. Bd. 1993) ("To be successful, a petition for reconsideration must rely on new facts, changed circumstances, or material errors or omissions in the underlying opinion. A petition which simply reiterates arguments previously considered and rejected will be denied." [internal citations omitted]); *Warren C. Havens Environmental LLC Petition for Reconsideration*, Order on Reconsideration, 30 FCC Rcd 2635, 2640 (2015) ("a Petition for Reconsideration that simply reiterates arguments previously considered and rejected will be denied"); *Capstar TX, LLC for a New FM Translator Station at Modesto, CA*, Memorandum Opinion and Order, 37 FCC Rcd 11073, 11075 (2022) ("[m]ere disagreement with the Bureau's findings does not provide a valid basis for reconsideration").

⁵¹ 47 U.S.C. § 534(h)(1)(C)(ii)(I)-(V).

13. This action is taken pursuant to authority delegated by section 0.283 of the Commission's rules.⁵²

FEDERAL COMMUNICATIONS COMMISSION

Holly Saurer
Chief,
Media Bureau

⁵² 47 CFR § 0.283.



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information: 202-418-0500

Internet: www.fcc.gov

TTY: 888-835-5322

DA 24-322

Released: April 3, 2024

**MEDIA BUREAU ANNOUNCES COMMENT AND REPLY COMMENT DEADLINES FOR
SECOND FNPRM SEEKING COMMENT ON REINSTATEMENT OF THE
FCC FORM 395-A DATA COLLECTION**

MB Docket No. 98-204

Comment Date: April 29, 2024

Reply Comment Date: May 13, 2024

On February 22, 2024, the Commission released a *Second Further Notice of Proposed Rulemaking (Second FNPRM)* that sought comment on reinstating collection of the FCC Form 395-A, which seeks to gather workforce composition data regarding multichannel video programming distributors (MVPDs) on an annual basis.¹ The Commission set deadlines for filing comments and reply comments in response to the *Second FNPRM* at 30 and 45 days, respectively, after publication of the *Second FNPRM* in the Federal Register.²

A summary of the *Second FNPRM* was published in the Federal Register on March 28, 2024.³ Accordingly, comments will be due on or before April 29, 2024 and reply comments on or before May 13, 2024. Commenters should follow the filing instructions provided in the *Second FNPRM*.⁴ The *Second FNPRM* is available on the Commission's website.⁵

For additional information, contact Christopher Sova of the Industry Analysis Division, Media Bureau at Christopher.Sova@fcc.gov or (202) 418-1868.

- FCC -

¹ *Review of the Commission's Broadcast and Cable Equal Employment Opportunity Rules and Policies*, Fourth Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking, FCC 24-18, paras. 62-67 (Feb. 22, 2024). The *Second FNPRM* was part of a larger document that also included an order reinstating the Commission's collection of FCC Form 395-B.

² *Id.* at 1.

³ Federal Communications Commission, *Review of the Commission's Broadcast and Cable Equal Employment Opportunity Rules and Policies*, 89 Fed. Reg. 21478 (Mar. 28, 2024).

⁴ See *Second FNPRM* at para. 69.

⁵ See <https://www.fcc.gov/document/fcc-reinstates-use-eeo-form-395-b>.



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-323

Released: April 4, 2024

BROADCAST STATION TOTALS AS OF MARCH 31, 2024

The Commission has announced the following totals for broadcast stations licensed as of March 31, 2024:

| | | |
|---------------------------------|-------|---------------|
| AM STATIONS | 4,427 | |
| FM COMMERCIAL | 6,663 | |
| FM EDUCATIONAL | 4,320 | |
| TOTAL | | 15,380 |
| UHF COMMERCIAL TV | 1,015 | |
| VHF COMMERCIAL TV | 367 | |
| UHF EDUCATIONAL TV | 267 | |
| VHF EDUCATIONAL TV | 116 | |
| TOTAL | | 1,765 |
| CLASS A UHF STATIONS | 349 | |
| CLASS A VHF STATIONS | 30 | |
| TOTAL | | 379 |
| FM TRANSLATORS & BOOSTERS | 8,913 | |
| UHF TRANSLATORS | 2,459 | |
| VHF TRANSLATORS | 659 | |
| TOTAL | | 12,031 |
| UHF LOW POWER TV | 1,516 | |
| VHF LOW POWER TV | 313 | |
| TOTAL | | 1,829 |
| LOW POWER FM | 1,960 | |
| TOTAL | | 1,960 |
| TOTAL BROADCAST STATIONS | | 33,344 |

- FCC -



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-324

Released: April 4, 2024

ROBOCALL ENFORCEMENT NOTICE TO ALL U.S.-BASED VOICE SERVICE PROVIDERS

FCC Enforcement Bureau Notifies All U.S.-Based Voice Service Providers of Rules Permitting Them to Block Calls Transmitting from Veriwave Telco, LLC.

File No. EB-TCD-24-00036355

By the Chief, Enforcement Bureau:

The Enforcement Bureau (Bureau) of the Federal Communications Commission (FCC or Commission) issues this *Public Notice* to notify all U.S.-based voice service providers about substantial amounts of apparently unlawful tax relief robocalls originating from Veriwave Telco, LLC (Veriwave). **Pursuant to section 64.1200(k)(4) of the Commission's rules, we hereby notify all U.S.-based voice service providers that if Veriwave fails to effectively mitigate illegal traffic, including the identified traffic described in the cease-and-desist letter (CDL) listed below and substantially similar traffic, within 48 hours of the date of this *Public Notice*, U.S.-based voice service providers may block voice calls or cease to accept traffic¹ from Veriwave, without liability under the Communications Act of 1934, as amended, or the Commission's rules.²**

Contemporaneous with this *Public Notice*, the Bureau is issuing a CDL to the following voice service provider:³

- **Veriwave**

Veriwave apparently originated a substantial volume of unlawful robocalls related to tax debt relief to wireless telephone numbers that apparently violated the Telephone Consumer Protection Act (TCPA) and the Commission's implementing rules.⁴ Pursuant to the CDL, Veriwave must: (1) promptly investigate the traffic identified in the CDL; (2) block or cease accepting the identified traffic and substantially similar traffic on an ongoing basis (unless it determines that the identified traffic is legal and provides a reasonable explanation to support that conclusion); and (3) report the results of the investigation to the Bureau within 14 days of the date of the CDL.⁵ If Veriwave fails to comply with those requirements, the

¹ A voice service provider may not block a voice call if the call is an emergency call placed to 911. *See* 47 CFR § 64.1200(k)(5).

² *Id.* § 64.1200(k)(4) (permitting downstream voice service providers to block calls from a notified provider that fails to either (a) effectively mitigate the identified traffic within 48 hours or (b) implement effective measures to prevent new and renewing customers from using its network to originate illegal calls).

³ Letter from Loyaan A. Egal, Chief, Enforcement Bureau, to Felix Hernandez, Compliance Officer, Veriwave Telco, LLC (April 4, 2024) (Veriwave Letter). This letter is available on the Commission's website at <https://www.fcc.gov/robocall-facilitators-must-cease-and-desist>.

⁴ *See* Traceback Consortium Subpoena Response (Jan. 31, 2024) (on file at EB-TCD-24-00036355); Traceback Consortium Subpoena Response (March 5, 2024) (on file at EB-TCD-24-00036355) (collectively, ITG Subpoena Responses); *see also* 47 U.S.C. § 227(b)(1)(A); 47 CFR § 64.1200(a)(1)-(2).

⁵ *See* 47 CFR § 64.1200(n)(2)(i)(A); *see also* Veriwave Letter at 5.

Bureau may ultimately issue a Final Determination Order, which would require downstream voice service providers to block and cease accepting all traffic from Veriwave.⁶

The CDL also serves as notice that downstream U.S.-based voice service providers may begin blocking all calls or cease accepting traffic from Veriwave after notifying the Commission of their decision, and providing a brief summary of their basis for making such determination, if Veriwave either (a) fails to effectively mitigate illegal traffic within 48 hours of the delivery date of the CDL or (b) fails to implement effective measures to prevent new and renewing customers from using its network to originate illegal calls within 14 days of the delivery date of the CDL.⁷ **U.S.-based voice service providers may block ALL call traffic transmitting from Veriwave’s network if it fails to act within either deadline.**

Purpose. Protecting individuals and entities from the dangers of unwanted and illegal robocalls is the Commission’s top consumer protection priority.⁸ As part of its multi-pronged approach to combatting illegal robocalls, the Commission has taken steps to encourage voice service providers to block suspected illegal robocalls.⁹ The Commission permits voice service providers to block traffic from other voice service providers that the Bureau has warned are originating or transmitting suspected illegal robocalls, if the warned voice service providers fail to take appropriate and timely action to mitigate such traffic.¹⁰ The Bureau has issued numerous “cease-and-desist” letters, warning voice service providers that they were originating or transmitting suspected illegal robocalls and could be subject to blocking.¹¹ The Bureau may also ultimately order voice service providers that are immediately downstream to cease accepting traffic from an upstream voice service provider that does not comply with the Commission’s rules.¹²

Nature of Apparently Unlawful Robocall Traffic. YouMail, Inc. (YouMail)¹³ estimates that between November 1, 2023 and January 31, 2024, approximately 15.8 million robocalls playing prerecorded messages pertaining to an unknown¹⁴ “National Tax Relief Program” were placed to call recipients

⁶ 47 CFR § 64.1200(n)(2)-(3).

⁷ *Id.* § 64.1200(k)(4).

⁸ *Consumer Guide: Stop Unwanted Robocalls and Texts*, Fed. Comm’n Comm’n, <https://www.fcc.gov/consumers/guides/stop-unwanted-robocalls-and-texts> (last visited Mar. 6, 2024) (“Unwanted calls – including illegal and spoofed robocalls - are the FCC’s top consumer complaint and our top consumer protection priority.”).

⁹ See 47 CFR § 64.1200(k); see, e.g., *Advanced Methods to Target and Eliminate Unlawful Robocalls*, CG Docket No. 17-59, Third Report and Order, Order on Reconsideration, and Fourth Further Notice of Proposed Rulemaking, 35 FCC Rcd 7614, 7622, para. 19 (2020) (*July 2020 Call Blocking Order*) (establishing safe harbor for blocking traffic from bad-actor upstream providers); *Advanced Methods to Target and Eliminate Unlawful Robocalls; Call Authentication Trust Anchor*, CG Docket No. 17-59, WC Docket No. 17-97, Declaratory Ruling and Third Further Notice of Proposed Rulemaking, 34 FCC Rcd 4876, 4887-88, paras. 34-46 (2019) (blocking based on reasonable analytics with consumer opt-out and consumer whitelists); *Advanced Methods to Target and Eliminate Unlawful Robocalls*, CG Docket No. 17-59, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 9706, 9709, para. 9 (2017) (blocking of certain categories of calls highly likely to be illegal).

¹⁰ See *July 2020 Call Blocking Order*, 35 FCC Rcd at 7628-29, paras. 36-39; 47 CFR § 64.1200(k)(4).

¹¹ These letters are available on the Commission’s website at <https://www.fcc.gov/robocall-facilitators-must-cease-and-desist>.

¹² 47 CFR § 64.1200(n)(2)-(3).

¹³ YouMail is a third-party robocall identification and blocking service. See *About Us*, YouMail, <https://www.youmail.com/home/corp/about> (last visited Mar. 4, 2024).

¹⁴ The Bureau has found no evidence of the existence of the “National Tax Relief Program.”

(recipients).¹⁵ This robocalling campaign increased in volume in the three months immediately preceding the 2024 filing season start date.¹⁶ This start date, and the lead up to it, may be particularly stressful for tax filers with arrears from prior years as their 2023 tax refund could be subject to withholding by the Internal Revenue Service.¹⁷ This robocall campaign apparently preyed upon these filers.

USTelecom's Industry Traceback Group (ITG)¹⁸ conducted tracebacks on 23 calls associated with the "National Tax Relief Program" made to wireless numbers between November 30, 2023 and January 29, 2024.¹⁹ All 23 calls, identified in Attachment A to this Notice, were part of an apparently illegal robocalling campaign featuring artificial or prerecorded voice messages from the "National Tax Relief Program" offering purported tax debt relief services under the same name.²⁰ Multiple messages were part of the campaign, but each pre-recorded message began by saying that the caller was contacting the called party to ensure the recipient received information on the new National Tax Relief Program.²¹ Many of the messages further appealed to recipients with the offer to "rapidly clear" their tax debt with the National Tax Relief Program.²² After describing the supposed benefit of the program, some recordings then prompted recipients to answer as to whether they owed any taxes.²³ In some instances, such as in the example transcript below, the recordings asked the recipient whether they had any tax debt, described the requirements of the program, and prompted them to press one to confirm if they qualified for the "special program":²⁴

Alright, uh, so I've been tasked to personally contact you and make sure that you have been provided the information about the new National Tax Relief Program. This relevant information is extremely important with helping those that owe back taxes to rapidly clear their debt. So can you tell me if you currently owe any back taxes at this time? Ok, let me go ahead and get you this information then. One moment please. Here we go.

Ok, so this special program has been recently approved as of August 2022. The purpose of the Tax Dismissal Program is to help those struggling with tax debt. However, there's certain requirements to be eligible. You cannot currently be in any other tax debt consolidation or settlement program. You cannot currently be in bankruptcy and you must have a household income of under \$250,000 a year, but you do have to have a

¹⁵ See *Daily Call Volume per Campaign*, YouMail, Inc., <https://app.sigmacomputing.com/youmailinc/workbook/> (last visited Mar. 19, 2023) (on file at EB-TCD-24-00036355).

¹⁶ *Id.*; *2024 Tax Filing Season Set for January 29; IRS Continues to Make Improvements to Help Taxpayers*, Internal Revenue Serv. (Jan. 8, 2024), <https://www.irs.gov/newsroom/2024-tax-filing-season-set-for-january-29-irs-continues-to-make-improvements-to-help-taxpayers#:~:text=January%2029%3A%20Filing%20season%20start%20Due%20date%20for%20extension%20filers> (explaining the IRS began accepting 2023 tax returns on January 29, 2024).

¹⁷ See *Topic No. 201, The Collection Process*, Internal Revenue Serv., <https://www.irs.gov/taxtopics/tc201> (last visited Mar. 19, 2024) ("[A]ny future federal tax refunds or state income tax refunds that you're due may be seized and applied to your federal tax liability").

¹⁸ The ITG is the registered industry consortium selected pursuant to the TRACED Act to conduct tracebacks. See *Implementing Section 13(d) of the Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence Act (TRACED Act)*, EB Docket No. 20-22, Report and Order, DA 23-719, 2023 WL 5358422, at *1, para. 1 (EB Aug. 18, 2023).

¹⁹ See ITG Subpoena Responses, *supra* note 4.

²⁰ See *id.*

²¹ See *id.*

²² See *id.*

²³ See *id.*

²⁴ See *id.*

monthly income of at least \$2,000 a month. So I need to ask you, do you meet these minimum requirements for eligibility? Press 1 for yes, 2 for no.²⁵

If the recipient connected to a live operator, the live operator reportedly asked for personal information, including date of birth and social security number.²⁶ The calls did not provide any call back number.²⁷

The ITG investigated the traceback calls and determined that Veriwave was the originating provider.²⁸ The ITG notified Veriwave of these calls and provided the Company with supporting data identifying each call.²⁹ Veriwave did not contest it had originated the calls and identified one client as the source of all of the calls.³⁰ Veriwave did not offer evidence of consent for the calls or contest the unlawful nature of the calls.³¹ Nor did Veriwave contest that any exceptions to the rules applied.³² The Bureau reached out to Veriwave via the email address Veriwave provided to the Bureau for communication about its robocall mitigation efforts, but the email was returned as undeliverable.³³

Potential Further Enforcement Action. The Bureau may issue an Initial Determination Order stating the Bureau's initial determination that Veriwave is not in compliance with section 64.1200 of the Commission's rules if: (a) Veriwave fails to respond to the CDL; (b) Veriwave provides an insufficient response; (c) Veriwave continues to originate substantially similar traffic or allow substantially similar traffic onto the U.S. network after the 14-day period identified above; or (d) the Bureau determines the traffic is illegal despite Veriwave's assertions to the contrary.³⁴ If the Bureau issues an Initial Determination Order, Veriwave will have an opportunity to respond.³⁵ If Veriwave does not provide an adequate response to the Initial Determination Order, or continues to originate or allow substantially similar traffic onto the U.S. network, the Bureau may issue a Final Determination Order in EB Docket No. 22-174 concluding that Veriwave is not in compliance with section 64.1200 of the Commission's rules.³⁶ **In the event that the Bureau issues a Final Determination Order in this matter, pursuant to section 64.1200(n)(3) of the Commission's Rules, all U.S.-based voice service providers shall be**

²⁵ See *id.*

²⁶ See FCC Complaint #6613274 (Nov. 30, 2023) (on file at EB-TCD-24-00036355) ("It goes on and on and on. They ask horrible personal questions."); see also FCC Complaint #6515954 (Oct. 12, 2023) (on file at EB-TCD-24-00036355).

²⁷ See ITG Subpoena Responses, *supra* note 4.

²⁸ See *id.*

²⁹ See *id.*

³⁰ See *id.*

³¹ See *id.*

³² See *id.*

³³ See Automatic response to e-mail from Caitlin Barbas, Attorney Advisor, Telecommunications Consumers Division, Enforcement Bureau, to Felix Hernandez, Compliance Officer, Veriwave Telco, LLC, (Feb. 2, 2024) (on file at EB-TCD-24-00036355) (showing email could not be delivered as the host platform was not found). The Bureau's email attempt also included the two email addresses provided to the Bureau by the ITG. See *id.*; see also ITG Subpoena Responses, *supra* note 4.

³⁴ 47 CFR § 64.1200(n)(2)(ii).

³⁵ *Id.*

³⁶ *Id.* § 64.1200(n)(2)(iii), (3); *Advanced Methods to Target and Eliminate Unlawful Robocalls, Call Authentication Trust Anchor*, CG Docket No. 17-59, WC Docket No. 17-97, Seventh Report and Order in CG Docket 17-59 and WC Docket 17-97, Eighth Further Notice of Proposed Rulemaking in CG Docket 17-59, and Third Notice of Inquiry in CG Docket 17-59, FCC 23-37, 2023 WL 3686042, at *11, para. 37 (2023).

required to block Veriwave's traffic beginning 30 days from the release date of the Final Determination Order.³⁷

Contact Information. For further information, please contact Kristi Thompson, Division Chief, Telecommunications Consumers Division, Enforcement Bureau, at 202-418-1318 or by email at Kristi.Thompson@fcc.gov; or Daniel Stepanicich, Assistant Division Chief, Telecommunications Consumers Division, Enforcement Bureau, at 202-418-7451 or by email at Daniel.Stepanicich@fcc.gov.

ENFORCEMENT BUREAU
Loyaan A. Egal
Chief

³⁷ *Id.* § 64.1200(n)(3). Providers must monitor EB Docket No. 22-174 and initiate blocking beginning 30 days from the release date of the Final Determination Order. *Id.*



PUBLIC NOTICE

Federal Communications Commission
45 L Street N.E.
Washington, DC 20554

News Media Information 202 / 418-0500
Internet: <https://www.fcc.gov>

DA 24-325

Released: April 3, 2024

INTERCONNECTED VOIP NUMBERING AUTHORIZATION APPLICATION FILED BY UNION TELEPHONE COMPANY PURSUANT TO SECTION 52.15(g)(3) OF THE COMMISSION'S RULES

STREAMLINED PLEADING CYCLE ESTABLISHED

WC Docket No. 23-310¹

Comments Due: April 18, 2024

Union Telephone Company (UTC), an interconnected Voice over Internet Protocol (VoIP) provider, filed a Numbering Authorization Application (Application) pursuant to section 52.15(g)(3) of the Federal Communications Commission's rules, seeking authorization to obtain North American Numbering Plan telephone numbers directly from the Numbering Administrator.² In its Application, UTC indicates that it intends to initially request numbers in Wyoming.³

In its Application, UTC includes the contact information and acknowledgements required by section 52.15(g)(3)(i) of the Commission's rules.⁴ UTC provides evidence that it will be capable of providing service within 60 days of the numbering resources activation date.⁵ UTC also certifies that it complies with the contribution, regulatory fee, and 911 obligations set forth in section 52.15(g)(3)(i)(E).⁶ In addition, UTC certifies that it has the financial, managerial, and technical expertise to provide reliable service.⁷ UTC further certifies that none of its key management and technical personnel are being or have

¹ We assign WC Docket No. 23-310 for this Application and all related filings by the Applicant and interested parties. See *Wireline Competition Bureau Announces Commencement Date and Process for Interconnected VoIP Providers to File Applications for Authorization to Obtain Telephone Numbers*, Public Notice, 31 FCC Rcd 949, 950 (WCB 2016).

² See Application of UTC for Authorization to Obtain Numbering Resources, WC Docket No. 23-310 (filed Sept. 11, 2023), <https://www.fcc.gov/ecfs/document/1091180315866/1>; Supplement to UTC, WC Docket No. 23-310 (filed Mar. 7, 2024), <https://www.fcc.gov/ecfs/document/10307284156305/1> (Supplement); see also 47 CFR § 52.15(g)(3).

³ Application at 3. See also *Numbering Policies for Modern Communications et al.*, Report and Order, 30 FCC Rcd 6839, 6850, para. 24 & n.74 (2015) (*VoIP Direct Access to Numbers Order*); Second Report and Order and Second Further Notice of Proposed Rulemaking, FCC 23-75 (2023) (adopting certain new rules for VoIP numbering authorizations that will become effective after Office of Management and Budget review)

⁴ Application at 2-4; see 47 CFR § 52.15(g)(3)(i)(A)-(C), (F).

⁵ Application at 3; see Supplement at 2; see 47 CFR § 52.15(g)(3)(i)(D).

⁶ Application at 3; see 47 CFR § 52.15(g)(3)(i)(E); see also 47 CFR §§ 1.1154, 52.17, 52.32, 64.604(c)(5)(iii); 47 CFR pts. 9 and 54, subpt. H.

⁷ Application at 3-4; see 47 CFR § 52.15(g)(3)(i)(F).

been investigated by the Commission, or any law enforcement or regulatory agency, for failure to comply with any law, rule, or order.⁸ Finally, UTC certifies that no party to the Application is subject to a denial of Federal benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1988.⁹

GENERAL INFORMATION

The Application identified herein has been found, upon initial review, to be acceptable for filing as a streamlined application. The Commission reserves the right to return any application if, upon further examination, it is determined to be defective and not in conformance with the Commission's rules and policies. Pursuant to section 52.15(g)(3)(ii) of the Commission's rules, interested parties may file comments in WC Docket No. 23-310 **on or before April 18, 2024**.¹⁰ Commenters must serve a copy of comments on UTC no later than the above comment filing date.

- *Electronic Filers:* Comments may be filed electronically by accessing ECFS at <https://apps.fcc.gov/ecfs/>.
- *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.
 - Filings can be sent by commercial overnight courier or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street NE, Washington, DC 20554.
 - Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, DA 20-304 (March 19, 2020). <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>
- *People with Disabilities:* We ask that requests for accommodations be made as soon as possible in order to allow the agency to satisfy such requests whenever possible. Send an email to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530.

⁸ Application at 4; *see* 47 CFR § 52.15(g)(3)(i)(F).

⁹ Application at 4; *see* 47 CFR § 52.15(g)(3)(i)(G); *see also* 21 U.S.C. § 862.

¹⁰ 47 CFR § 52.15(g)(3)(ii).

In addition, e-mail one copy of each pleading to each of the following:

- 1) DAA@fcc.gov;
- 2) Margoux Newman, Competition Policy Division, Wireline Competition Bureau, Margoux.Newman@fcc.gov;
- 3) Jordan Marie Reth, Competition Policy Division, Wireline Competition Bureau, Jordan.Reth@fcc.gov.

The proceeding in this Notice shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b), 47 CFR § 1.1206(b). Participants in this proceeding should familiarize themselves with the Commission’s *ex parte* rules.

To allow the Commission to consider fully all substantive issues regarding the application in as timely and efficient a manner as possible, petitioners and commenters should raise all issues in their initial filings. New issues may not be raised in responses or replies.¹¹ A party or interested person seeking to raise a new issue after the pleading cycle has closed must show good cause why it was not possible for it to have raised the issue previously. Submissions after the pleading cycle has closed that seek to raise new issues based on new facts or newly discovered facts should be filed within 15 days after such facts are discovered. Absent such a showing of good cause, any issues not timely raised may be disregarded by the Commission.

Please contact DAA@fcc.gov, Margoux Newman at Margoux.Newman@fcc.gov, or Jordan Reth at Jordan.Reth@fcc.gov for further information.

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¹¹ See 47 CFR § 1.45(c).



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-327

Released: April 4, 2024

GUIDANCE TO 2.5 GHZ RURAL TRIBAL PRIORITY WINDOW LICENSEES ON DEMONSTRATING COMPLIANCE WITH INTERIM PERFORMANCE REQUIREMENTS

By this *Public Notice*, the Broadband Division of the Wireless Telecommunications Bureau (Bureau) provides guidance to 2.5 GHz Rural Tribal Priority Window (Tribal Window)¹ licensees on complying with the interim performance requirements deadline contained with section 27.14(u)(4),² as modified by the Commission's July 8, 2022 Public Notice.³ Please note that the Commission uses the terms performance requirements, construction requirements and buildout requirements interchangeably and in each case we are referring to the requirement for a licensee to demonstrate that it has constructed and is operating pursuant to the license issued by the Commission.

As discussed in greater detail below, all new licensees in this band, including Tribal Window licensees, are subject to interim and final performance requirements within four and eight years of initial license grant, respectively, and should file notifications demonstrating completion of any related construction work by the applicable deadline.⁴ Licenses granted to more than 150 Tribal Window licensees have interim performance deadlines in October 2024; deadlines for later-granted licenses come due on the four year anniversary of the license grant.⁵ Tribal Window licensees can confirm the date of their interim performance deadline by referring to their license records in the Universal Licensing System

¹ On July 11, 2019, the Commission modernized the regulatory framework for the 2.5 GHz band to make this swath of vital mid-band spectrum available for advanced wireless services, including 5G. *Transforming the 2.5 GHz Band*, Report and Order, 34 FCC Rcd 5446 (2019) (*2.5 GHz Report and Order*). Among other things, the *2.5 GHz Report and Order* established a priority application window for federally recognized Tribes and Tribally owned and controlled entities to obtain licenses for unassigned 2.5 GHz spectrum over their rural Tribal lands to address the communications needs of their communities.

² 47 CFR § 27.14(u)(4).

³ *Wireless Telecommunications Bureau Waives 2.5 GHz Rural Tribal Window Specific Interim and Final Performance Deadlines*, Public Notice, 37 FCC Rcd 7829 (2022) (*2022 Public Notice*). On July 8, 2022, on its own motion, the Bureau waived the Tribal-specific interim and final performance deadlines in subsection 27.14(u)(4), 47 CFR § 27.14(u)(4), of the Commission's rules for all 2.5 GHz Tribal Window licensees to afford them flexibility as they complete their deployments. Thus, all Tribal Window licensees are subject to the generally applicable performance deadlines for all other 2.5 GHz licenses initially granted after October 25, 2019, as set forth in subsections 27.14(u)(2) and (3) of the Commission's rules. 47 CFR § 27.14(u)(2), (3).

⁴ 47 CFR § 27.14(u)(2)-(5). All 2.5 GHz licenses initially granted after October 25, 2019, are subject to the same interim and final performance requirements, which may be met by showing, *inter alia*, either of the following: (1) 80% population coverage for mobile or point-to-multipoint service (50% interim); or (2) 40 links per million persons (one link per 25,000) for fixed point-to-point service (20 links per million interim (one link per 50,000)). *See id.*; *2.5 GHz Report and Order*, 34 FCC Rcd at 5483, para. 101; *2022 Public Notice*.

⁵ 47 CFR § 27.14(u)(2), (3). *See* News Release, *FCC Grants First Licenses in 2.5 GHz Rural Tribal Priority Window* (Oct. 23, 2020), <https://www.fcc.gov/document/fcc-grants-first-licenses-25-ghz-rural-tribal-priority-window>.

(ULS).⁶ To facilitate the submission of related construction notification filings, below we provide important guidance on the information to include, how to make the filing, and the relationship between the interim and final performance requirements and filing deadlines.

Interim Performance Requirements

There are two ways that Tribal Window licensees can show that they have met the interim performance requirements applicable to their licenses:

- Licensees providing mobile or point-to-multipoint service must demonstrate reliable signal coverage of 50% of the population of the geographic service area within four years of initial license grant;⁷ or
- Licensees providing fixed point-to-point service must demonstrate operation of one link for each 50,000 persons in the geographic service area within four years of initial license grant.⁸

As discussed in greater detail below, if a Tribal Window licensee has met its interim performance requirements, it must make its interim performance requirements showing by filing a construction notification (NT) application with supporting appendices filed in ULS. This application may be filed at any point once the interim buildout work is complete, and the licensee need not wait for the actual deadline to make its submission. We therefore encourage Tribal Window licensees to file construction notification applications at their earliest convenience, but no later than 15 days after the four year anniversary of their license grants.

Information To Make Interim Performance Requirements Showing

The information required in connection with an interim performance requirements showing will vary depending on the nature of the service being provided and the type of showing the licensee is attempting to make. What follows is general guidance on the type of information that should be provided. If after reviewing the showing staff determines that additional information is necessary, either the licensee will be informally contacted with a request for additional information, or the application may be returned. Accordingly, it is imperative that the contact information provided on the application be accurate and current.

All licensees should provide a narrative description of the type of service they are providing. The description must be sufficient for staff to understand how and by whom the facilities are being used and where there is signal coverage. In addition, licensees must indicate the source for the population information provided in the showing (*e.g.*, Census Bureau, Bureau of Indian Affairs). Each showing shall also include appropriate technical information, as described below, that permits staff to confirm that the interim performance benchmark is actually being met.

⁶ The interim performance deadline may be viewed in ULS by looking at the license under the Main tab and viewing the “1st Buildout Deadline” date. In addition to searching for individual license records in ULS, licensees can find a list of all licenses granted as a result of the Tribal Window, with a link to the relevant ULS licensing records, at the Commission’s website. *See* FCC, *2.5 GHz Tribal License Details* (Mar. 19, 2024), <https://www.fcc.gov/wireless/25-tribal-licenses>.

⁷ 47 CFR § 27.14(u)(2).

⁸ *Id.* § 27.14(u)(3).

“Licensees providing mobile or point-to-multipoint service must demonstrate reliable signal coverage of 50% of the population of the geographic service area.” If the Tribal Window licensee is providing service using one base station, the interim performance requirements filing must include, at a minimum:

- Geographic coordinates of the base station;
- Total population of licensed area;
- Percentage of population within the area of reliable signal coverage;
- Received signal level at edge of coverage area; and
- Transmitter EIRP (Equivalent Isotropic Radiated Power = $P_t - L_c + G_a$). P_t represents the output power of the transmitter (dBm). L_c represents the cable loss (dB). G_a represents the antenna gain (dBi).

In cases where the Tribal Window licensee employs multiple base stations in its network, the interim performance requirements filing must include, at a minimum:

- Geographic coordinates of all base stations;
- Total population of licensed area;
- Percentage of population within the area of reliable signal coverage;
- Received signal level at edge of coverage area;
- Map of the coverage area (as discussed below); and
- Link budget – ex. Received power (dB) = transmitted power (dB) + gains (dB) – losses (dB).

“Licensees providing fixed point-to-point service must demonstrate operation of one link for each 50,000 persons in the geographic service area.” In cases where the Tribal Window licensee is providing fixed point-to-point service, the interim performance requirements filing must include, at a minimum:

- Geographic coordinates on both end points of each link;
- Amount of bandwidth being used in point-to-point link; and
- Total population of licensed area.

Construction Notification Application Filing Instructions

Application Basics: All Tribal Window licensees that meet the interim performance requirements are required to file construction notifications in the form of applications using the notification of completion of construction (NT) application purpose.⁹ All such applications must be filed electronically using ULS. The licensee must provide its FCC Registration Number (FRN) and password in order to submit the application.¹⁰

⁹ A licensee who does not meet the interim performance requirements is not required to file anything. However, as noted below, the final performance requirements for that license will automatically be advanced by two years. See 47 CFR § 27.14(u)(5).

¹⁰ Applicants login to ULS using the FRN on their license, and the password. To reset an FRN password, applicants must create an FCC Username Account and link their FRN to that account. Please see the [Wireless Telecommunications Bureau Knowledge Base](#) for instructions. Also note that to enhance security, beginning March 29, 2024, Multi-Factor Authentication (MFA) will be mandatory for all CORES accounts. The MFA code will be sent to the username account email as well as any secondary email provided. Please ensure your FCC username is up to date and that you have access to the corresponding email inbox. If you no longer have access to the

(continued....)

Deadlines for Filing: Interim performance requirements showings should be filed within 15 days after the date that is four years after the license was initially granted by the Commission (“Filing Deadline”).¹¹ Licensees may verify the date of their interim performance requirements deadline(s) in ULS by looking at each license under the Main tab and viewing the “1st Buildout Deadline” date. A request for extension of time to demonstrate compliance with the interim performance requirements showing must be filed by the interim performance deadline.¹² Applications submitted after the relevant interim performance deadline must be accompanied by a request for waiver, along with a justification for a waiver.¹³

Filing Instructions: The following instructions apply to filing construction notifications.

- *Single Call Sign:* A licensee filing a notification for a single call sign should login to ULS License Manager using the licensee’s FRN and password and click on the applicable call sign link displayed on the “My Licenses” page. On the “License at a Glance” screen, the licensee should select the “Notify the FCC” link in the “Work on This License” box on the right side of the screen. The system will then launch an NT (construction notification) application for the call sign from which the application was initiated. Call signs cannot be added to an application that is initiated for a single call sign.
- *Multiple Call Signs:* To launch an application for multiple call signs, the licensee should log in to ULS License Manager and select the “Notify the FCC” link in the left-hand navigation menu in License Manager.
- *Purpose of Filing:* Once an NT application is launched, the licensee will be guided through a series of steps in which the system will prompt the applicant to respond to questions and provide required information. On the first screen, the licensee must select the purpose of the filing. The system will display a list of application purposes based on the call sign selected (for a single call sign application) or the licenses linked to the licensee’s FRN (for a multiple call sign application). For an interim performance requirements showing, licensees should select “1 - 1st Buildout/Coverage requirements” from the list of purposes. If the licensee is filing an application for multiple call signs, the system will display a list of pertinent call signs based on the purpose selected; the licensee should select and review the call signs to be included in the application.
- *Waivers (if applicable):* Following selection of the purpose of the application, the licensee will be asked to complete the questions on the “Fees and Waivers” page. Applicants should note that waivers filed on a multiple call sign application are applicable to every call sign on the application. If a waiver is required for only some of the call signs, it is recommended that applicants submit two filings; one for the call signs with a waiver and one for the call signs without a waiver.

corresponding email inbox, please go to the FCC User Registration System and update your FCC username as soon as possible.

¹¹ For example, licenses originally granted on October 21, 2020 would have an interim performance requirements deadline of October 21, 2024. Related applications with a notification of completion of construction would be due no later than November 5, 2024.

¹² See 47 CFR § 1.946(e).

¹³ The Commission may grant a request for waiver if it is shown that the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative. See *id.* § 1.925(b)(3).

- *Adding Attachments:* At this point in the process it will also be necessary to add an attachment which contains the information described above that is necessary to demonstrate that the licensee has met the interim buildout showing. The attachment can be in several formats, including Word or Adobe.¹⁴ To add the attachment, the licensee should click on the “Attachments” link near the top right hand corner of the License Manager screen. From the “Add Attachment” menu the licensee should select type “Other” from the drop down box, browse to select the appropriate attachment and enter “Performance Requirements Demonstration” in the description. The licensee can then click on the “Add Attachment” button to complete this process. As noted above, licensees may be required to provide a map as part of the showing. Licensees may provide the map as an image (e.g., PDF) or they may provide a GIS map. If the licensee wants to provide the map as an image, it should follow the instructions above for filing Attachment Type “Other.” If the licensee wants to include a GIS map as an attachment, it should choose Attachment Type “GIS Map Files” and then upload the GIS map. Valid GIS Map Files types are XML, KML, KMZ, Shape(zip).
- *Summary Screen:* After the licensee has completed the preceding steps, the “Summary” screen is displayed allowing the licensee to review and, if necessary, edit the information on the application. After ensuring that the information on the application is correct, the licensee may continue to the “Certification” screen to sign and submit the application.

Processing of Construction Notification Applications

All interim performance requirements showings will be reviewed by staff of the Broadband Division. If additional information is necessary to process the application, the licensee will be informed either through informal contact or a return of the application. Depending on the circumstances, action on interim performance requirements showings may be taken in ULS, or through public notice, or by order.

Relation to Final Performance Requirements and Deadline

If a Tribal Window licensee has already met both its interim and final performance requirements, in lieu of making two separate showings, it can instead file one showing demonstrating that it has met its final performance requirements.¹⁵ Otherwise, the licensee should make its interim and final performance requirements showings separately, as soon as each has been met but no later than the applicable Filing Deadline. For any licensee in this band that fails to meet its interim construction benchmark, the deadline for its license to meet its final performance requirements will be advanced by two years. Thus, the final performance requirements must be met in six years, instead of eight. For any licensee in this band that fails to meet its final performance requirements, its license shall automatically terminate without specific Commission action.¹⁶

¹⁴ For a list of all acceptable file formats, *see* https://esupport.fcc.gov/help/index.htm?job=help_topic&id=pleadings&page=help_attachments.

¹⁵ If the licensee is also filing to demonstrate it has met the final performance requirements, they should select “2nd Buildout/Coverage requirements” from the list of purposes. The licensee should also make sure that the attachment that is provided demonstrate that the licensee is meeting the final performance requirements, which is different than the interim construction requirements. For example, licensees providing mobile or point-to-multipoint service must demonstrate reliable signal coverage of 80% of the population of the geographic service area, and licensees providing fixed point-to-point service must demonstrate operation of one link for each 25,000 persons in the geographic service area. *See* 47 CFR § 27.14(u)(2), (3).

¹⁶ *Id.* § 27.14(u)(5).

For further information, contact the Broadband Division, Wireless Telecommunications Bureau at via email at RuralTribalWindow@fcc.gov or contact Nadja Sodos-Wallace at (202) 418-0955, or via email at Nadja.SodosWallace@fcc.gov.

- FCC -

Before the
Federal Communications Commission
Washington, D.C. 20554

| | | |
|------------------------------------|---|----------------------------|
| In the Matter of |) | |
| |) | |
| ROSELAND BROADCASTING, INC. |) | Facility ID No. 48834 |
| |) | NAL/Acct. No. 202341420046 |
| Low Power Television Station |) | FRN: 0028087013 |
| KXCC-LD, Corpus Christi, TX |) | |

FORFEITURE ORDER

Adopted: April 4, 2024

Released: April 4, 2024

By the Chief, Video Division, Media Bureau:

I. INTRODUCTION

1. In this *Forfeiture Order*, we issue a monetary forfeiture in the amount of nine thousand five hundred dollars (\$9,500) to Roseland Broadcasting, Inc. (RBI or Licensee), licensee of low power television (LPTV) station KXCC-LD, Corpus Christi, Texas (KXCC-LD or Station). We find that RBI willfully violated sections 73.3598(a) and 73.1635(a) of the Commission’s rules (Rules) by failing to timely file a license to cover application and request for special temporary authority,¹ and willfully and repeatedly violated section 73.1745(a) of the Rules² and section 301 of the Communications Act of 1934 (Act)³ by engaging in unauthorized operation.

II. BACKGROUND

1. On December 22, 2023, the Media Bureau (Bureau) issued a *Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture (NAL)* in the amount of nine thousand five hundred dollars (\$9,500) to RBI.⁴ In the *NAL*, we found that RBI commenced operations under the parameters of its modified construction permit without timely filing an application for license to cover and then modified its operations without filing a request for special temporary authority (STA) and therefore it engaged in unauthorized operation for almost eight months in violation of section 73.1745(a) of the Rules and section 301 of the Act.⁵ Specifically, RBI operated at full-power without a valid license authorization from February 1, 2023 through June 27, 2023 and then it operated at reduced power without a valid STA from June 27, 2023 to September 25, 2023.⁶ Therefore we found that RBI apparently violated the Rules and the Act and is apparently liable for forfeiture.⁷

¹ 47 CFR §§ 73.3598(a) and 73.1635(a).

² 47 CFR § 73.1745(a).

³ See 47 U.S.C. § 301.

⁴ *Roseland Broadcasting, Inc.*, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, DA 23-1203 (MB Dec. 22, 2023) (*NAL*).

⁵ *Id.* at para. 4 citing 47 CFR § 73.1745(a) and 47 U.S.C. § 301.

⁶ *Id.* Because the Station had a pending license to cover application on file, we did not consider the Station’s full power operations that resumed on September 25, 2023, as unauthorized for purposes of the proposed forfeiture. *Id.* at 3, n. 29.

⁷ *Id.* at para. 4.

2. In a January 22, 2024 Request for Reduction, RBI “urges that the Commission reduce the forfeiture to \$3,000.”⁸ RBI argues that there was no intent when it “filed the wrong form at the correct time” and that it is in the “process of instituting safeguards so that errors like the present one can be minimized and hopefully eliminated.”⁹ RBI also contends that “the omission, in the context they were made, caused no harm.”¹⁰

3. RBI also argues that the forfeiture amount was excessive.¹¹ RBI cites to three prior Commission forfeiture decisions (that were cited in the *NAL*) that it argues represent “precedent to support the reduction of the forfeiture amount.”¹²

III. DISCUSSION

4. The forfeiture amount proposed in this case was assessed in accordance with section 503(b) of the Act,¹³ section 1.80 of the rules,¹⁴ and the Commission’s *Forfeiture Policy Statement*.¹⁵ In particular, the Commission’s *Forfeiture Policy Statement* and section 1.80(b)(10) of the Rules establish a base forfeiture amount of \$3,000 for the failure to file a required form.¹⁶ The guidelines also specify a base forfeiture amount of \$10,000 for each incident of construction and operation without an instrument of authorization for the service.¹⁷ In assessing forfeitures, we may adjust the base amount upward or downward by considering the factors enumerated in section 503(b)(2) of the Act, including “the nature, circumstances, extent and gravity of the violation and, with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, and such other matters as justice may require.”¹⁸

5. Here, RBI does not claim inability to pay nor does it claim that the forfeiture was imposed in error. RBI only argues that the forfeiture amount was excessive and its violations inadvertent.¹⁹ First, RBI argues that the forfeiture is excessive because it is being “targeted” because of

⁸ See *Roseland Broadcasting, Inc. - Request for Reduction* (Jan. 22, 2024) (Request), a copy of which is available to Facility ID No. 48834.

⁹ *Id.* at 4.

¹⁰ *Id.*

¹¹ *Id.* at 5.

¹² *Id.* citing *Southwest Colorado TV Translator Association*, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, 36 FCC Rcd 18042 (2021) (*Southwest Colorado*); *KAZT, LLC*, Memorandum Opinion and Order and Notice of Apparent Liability, 36 FCC Rcd 15530 (2021) (*KAZT*); and *The Estate of Ettie Clark*, Memorandum Opinion and Order and Notice of Apparent Liability, 37 FCC Rcd 4111 (2022) (*Ettie Clark*).

¹³ 47 U.S.C. § 503(b).

¹⁴ 47 CFR § 1.80.

¹⁵ See *Forfeiture Policy Statement and Amendment of Section 1.80(b) of the Rules to Incorporate the Forfeiture Guidelines*, Report and Order, 12 FCC Rcd 17087, 17113-15 (1997) (*Forfeiture Policy Statement*), recon. denied, 15 FCC Rcd 303 (1999).

¹⁶ See *Forfeiture Policy Statement and Amendment of Section 1.80(b) of the Rules to Incorporate the Forfeiture Guidelines*, Report and Order, 12 FCC Rcd 17087, 17113-15 (1997) (*Forfeiture Policy Statement*), recon. denied, Memorandum Opinion and Order, 15 FCC Rcd 303 (1999); 47 CFR § 1.80(b)(10), note to paragraph (b)(10), Section I. See also *Clear Channel*, 26 FCC Rcd at 7157 (“We note that the staff may also issue Notices of Apparent Liability for ‘failure to file a required form’ as authorized by Section 503(b)(1)(B) of the Communications Act of 1934, as amended (the ‘Act’) and Section 1.80 of the Rules, for such violations of covering license application filing deadlines or take other enforcement action.”).

¹⁷ *Forfeiture Policy Statement*, 12 FCC Rcd at 17113-15; 47 CFR § 1.80(b)(10), note to paragraph (b)(10), Section I. A broadcast station requires an authorization from the Commission to operate. See 47 U.S.C. § 301.

¹⁸ 47 U.S.C. § 503(b)(2)(E). See *Forfeiture Policy Statement*, 12 FCC Rcd at 17100; 47 CFR § 1.80(b)(10).

¹⁹ Request at 4.

its past error.”²⁰ However, as discussed above and in the *NAL*, taking into account a licensee’s history of prior offenses when determining an appropriate forfeiture amount is within the Bureau’s discretion and consistent with the standards set forth in the Act, the Rules, and *Forfeiture Policy Statement*. This is not the Bureau targeting RBI, but taking all facts into account when determining an appropriate forfeiture amount. Further, unlike the cases cited by RBI, which the Bureau itself cited,²¹ none of them involved a situation where there was a history of prior violations, as is present here, and all involved single instances of unauthorized operation and failure to timely file an application, as opposed to the multiple violations found here.²² These distinctions are what led the Bureau to find that a larger proposed forfeiture was appropriate.

6. Second, in arguing that the fine was excessive RBI contends that its violations were inadvertent, not intentional, and that there was no actual harm that *resulted* from its failure. Section 312(f)(1) of the Act defines “willful” as the “conscious and deliberate commission or *omission* of [any] act, *irrespective of any intent to violate*” the law.²³ The legislative history to Section 312(f)(1) of the Act clarifies that, “[a]s defined . . . ‘willful’ means that the licensee knew that he was doing the act in question, regardless of whether there was an intent to violate the law.”²⁴ The Commission has also determined that “inadvertence . . . is at best, ignorance of the law, which the Commission does not consider a mitigating circumstance.”²⁵ As such, RBI’s assertion that it did not intend to violate the law is unavailing.

7. RBI goes on to argue that “[t]he Commission has previously offered relief when inadvertence was the cause of an FCC problem” and provides citations to the Commission’s *Bishop Perry* case and a subsequent *Brewster Academy* case that relies on the Commission’s findings in *Bishop Perry*.²⁶ Not only does RBI fail to explain how these cases support its request for a forfeiture reduction, but on their face we find the cases do not justify relief in this case. Both cases dealt with appeals of Universal Service Administrative Company decisions denying E-rate program applications for inadvertent clerical, ministerial, and procedural errors. In *Bishop Perry*, the Commission determined that it was in the public

²⁰ *Id.*

²¹ See *NAL* at para. 5, n. 35.

²² In the *Southwest Colorado, KAZT* and *Ettie Clark* cases cited in the *NAL*, *supra* n. 12, the stations had a single case of failure to file a license to cover and a period of unauthorized operations and no history of similar past violations.

²³ 47 U.S.C. § 312(f)(1) (emphasis added).

²⁴ H.R. Rep. No. 97-765, 97th Cong. 2d Sess. 51 (1982), reprinted in 1982 U.S.C.C.A.N. 2294-95.

²⁵ See e.g., *Southern California Broadcasting Co.*, Memorandum Opinion and Order, 6 FCC Rcd 4387, para 3 (1991), recon. denied, 7 FCC Rcd 3454 (1992) (stating that “inadvertence . . . is at best, ignorance of the law, which the Commission does not consider a mitigating circumstance”) (internal cite omitted); *Townsquare Media of El Paso, Inc.*, Notice of Apparent Liability for Forfeiture, 35 FCC Rcd 6661, 6665, para. 5 & n. 37 (EB 2020) (“It is immaterial whether . . . violations were inadvertent, the result of ignorance of the law, or the product of administrative oversight.”). Likewise, it is well settled precedent that subsequent remedial actions, such as the efforts noted by RBI in its response to avoid future violations, response at 4, do not excuse or nullify a licensee’s violation of a Commission rule. See *Turner I*, 28 FCC Rcd 15455, 15460, para. 14 (Enf. Bur. 2013), *citing Seawest Yacht Brokers dba San Juan Marina Friday Harbor*, Notice of Forfeiture, 9 FCC Rcd 6099 (1994) (noting that “corrective action taken to come into compliance with Commission rules or policy is expected, and does not nullify or mitigate any prior forfeitures or violations”); *Station KGVL, Inc.*, Memorandum Opinion and Order, 42 FCC 2d 258, 259, para. 6 (1973); *Exec. Broad. Corp.*, Memorandum Opinion and Order, 3 FCC 2d 699, 699, para. 6 (1966) (“The fact that prompt corrective action was taken . . . does not excuse the prior violations.”)).

²⁶ Request at 4 citing *Requests for Review of Decisions of the Universal Service Administrator by Brewster Academy*, Order, 22 FCC Rcd 9185 (WCB 2007) (*Brewster Academy*); *Bishop Perry*, Order, 21 FCC Rcd 5316 (2006) (*Bishop Perry*).

interest to permit otherwise eligible E-rate applications to cure clerical, ministerial or procedural error.²⁷ The Commission also found that a “slight delay” in the receipt of E-rate applications does not warrant the complete rejection of them.²⁸ However, in arriving at its conclusion in *Bishop Perry*, the Commission made clear that its decision was based “in the context of the purposes of section 254 and cannot be applied generally to other Commission rules that are procedural in nature.”²⁹ The case before us not only has nothing to do with the Commission’s E-rate program, but we find the violations are more than procedural, ministerial, or clerical in nature.

8. At issue in the case before us is series of misfiled applications and violations that drive at the very core of the Commission’s statutory obligation to maintain order in the spectrum bands.³⁰ Obtaining a valid instrument of authorization prior to engaging in operation is one of the most basic requirements the Commission places on broadcasters. RBI also appears to have been aware of what applications should have been filed, but either filed them months late or, based on guidance from its outside legal counsel, chose not to make the necessary filings. These facts show more than the type of procedural, ministerial or clerical errors found in *Bishop Perry* and its progeny that the Commission has found warrants relief in the context of E-rate applications. While RBI contends that the Station’s operation did not cause any interference or harm to others, failure to take appropriate action here merely encourages others to disregard our licensing rules, be it intentionally or unintentionally. And we again draw upon the fact that RBI was recently admonished for a similar violation,³¹ making it all the more important to make clear that licensees must abide by our licensing procedures, including making all necessary filings and operating pursuant to valid instruments of authorization.

9. We have considered RBI’s Request and the record of this case in light of the above statutory factors, our rules, and the *Forfeiture Policy Statement*. We have already reduced the forfeiture amount in light of the Station’s secondary status and RBI provides no evidence that it has an inability to pay the fine or that the Bureau erred in its findings. Despite RBI’s efforts to downplay the nature of the violations, RBI does not dispute that it committed the violations. We therefore find that RBI willfully violated section 73.3598(a) of the Rules by failing to timely file a license to cover application and 73.1635(a) by failing to file for special temporary authority,³² and willfully and repeatedly violated section 73.1745(a) of the Rules³³ and section 301 of the Act,³⁴ by engaging in unauthorized operation. Accordingly, we conclude that based on the facts and circumstances a forfeiture in the amount of nine

²⁷ *Bishop Perry*, 21 FCC Rcd at 5317, 5320, 5324 and 5327-8, paras. 2, 9, 14, and 23. The Commission later clarified that clerical or ministerial errors that warrant relief include “only the kinds of errors that a typist might make when entering data from one list to another, such as mistyping a number, using the wrong name or phone number, failing to enter an item from the source list onto the application, or making an arithmetic error.” *School and Libraries Universal Service Support Mechanism*, Order, 26 FCC Rcd 6487, 6489, para. 5 (2011). These are not the type of inadvertent errors or oversights present here.

²⁸ *Bishop Perry*, 21 FCC Rcd at 5321-22, para. 12.

²⁹ *Id.* at 5320, para. 9.

³⁰ *See e.g.*, 47 U.S.C. §§ 151 and 301.

³¹ *See* Letter to Roseland Broadcasting, Inc., K07AAJ-D, Bakersfield, CA from Barbara A. Kreisman, Chief, Video Division (Oct. 13, 2023) a copy of which is available at LMS Facility ID No. 181741.

³² 47 CFR §§ 73.3598(a) and 73.1635(a).

³³ 47 CFR § 73.1745(a).

³⁴ *See* 47 U.S.C. § 301.

thousand five hundred dollars (\$9,500), as proposed in the *NAL* is warranted.³⁵ Furthermore, as stated in the *NAL*, we will grant the Station's pending license application by separate action upon the conclusion of this forfeiture proceeding if there are no issues other than the apparent violations that would preclude grant.³⁶

IV. ORDERING CLAUSES

10. Accordingly, **IT IS ORDERED**, pursuant to section 503(b) of the Communications Act of 1934, as amended, and sections 0.283 and 1.80 of the Commission's rules,³⁷ that Roseland Broadcasting, Inc. **SHALL FORFEIT** to the United States the sum of nine thousand five hundred dollars (\$9,500) for willfully violated sections 73.3598(a) and 73.1635(a) of the Commission's rules by failing to timely file a license to cover application and request for special temporary authority,³⁸ and willfully and repeatedly violated section 73.1745(a) of the Rules³⁹ and section 301 of the Act,⁴⁰ by engaging in unauthorized operation.

11. Payment of the forfeiture must be made by credit card, ACH (Automated Clearing House) debit from a bank account using CORES (the Commission's online payment system),⁴¹ or by wire transfer. Payments by check or money order to pay a forfeiture are no longer accepted. Below are instructions that payors should follow based on the form of payment selected:⁴²

- Payment by wire transfer must be made to ABA Number 021030004, receiving bank TREAS/NYC, and Account Number 27000001. A completed Form 159 must be faxed to the Federal Communications Commission at 202-418-2843 or e-mailed to RROGWireFaxes@fcc.gov on the same business day the wire transfer is initiated. Failure to provide all required information in Form 159 may result in payment not being recognized as having been received. When completing FCC Form 159, enter the Account Number in block number 23A (call sign/other ID), enter the letters "FORF" in block number 24A (payment type code), and enter in block number 11 the FRN(s) captioned above (Payor FRN).⁴³ For additional

³⁵ We will act on the pending license renewal application by separate staff action, following conclusion of this forfeiture proceeding and in accordance with the Commission renewal standard set forth under section 309(k) of the Act. See *NAL* at para. 9; 47 U.S.C. § 309(k). While the Station is authorized to continue to operate during the pendency of its License Application pursuant to the parameters set forth therein, if the Station must operate at variance from these parameters it must file all required notifications and applications with the Commission. Any questions with regards to making such filings should be directed to Shaun Maher, Attorney-Advisor, Video Division, Media Bureau by e-mail at Shaun.Maher@fcc.gov (legal) or Mark Colombo, Associate Division Chief, Video Division, Media Bureau by e-mail at Mark.Colombo@fcc.gov (LMS/technical). See *NAL* at n.36.

³⁶ See LMS File No. 0000218484. While the Station is authorized to continue to operate during the pendency of its license application pursuant to the parameters set forth therein, if the Station must operate at variance from these parameters it must file all required notifications and applications with the Commission. Any questions with regards to making such filings should be directed to Shaun Maher, Attorney-Advisor, Video Division, Media Bureau by e-mail at Shaun.Maher@fcc.gov (legal) or Mark Colombo, Associate Division Chief, Video Division, Media Bureau by e-mail at Mark.Colombo@fcc.gov (LMS/technical).

³⁷ 47 U.S.C. § 503(b); 47 C.F.R. §§ 0.283, 1.80.

³⁸ 47 CFR §§ 73.3598(a) and 73.1635(a).

³⁹ 47 CFR § 73.1745(a).

⁴⁰ See 47 U.S.C. § 301.

⁴¹ Payments made using CORES do not require the submission of an FCC Form 159.

⁴² For questions regarding payment procedures, please contact the Financial Operations Group Help Desk by phone at 1-877-480-3201 (option #6), or by e-mail at ARINQUIRIES@fcc.gov.

⁴³ Instructions for completing the form may be obtained at <https://www.fcc.gov/Forms/Form159/159.pdf>.

detail and wire transfer instructions, go to <https://www.fcc.gov/licensing-databases/fees/wire-transfer>.

- Payment by credit card must be made by using the Commission’s Registration System (CORES) at <https://apps.fcc.gov/cores/userLogin.do>. To pay by credit card, log-in using the FCC Username associated to the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Manage Existing FRNs | FRN Financial | Bills & Fees” from the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the “Open Bills” tab and find the bill number associated with the NAL/Acct. No. The bill number is the NAL Acct. No. (e.g., NAL/Acct. No. 1912345678 would be associated with FCC Bill Number 1912345678). After selecting the bill for payment, choose the “Pay by Credit Card” option. Please note that there is a \$24,999.99 limit on credit card transactions.
- Payment by ACH must be made by using the Commission’s Registration System (CORES) at <https://apps.fcc.gov/cores/paymentFrnLogin.do>. To pay by ACH, log in using the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Manage Existing FRNs | FRN Financial | Bills & Fees” on the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the “Open Bills” tab and find the bill number associated with the NAL/Acct. No. The bill number is the NAL/Acct. No. (e.g., NAL/Acct. No. 1912345678 would be associated with FCC Bill Number 1912345678). Finally, choose the “Pay from Bank Account” option. Please contact the appropriate financial institution to confirm the correct Routing Number and the correct account number from which payment will be made and verify with that financial institution that the designated account has authorization to accept ACH transactions.

12. Requests for full payment of the forfeiture proposed in this Forfeiture Order under an installment plan should be sent to: Associate Managing Director-Financial Operations, 45 L Street, NE, Washington, DC 20554.⁴⁴ Questions regarding payment procedures should be directed to the Financial Operations Group Help Desk by phone, 1-877-480-3201 (option #6), or by e-mail at ARINQUIRIES@fcc.gov.

13. **IT IS FURTHER ORDERED** that a copy of this Order shall be sent by First Class and Certified Mail, Return Receipt Requested, to Roseland Broadcasting, Inc., 888C 8th Avenue, Suite 733, New York, New York 10019 as well as by e-mail to legal@box733.com, and to RBI’s counsel, Aaron P. Shainis, Esq., Shainis & Peltzman, Chartered, 1850 M Street NW, Suite 240, Washington, DC 20036, as well as e-mailed to aaron@s-plaw.com.

FEDERAL COMMUNICATIONS COMMISSION

Holly Saurer
Chief, Media Bureau

⁴⁴ See 47 CFR § 1.1914.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
CNZ Communications SE, LLC) MB Docket No. 24-27
v.) CSR-9013-M
DISH Network L.L.C.)

MEMORANDUM OPINION AND ORDER

Adopted: April 4, 2024

Released: April 4, 2024

By the Senior Deputy Chief, Policy Division, Media Bureau:

I. INTRODUCTION

1. CNZ Communications SE, LLC (CNZ) licensee of full-power commercial television station WGBP-TV, Opelika, Alabama (WGBP or Station), filed the above-captioned complaint (Complaint) against DISH Network L.L.C. (DISH), seeking mandatory carriage throughout the Columbus-Opelika Designated Market Area (DMA) on DISH's systems during the current election cycle, pursuant to section 338 of the Communications Act of 1934, as amended (Act), and sections 76.66(m)(3) and 76.7 of the Commission's rules. DISH filed an Answer to the Complaint to which CNZ filed a Reply. For the reasons discussed below, we find that WGBP is entitled to carriage throughout the Columbus-Opelika DMA and grant the Complaint.

II. BACKGROUND

2. Section 338 of the Act, adopted as part of the Satellite Home Viewer Improvement Act of 1999 (SHVIA), requires satellite carriers, beginning January 1, 2002, to carry on request all local television broadcast stations' signals in local markets in which the satellite carrier carries at least one local

1 CNZ Commc'ns SE, LLC v. DISH Network L.L.C., Must-Carry Complaint Regarding Carriage of WGBP-TV Opelika, AL, MB Docket No. 24-27, CSR-9013-M (rec. Dec. 13, 2023) (Complaint Erratum); see CNZ Commc'ns SE, LLC v. DISH Network L.L.C., Must-Carry Complaint Regarding Carriage of WGBP-TV Opelika, AL, Public Notice, Special Relief and Show Cause Petitions, Report No. 0509, MB Docket No. 24-27 (Jan. 22, 2024).

2 47 U.S.C. § 338.

3 47 CFR §§ 76.66(m)(3), 76.7.

4 CNZ Commc'ns SE, LLC v. DISH Network L.L.C., Must-Carry Complaint Regarding Carriage of WGBP-TV Opelika, AL, MB Docket No. 24-27, Answer of DISH at 1 (rec. Jan. 2, 2024) (DISH Answer); CNZ Commc'ns SE, LLC v. DISH Network L.L.C., Must-Carry Complaint Regarding Carriage of WGBP-TV Opelika, AL, MB Docket No. 24-27, Reply of CNZ Communications SE, LLC (rec. Jan. 5, 2024) (CNZ Reply).

5 47 U.S.C. § 338. See Implementation of the Satellite Home Viewer Improvement Act of 1999: Broadcast Signal Carriage Issues; Retransmission Consent Issues, Report and Order, 16 FCC Rcd 1918, 1934, para. 15 (2000) (SHVIA Order); Implementation of the Satellite Home Viewer Improvement Act of 1999; Broadcast Signal Carriage Issues, Order on Reconsideration, 16 FCC Rcd 16544 (2001).

television broadcast signal pursuant to the statutory copyright license.⁶ Generally, a television station must request carriage by electing either retransmission consent or mandatory carriage with the satellite carrier serving its local market by October 1st of the year preceding each three-year carriage election cycle.⁷ A station's local market for satellite carriage purposes is generally its DMA, as defined by The Nielsen Company (Nielsen).⁸ The Commission in 2000 grappled with SHVIA's definition of "Local Market" in a case like the instant one, explaining that "the satellite compulsory license includes not only television stations licensed to a local market, but also extends to stations licensed in one market but assigned by Nielsen to another market" and providing multiple examples to clarify its reading of the statutory requirements.⁹

3. WGBP is licensed to Opelika, Alabama, which is located in Lee County, Alabama.¹⁰ Lee County is assigned to the Columbus-Opelika DMA.¹¹ The Station filed an application on September 29, 2017 with the Commission, which allowed it to convert to a distributed transmission system (DTS) by installing two transmitters, one in Warm Springs, Georgia (Atlanta DMA), and the other in Cusseta, Georgia (Columbus-Opelika DMA).¹² The conversion was completed on December 9, 2020.¹³ At some point thereafter, Nielsen assigned the Station to the Atlanta DMA.¹⁴

⁶ 47 CFR § 76.66(a)(6). Pursuant to Section 338, satellite carriers are not required to carry local broadcast television stations; however, if a satellite carrier chooses to carry a local station in a particular DMA in reliance on the local statutory copyright license, it generally must carry any qualified local station in the same DMA that makes a timely election for retransmission consent or mandatory carriage. 47 U.S.C. § 338. This is commonly referred to as the "carry one, carry all" requirement. Satellite carriers have a statutory copyright license under SHVIA for carriage of stations to any subscriber within a station's local market. *See* 17 U.S.C. § 122.

⁷ 47 CFR § 76.66(c)(4).

⁸ 17 U.S.C. § 122(j)(2); 47 CFR § 76.66(e) (defining a television broadcast station's local market for purposes of satellite carriage as the DMA in which the station is located).

⁹ *SHVIA Order*, 16 FCC Rcd at 1934-35, para. 36 ("We find that the term 'local market,' as it is used for satellite carriage purposes, includes all counties within a market, as well as the home county of the television station if that county is not physically located in the DMA. We believe that the satellite compulsory license includes not only television stations licensed to a local market, but also extends to stations licensed in one market but assigned by Nielsen to another market. For example, a television station licensed to a community in Jefferson County, Missouri, which is in the Paducah DMA, but assigned by Nielsen to the St. Louis DMA, would be considered within the St. Louis market under Section 338. In this case, Jefferson County is the home county, and such a county should be treated as part of the St. Louis DMA for satellite carriage purposes. Moreover, since this station is licensed to a community in the Paducah market, it may assert its carriage rights in that market as well, if satellite carriers decide to provide local-into-local service there. If there happens to be another television station licensed to a community in Jefferson County, that station will also be considered in the St. Louis DMA and eligible to assert its right to carriage against a satellite carrier. In addition, if a station is licensed to a community that is inside one DMA, but is assigned to another DMA by Nielsen, the station could assert its right to carriage in the market where its community of license is located. For example, KNTV is licensed to San Jose, CA, which is in the San Francisco DMA, but is assigned by Nielsen to the Salinas-Monterey DMA. In this case, KNTV can assert its carriage rights in the San Francisco DMA because that is where its community of license is located. These interpretations are consistent with the SHVIA's goals of preserving over-the-air broadcasting and providing satellite subscribers with a full complement of local station signals.").

¹⁰ Complaint at 2.

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.*

4. On September 28, 2023, CNZ submitted its election of mandatory carriage for WGBP to DISH for the 2024-2026 election cycle, demanding carriage in both the Atlanta and Columbus-Opelika DMAs.¹⁵ On September 29, 2023, CNZ received an email response from DISH indicating that a further response would be forthcoming.¹⁶ On October 11, 2023, DISH provided a further response stating that, pursuant to its reading of the Commission's rules, it would carry WGBP in the Atlanta DMA and in Lee County, Alabama (Columbus-Opelika DMA), for the election cycle commencing on January 1, 2024.¹⁷ DISH otherwise denied CNZ's request for mandatory carriage of WGBP throughout the Columbus-Opelika DMA, stating that the area of the DMA beyond Lee County was "outside its Niels[e]n-assigned DMA."¹⁸ That same day, CNZ's legal counsel replied to DISH's letter and stated that DISH was misinterpreting the Commission's rules.¹⁹ On October 31, 2023, DISH responded to CNZ's legal counsel, refuting this contention.²⁰ The Station filed the above-captioned complaint in December 2023.

A. The Filings

5. The parties agree that the relevant provisions governing this dispute are section 338 of the Communications Act and section 76.66 of the Commission's rules, adopted in the Commission's 2000 *SHVIA Order*.²¹ CNZ asserts that, per the order, "a station's local market is not limited to the county of license itself, but includes the designated market area in which the county is located."²² DISH, however, argues that the Commission's language only provides a station flexibility to "choose whether to assert must-carry rights in its Nielsen-assigned DMA plus the county where its community of license is located, *or* the entire DMA where its community of license is located."²³

6. CNZ also contends that the Bureau's recent order involving WGBP supports its reading of the 2000 *SHVIA Order* on what constitutes a station's local market. In *CNZ v. DIRECTV LLC*, WGBP filed a petition seeking mandatory carriage on DIRECTV LLC's systems serving the Atlanta DMA based upon its assertion that it was a new station after converting its facility to a DTS in October 2020.²⁴ Although the Bureau denied CNZ's petition, CNZ argues that *CNZ v. DIRECTV* supports the station's interpretation of the Commission's rules by stating that "based on the Station's present Nielsen DMA assignment in the Atlanta DMA, and the fact that its community of license of Opelika, AL is in the Columbus, GA (Opelika, AL) DMA, we agree with the Station that it could assert mandatory carriage rights in both the Atlanta and Columbus markets."²⁵ DISH in its answer emphasizes the absence of the

¹⁵ *Id.*; Complaint Attachment 2 (WGBP's Initial 2024-2026 Election Notice).

¹⁶ Complaint at 2; Complaint Attachment 2 (Email from Local Operations, DISH L.L.C. to Ari Meltzer, Wiley Rein LLP (Sep. 29, 2023)).

¹⁷ Complaint at 2; Complaint Attachment 3 (Letter from Teresa Cain, DISH Programming, Locals Operations, to Randy E. Nonberg, Manager, CNZ Communications SE, LLC (Oct. 11, 2023)).

¹⁸ *Id.*

¹⁹ Complaint 3-5; Complaint Attachment 4 (Letter from Ari Meltzer, Wiley Rein, LLP, to Teresa Cain, DISH Programming, Locals Operations (Oct. 11, 2023)).

²⁰ Complaint, Complaint Attachment 5 (Letter from Hadass Kogan, Vice President & Associate General Counsel, Regulatory Affairs, DISH, to Ari Meltzer, Wiley Rein, LLP (Oct. 31, 2023)).

²¹ Complaint at 3-5; DISH Answer at 4-8; CNZ Reply at 2-5 (all citing 47 U.S.C. § 338 and 47 CFR § 76.66(b)(1)).

²² Complaint at 3.

²³ DISH Answer at 5 (emphasis in original).

²⁴ Complaint at 4, citing *In the Matter of CNZ Commc'ns SE, LLC v. DIRECTV, LLC*, MB Docket No. 21-153, *Memorandum Opinion and Order*, 37 FCC Rcd 48 (MB 2022) (*CNZ v. DIRECTV*).

²⁵ *Id.* at 4 (quoting *CNZ v. DIRECTV*, 37 FCC Rcd at 51-52).

word “simultaneous,” and argues that the Bureau could not find WGBP had simultaneous rights across two DMAs because it would be a revision of a “long-standing Commission rule.”²⁶

7. Finally, DISH turns to policy arguments against CNZ’s interpretation of the rule, contending that it would deny the flexibility afforded to “satellite carriers in the case of changing boundaries,” fail to recognize the “realities of limited satellite carrier capacity,” and “open the floodgates” of stations seeking assignment to DMAs in which they are not located.²⁷ CNZ argues that DISH’s claims are overstated not least because Commission rules for DTS “would preclude most stations from serving two different DMAs” and thus being reassigned.²⁸

III. DISCUSSION

8. We find that, consistent with the Commission’s 2000 *SHVIA Order*, the Station may simultaneously elect mandatory carriage throughout both the Atlanta and Columbus-Opelika DMAs. The issue presented in this case is whether WGBP is entitled to mandatory carriage throughout both its Nielsen assigned DMA (Atlanta) and the DMA where its community of license is located (Columbus-Opelika). We find that it is. As the Bureau previously explained in *CNZ v. DIRECTV LLC*, a station with a Nielsen DMA assignment in the Atlanta DMA and with a community of license in the Columbus DMA “could assert mandatory carriage rights in both the Atlanta and Columbus markets.”²⁹ Thus, we agree with the Petitioner’s interpretation of the *SHVIA Order*, and the consequent requirement for carriage, upon demand, throughout both DMAs by DBS providers. A station assigned by Nielsen to one DMA but physically located in another, as is WGBP, has two local markets in which it may simultaneously demand carriage – one market consisting of the county in which it is licensed and the DMA to which it is assigned, and another overlapping market consisting of the DMA in which it is located.

9. Contrary to DISH’s assertion, this conclusion does not alter any existing rule. Nonetheless, we reiterate our additional observations from *CNZ v. DIRECTV*. To the extent a provider has concerns about Nielsen’s reassignment of a DMA, we encourage the provider to raise those concerns with Nielsen directly.³⁰ Furthermore, to the extent a provider objects to carriage throughout both DMAs due to concerns about localism, it may file a satellite market modification petition with the Commission seeking to modify the local television market of a station to exclude counties with which the Station has no local connection.³¹

IV. ORDERING CLAUSE

10. Accordingly, **IT IS ORDERED**, that pursuant to section 338 of the Communications Act, as amended, 47 U.S.C. § 338, and section 76.66 of the Commission’s rules, 47 CFR § 76.66, the mandatory carriage complaint filed by CNZ Communications SE, LLC, licensee of WGBP-TV, Opelika, AL, is **GRANTED**. DISH Network L.L.C. **IS ORDERED** to commence carriage of WGBP-TV on its satellite systems serving the Columbus-Opelika designated market area within sixty (60) days of the release of this Order. This action is taken pursuant to the authority delegated in section 0.283 of the Commission’s rules, 47 CFR § 0.283.

²⁶ DISH Answer at 6 (failing to cite a specific Commission rule).

²⁷ DISH Answer at 7.

²⁸ CNZ Reply at 5.

²⁹ *CNZ v. DIRECTV*, 37 FCC Rcd at 52.

³⁰ *Id.* at 52, n. 35.

³¹ *Id.* at 52, n. 36.

FEDERAL COMMUNICATIONS COMMISSION

Steven Broecker
Senior Deputy Chief, Policy Division, Media Bureau



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

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DA 24-330

Released: April 5, 2024

**PUBLIC SAFETY AND HOMELAND SECURITY BUREAU SEEKS COMMENT ON
REQUESTS FOR WAIVER FILED BY THE CITY OF NEW BEDFORD, MASSACHUSETTS
FOR T-BAND BASE STATION**

File No. 0010694508

Comments Due: April 25, 2024

Reply Comments Due: May 6, 2024

The Public Safety and Homeland Security Bureau (Bureau) seeks comment on the above-captioned application and waiver requests filed by the City of New Bedford, Massachusetts (New Bedford, or the City).¹ The City proposes to harmonize frequency assignments across its base stations authorized on public safety radio system call sign WRTX821, operating in the 470-512 MHz band (T-Band).² The City seeks waiver relief of section 90.305(a) of the Commission's rules because the proposal involves a base station located more than 80 kilometers (50 miles) outside of the city center coordinates of Boston, Massachusetts,³ and of section 90.307(d) of the Commission's rules to use this base station located less than 145 kilometers (90 miles) from an adjacent channel television (TV) station.⁴

New Bedford operates a radio system under call sign WRTX821. Three base stations use spectrum in the TV Channel 16 band (482-488 MHz). On May 11, 2023, the Bureau's Policy and Licensing Division granted New Bedford a waiver of section 90.305(a) to add a fourth base station at the New Bedford Hotel, operating on frequencies in the TV Channel 14 band (470-476 MHz).⁵ New Bedford states that "[i]nadvertently, the Fire Department channels were added to the Police Department

¹ See File No. 0010694508 (filed Sept. 14, 2023), attached Request for Waiver (Fifty-Mile Waiver Request); attached Waiver – Expedited Action Requested, Involving TV Protection in the 470-512 MHz Band (TV Spacing Waiver Request).

² See TV Spacing Waiver Request at 1 (“The City operates a simulcast multi-channel public safety communications system which requires that all sites have the full complement of available channels. Location 7 currently is missing the TV16 channel allotments.”).

³ 47 CFR § 90.305(a) (the transmitter site(s) for base stations shall be located not more than 80 kilometers (50 miles) of the geographic centers of the urbanized areas listed in 47 CFR § 90.303); Fifty-Mile Waiver Request.

⁴ 47 CFR § 90.307(d) (The minimum distance between a land mobile base station which has associated mobile units and a protected adjacent channel television station is 145 km (90 miles)); TV Spacing Waiver Request.

⁵ *City of New Bedford, Massachusetts, Request for Waiver of Section 90.305(a) of the Commission's Rules*, Order, DA 23-396, 2023 WL 3476439 (PSHSB PLD May 11, 2023) (2023 Waiver Order). The New Bedford Hotel site is located 0.715 kilometers (0.154 miles) outside the 80-kilometer (50-mile) radius area around Boston, Massachusetts in which fixed stations are normally authorized under the rules.

authorization.”⁶ New Bedford seeks to “correct the channels at Location 7,”⁷ i.e., the New Bedford Hotel site, and “extend the operation of TV16 T-Band channels to Location 7.”⁸ The City now seeks a waiver of the same rule with respect to the proposed addition of TV Channel 16 frequencies at this site.⁹

Additionally, due to the proposed addition of TV Channel 16 spectrum to the New Bedford Hotel site, the City seeks a waiver of section 90.307(d) for this site to operate less than 145 kilometers from adjacent channel TV Station WPXQ-TV, TV Channel 17, Newport, Rhode Island.¹⁰ We note that New Bedford has an existing waiver of section 90.307(d) allowing its other Channel 16 base stations to operate less than 145 kilometers Station WPXQ-TV.¹¹

The City states that it “is in dire need of improved coverage and building penetration in its historical downtown business district.”¹² The City contends that “the prime sites that can provide that coverage are all located greater than 50 miles of the geographic center of Boston.”¹³ The City states that “[t]he distance that the New Bedford Hotel site exceeds the 50-mile limit of Section 90.305(a) is already considered *de minimus* [sic] by the Commission.”¹⁴ The City asserts that a waiver grant is in the public interest and would “provide enhanced public safety radio services to the citizens and visitors in greater downtown New Bedford.”¹⁵

Pursuant to Sections 1.415 and 1.419 of the Commission’s rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this *Public Notice*. All comments and reply comments should reference the subject file number(s), waiver requests, and the DA number indicated on this *Public Notice*.

Pleadings may be filed electronically through ULS, or by paper pursuant to the following instructions. Parties are strongly encouraged to file electronically using ULS.

- Electronic Filers: Pleadings may be filed electronically using the Internet by accessing ULS: <https://www.fcc.gov/wireless/systems-utilities/universal-licensing-system>. Each screen indicates the information to be provided or the action(s) to be performed to complete that screen. From the ULS website, to begin the process of filing a pleading click on “SUBMIT A PLEADING.” The link takes the user to the *Pleadings Information* screen. Upon completing the *Pleadings Information* screen, click “CONTINUE” to go to the *File Numbers/Call Signs* screen. Upon providing the information required on that screen, complete steps three and four at the *Attach File*

⁶ Fifty-Mile Waiver Request at 1. We infer that the Police Department uses Channel 16 frequencies, and the Fire Department uses Channel 14 frequencies.

⁷ Fifty-Mile Waiver Request at 1.

⁸ TV Spacing Waiver Request at 1.

⁹ File No. 0010694508; Fifty-Mile Waiver Request at 1.

¹⁰ TV Spacing Waiver Request at 1. The New Bedford Hotel site is located 73.2 kilometers (45.5 miles) from Station WPXQ-TV.

¹¹ See call sign WRTX821, special conditions.

¹² Fifty-Mile Waiver Request at 1.

¹³ *Id.*

¹⁴ *Id.* citing 2023 Waiver Order.

¹⁵ Fifty-Mile Waiver Request at 1.

and *Confirmation* screens, respectively. For more information, detailed instructions can be found in the *Public Notice* announcing the implementation of electronic filing for pleadings.¹⁶

- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial courier or by the U.S. Postal Service. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
- Commercial deliveries (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service First-Class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, DC 20554.
- As of March 19, 2020, the FCC is no longer accepting hand-delivered or messenger delivered paper filings at FCC Headquarters due to the COVID-19 pandemic.¹⁷ Furthermore, after COVID-19 restrictions are lifted the new filing location for paper documents will be 9050 Junction Drive, Annapolis Junction, MD 20701.¹⁸
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, DC 20554.

Because of the policy implications and potential impact of this case on persons not party to the applications, it is in the public interest to treat this case as a permit-but-disclose proceeding under the *ex parte* rules. See Sections 1.1200(a) and 1.1206 of the Commission's rules, 47 CFR §§ 1.1200(a) and 1.1206. Therefore, subsequent to the release of this *Public Notice*, *ex parte* presentations that are made with respect to the issues involved in the subject waiver requests will be allowed, but must be disclosed in accordance with the requirements of Section 1.1206(b) of the Commission's rules, 47 CFR § 1.1206(b).

The applications, waiver requests, and comments and reply comments can be accessed electronically via the Commission's Universal Licensing System, <https://www.fcc.gov/wireless/universal-licensing-system>.

For technical assistance in using ULS for viewing the application or filing an amendment to the application, contact the ULS Licensing Support Hotline at (877) 480-3201. The ULS Licensing Support Hotline is available Monday through Friday, from 8:00 A.M. to 6:00 P.M. Eastern Time. All calls to the ULS Licensing Support Hotline are recorded.

For further information regarding this Public Notice, please contact Thomas Eng, Policy and Licensing Division, Public Safety and Homeland Security Bureau, (202) 418-0019, or by email to thomas.eng@fcc.gov.

¹⁶ *Wireless Telecommunications Bureau Enhances the Commission's Universal Licensing System to Implement Electronic Filing for Pleadings*, Public Notice, 21 FCC Rcd 424 (WTB 2006).

¹⁷ *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Filing*, Public Notice, 35 FCC Rcd 2788 (OMD 2020).

¹⁸ *FCC Announces Closure of Filing Window at FCC Headquarters and Permanent Change in the Location and Hours for Receiving Hand-Carried Filings*, Public Notice (OMD July 7, 2020).

Copies of materials can be obtained from the FCC's Reference Information Center at (202) 418-0270.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice).

By the Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau.

-FCC-



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
45 L STREET NE
WASHINGTON D.C. 20554

News media information 202-418-0500
Internet: <http://www.fcc.gov> (or <ftp.fcc.gov>)
TTY (202) 418-2555

DA No. 24-331

Friday April 5, 2024

Report No. SAT-01813

Satellite Licensing Division and Satellite Programs and Policy Division Information

Actions Taken

The Commission, by its Space Bureau, took the following actions pursuant to delegated authority. The effective date of these actions is the release date of this Notice, except where an effective date is specified.

SAT-AMD-20230519-00118 E S2715 Intelsat License LLC
Amendment
Grant of Authority Effective Date: 04/04/2024

Nature of Service: Fixed Satellite Service

See ICFS File No. SAT-MOD-20220523-00053 for a description of the action taken.

SAT-MOD-20220523-00053 E S2715 Intelsat License LLC
Modification 07/06/2022 - 07/06/2027
Grant of Authority Effective Date: 04/04/2024

Nature of Service: Fixed Satellite Service

On April 4, 2024, the Satellite Programs and Policy Division granted, with conditions, Intelsat License LLC's request for modification of the authorization for the Galaxy 17 space station to: (1) extend the license term through July 5, 2027; and (2) provide fixed-satellite service from the 85.0° W.L. orbital location instead of its previously-licensed orbital location of 91.0° W.L. At the 85.0° W.L. orbital location, Galaxy 17 is authorized to provide fixed-satellite service in the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 11.7-12.2 GHz (space-to-Earth), and 14.0-14.5 GHz (Earth-to-space) frequency bands. Galaxy 17 conducts telemetry, tracking, and command operations using the following center frequencies: 4197.125 MHz and 4198.875 MHz (space-to-Earth); and 5925.5 MHz and 6424.5 MHz (Earth-to-space).

SAT-STA-20230816-00205 E S2715 Intelsat License LLC
Special Temporary Authority
Grant of Authority Effective Date: 09/21/2023

Application listed granted in ICFS to reflect continuing operations pursuant to section 1.62 of the Commission's rules. 47 CFR § 1.62.

SAT-STA-20231206-00303 E S3032 BlackSky Global LLC
Special Temporary Authority
Grant of Authority Effective Date: 01/11/2024

Application listed as granted in ICFS to reflect continuing operations pursuant to section 1.62 of the Commission's rules, 47 CFR § 1.62.

SAT-STA-20240129-00018 E S3033 Sirius XM Radio Inc.
Special Temporary Authority
Grant of Authority
Effective Date: 04/02/2024

SAT-STA-20240327-00065 E S2368 Intelsat License LLC
Special Temporary Authority
Withdrawn
Effective Date: 04/01/2024

INFORMATIVE

SAT-APL-20230717-00172 S3065 AST & Science, LLC

The application amended by this filing was previously designated "permit-but-disclose" for purposes of the Commission's rules governing ex parte communications, and that designation applies to the above-captioned amendment. See ICFS File Nos. SAT-LOA-20200413-00034, SAT-AMD-20200727-00088, SAT-AMD-20201028-00126.

SAT-APL-20240311-00053 S3065 AST & Science, LLC

The application amended by this filing was previously designated "permit-but-disclose" for purposes of the Commission's rules governing ex parte communications, and that designation applies to the above-captioned amendment. See ICFS File Nos. SAT-LOA-20200413-00034, SAT-AMD-20200727-00088, SAT-AMD-20201028-00126.

For more information concerning this Notice, contact the Satellite Licensing Division and Satellite Programs and Policy Division at (202) 418-0719.



PUBLIC NOTICE

Federal Communications Commission
45 L St., N.E.
Washington, D.C. 20554

News Media Information 202 / 418-0500
Internet: <https://www.fcc.gov>
TTY: 1-888-835-5324

DA 24-332
Released: April 5, 2024

PUBLIC SAFETY AND HOMELAND SECURITY BUREAU APPROVES REGION 21 (MICHIGAN) 700 MHZ REGIONAL PLAN

WT Docket No. 02-378

Introduction. The Region 21 (Michigan)¹ 700 MHz Regional Planning Committee (RPC) (Region 21) submitted a proposed 700 MHz Public Safety Plan (Plan) for General Use spectrum² in the 769-775/799-805 MHz band for review and approval.³ For the reasons discussed below, we approve the Region 21 700 MHz Plan.

Background. In 1998, the Commission established a structure to allow RPCs optimal flexibility to meet state and local needs, encourage innovative use of narrowband spectrum in the 700 MHz band, and accommodate new and as yet unanticipated developments in technology and equipment.⁴ Each of the fifty-five (55) RPCs is required to submit its plan for General Use spectrum.⁵ The Commission's role in relation to the RPCs is limited to (1) defining the regional boundaries; (2) requiring fair and open procedures, *i.e.*, requiring notice, opportunity for comment, and reasonable consideration; (3) specifying the elements that all regional plans must include; and (4) reviewing and accepting proposed plans (or amendments to approved plans) or rejecting them with an explanation.⁶

The Region 21 700 MHz Plan Update. On July 11, 2023, the RPC submitted an amendment to the Region 21 – 700 MHz Plan.⁷ In its amendment, the RPC proposes to:

- Remove non-essential language under the heading “700 MHz Interoperability Channels,” and

¹ The Region 21 (Michigan) 700 MHz regional planning area includes the entire state of Michigan.

² The General Use spectrum is administered by RPCs and is licensed for public safety services on a site-by-site basis in accordance with the relevant Commission-approved regional plan and frequency coordination.

³ See Letter from Keith M. Bradshaw, Chairman, Region 21 700 MHz Regional Planning Committee, to Chief, Public Safety and Homeland Security Bureau, Federal Communications Commission, WT Docket No. 02-378 (dated Dec. 07, 2021) (filed Jul. 11, 2023) (Cover Letter). See also Region 21 700 MHz Plan Update, WT Docket 02-378 (filed Jul. 11, 2023) (Plan Amendment).

⁴ See *Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010*, First Report and Order and Third Notice of Proposed Rulemaking, 14 FCC Rcd 152 (1998) (*First Report and Order*); Second Memorandum Opinion and Order, 15 FCC Rcd 16844 (2000). See also 47 CFR § 90.527.

⁵ See 47 CFR § 90.527.

⁶ *First Report and Order*, 14 FCC Rcd at 195 para. 87.

⁷ See Cover Letter and Plan Amendment.

- Add provisions for deploying fixed 700 MHz interoperability equipment in the region.⁸

Region 21's RPC received concurrence letters for the proposed Plan Amendment from its four adjacent regions: Region 14 (Indiana), Region 33 (Ohio), Region 45 (Wisconsin), and Region 54 (Chicago-Metropolitan).⁹

On August 21, 2023, the Bureau released a Public Notice seeking comment on the Region 21 Plan Amendment.¹⁰ We received no comments.

Based on our review of the Plan Amendment, we conclude that Region 21's Plan Amendment complies with FCC rules and policies. Accordingly, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 1.102(b) of the Commission's rules, 47 CFR § 1.102(b), the Region 21 (Michigan) 700 MHz Plan is APPROVED.

This action is taken under delegated authority pursuant to Sections 0.191 and 0.392 of the Commission's rules, 47 CFR §§ 0.191, 0.392.

For further information regarding this matter, contact Brian Marengo, Electronics Engineer, Policy and Licensing Division, Public Safety and Homeland Security Bureau at (202) 418-0838 or Brian.Marengo@fcc.gov.

- FCC -

⁸ Cover Letter at 1. *See also* Plan Amendment at 5.

⁹ *See* Letter from Douglas B. Cochrane, Region 14 Acting Chairman, to Region 21 RPC (Nov. 30, 2021); Letter from Robert M. Bill, Chairman Region 33, to Region 21 RPC (Apr. 23, 2021); Letter from Russell Schreiner, Chairman Region 45, to Region 21 RPC (July 21, 2021); Letter from Chris Kindelspire Chairman Region 54, to Mr. Bradshaw, Region 21 RPC (July 15, 2021); (collectively filed July 11, 2023).

¹⁰ *Public Safety and Homeland Security Bureau Seeks Comments on Region 21 (Michigan) 700 MHz Regional Plan Update*, Public Notice, DA 23-730 (PSHSB 2023).

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
Westchester County, New York) File Nos. 0010797498, 0010797527,
Request for Waiver of Section 90.551 of the) 0010797542, 0010797559
Commission’s Rules)

ORDER

Adopted: April 5, 2024

Released: April 5, 2024

By the Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau:

I. INTRODUCTION

1. Westchester County, New York (Westchester or the County) is the licensee of four 700 MHz trunked public safety stations authorized under call signs WQSU957, WQSU958, WQUJ897, and WQUJ898.1 On May 24, 2019, the Public Safety and Homeland Security (Bureau) granted the County an extension for all referenced authorizations through November 30, 2023.2 On November 29, 2023, the County submitted the instant request for a further extension for all referenced authorizations through December 31, 2025.3 We grant the County’s extension request.4

II. BACKGROUND

2. Extended Implementation. Section 90.551 of the Commission’s rules requires 700 MHz narrowband stations to be constructed and placed into operation within 12 months from the date of grant of the authorization,5 Section 90.629 of the Commission’s rules allows licensees to request an extended construction period of up to 5 years subject to certain conditions.6

1 The Bureau granted the County an extended period to construct these authorizations. For authorizations WQUJ897 and WQUJ898, this period ended on November 20, 2018; for authorizations WQSU957 and WQSU958 the extended construction period ended July 29, 2019.

2 See Westchester County, New York, Order, 34 FCC Rcd 3768 (PSSB 2019) (Westchester Order).

3 File Nos. 0010797498, 0010797527, 0010797542, and 0010797559 (collectively, Westchester Application).

4 While this extension request was pending, the Bureau placed WQSU957, WQSU958, WQUJ897, and WQUJ898 offline for slow growth review pending the extension request status.

5 47 CFR § 90.551. However, licensees may request a longer construction period, up to but not exceeding 5 years. 47 CFR § 90.551 (establishing that licensees may request a construction period, up to but not exceeding 5 years, pursuant to § 90.155(b)); 47 CFR § 90.155(b) (establishing that “[a] local government entity in the Public Safety Pool, applying for any frequency in this part, may also seek extended implementation authorization pursuant to § 90.629).

6 47 CFR § 90.629 (Extended implementation period). The conditions include but are not limited to: The applicant must justify an extended implementation period. The justification must describe the proposed system, state the amount of time necessary to construct and place the system in operation, identify the number of base stations to be constructed and placed in operation during each year of the extended construction period, and show that: (1) The proposed system will require longer than twelve (12) months to construct and place in operation because of its purpose, size, or complexity; or (2) The proposed system is to be part of a coordinated or integrated wide-area

3. *Westchester's Waiver Request.* The County currently operates stations in the T-Band (470-512 MHz), and contends that as a result of the confusion surrounding the enactment and subsequent repeal of Section 6103 of Public Law 112-96 (the Spectrum Act), which required the FCC to institute an auction of public safety T-Band channels by February 22, 2021, and to remove public safety from the T-Band within two years of the close of the auction,⁷ Westchester County was unable to timely complete construction of its 700 MHz system.⁸ The County contends that it undertook the conversion of its T-Band stations to relocate those stations to frequencies in the 700 MHz band in response to the Spectrum Act T-Band legislation.⁹ Such relocations required a re-design of the County's proposed 700 MHz system to accommodate both law enforcement users and displaced T-Band fire, EMS, and transit users.¹⁰ The County asserts that the re-design and implementation of its 700 MHz system required the County to create a hybrid system, utilizing both T-Band and 700 MHz spectrum.¹¹ The County contends that, while the T-band relocation mandate is no longer required,¹² the work it completed to convert and relocate its system should be recognized.¹³

III. DISCUSSION

4. To obtain a waiver of the Commission's rules, a petitioner must demonstrate either that (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the present case, and that a grant of the waiver would be in the public interest; or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.¹⁴ An applicant seeking a waiver faces a high hurdle and must plead with particularity the facts and circumstances that warrant a waiver.¹⁵

5. We find that the County has met the first prong of the Commission's waiver standard as similarly determined in the Bureau's 2019 *Westchester Order*. At that time, the Bureau observed that the uncertainty regarding the potential repeal of the T-Band legislation impacted the County's efforts to finalize the design of its 700/800 MHz band system.¹⁶ The County continues to implement a system that represents an enormously complex and substantial undertaking which warrants more time than the usual situation, particularly where factors outside the County's control impacted system redesign. Here, stringent application of our rule would effectively negate the County's investments and frustrate the

system which will require more than twelve (12) months to plan, approve, fund, purchase, construct, and place in operation; or (3) The applicant is required by law to follow a multi-year cycle for planning, approval, funding, and purchasing the proposed system.

⁷ Waiver Request at 1 *citing* Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No 112-16, 126 Stat. 156 (2012).

⁸ *Id.* at 2.

⁹ *Id.*

¹⁰ *Id.* at 1-2.

¹¹ *Id.* at 3. The County notes that as part of the previous extension the County submitted annual Construction Reports. *Id.* at 2. The County has spent over two years testing individual channels for coverage and radio frequency interference, in an effort to create a spectrum plan. *Id.* at 4.

¹² See Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, Division FF, Title IX, § 902 (2020) (repealing § 6103 of the Middle Class Tax Relief and Job Creation Act of 2012).

¹³ Waiver Request at 3.

¹⁴ 47 CFR § 1.925(a)(3).

¹⁵ *WAIT Radio v. FCC*, 413 F.2d 1153, 1157 (D.C. Cir. 1969) (*WAIT Radio*), *aff'd*, 459 F.2d 1203 (1973), *cert. denied*, 409 U.S. 1027 (1972) (*citing Rio Grande Family Radio Fellowship, Inc. v. FCC*, 406 F.2d 664 (D.C. Cir. 1968)); *Birach Broad. Corp.*, Memorandum Opinion and Order, 18 FCC Rcd 1414, 1415 (2003).

¹⁶ *Westchester Order*, 34 FCC Rcd at 3769 para. 5; 3770 note 11.

County's goal to upgrade and consolidate a public safety communications system and achieve interoperability.¹⁷ Under these circumstances, we believe the County should be afforded additional time to properly design and implement its innovative solution to its public safety communications system. The requested extension is reasonable in light of the fact the County is and was actively working on the project, has made substantial progress,¹⁸ complied with previous orders to provide annual Construction Reports,¹⁹ and taken on the task of implementing an innovative solution to complete the project.²⁰ We find that the circumstances surrounding this request warrant an extension to serve the public interest given the time, effort, and expense the County has already incurred to institute a system in response to now repealed requirements.

IV. ORDERING CLAUSES

6. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and 303(c) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(c), and Section 1.925 of the Commission's rules, 47 CFR § 1.925, that the waiver requests associated with File Nos. 0010797498, 0010797527, 0010797542, and 0010797559 filed by Westchester County, New York IS GRANTED, and the associated licenses SHALL BE MODIFIED to specify a construction expiration date of December 31, 2025.

7. This action is taken under delegated authority pursuant to Section 155(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 155(c) and Sections 0.191 and 0.392 of the Commission's rules, 47 CFR §§ 0.191, 0.392.

FEDERAL COMMUNICATIONS COMMISSION

John Evanoff
Chief, Policy and Licensing Division
Public Safety and Homeland Security Bureau

¹⁷ *In the Matter of Cnty. of Morris, New Jersey*, DA Docket No. 21-311, Order, 36 FCC Rcd 5539 (2021).

¹⁸ Waiver Request at 4.

¹⁹ *Id.* at 2.

²⁰ *Id.* at 3-4.



Federal Communications Commission
Washington, D.C. 20554

April 5, 2024

DA 24-334

In Reply Refer to:

1800B3-SDW

Released: April 5, 2024

Community Media of Union City
c/o Jason McCray, Director
17051 Lincolnville Rd
Union City, PA 16438
jason@mccraytechnologies.com

Union City Family Support Center
38 North Main Street
Union City, PA 16438
heather.brooks@ucfsc.org

In re: **Community Media of Union City**
New LPFM, Union City, PA
Facility ID No. 788269
Application File No. 0000232840

Petition to Deny

Dear Applicant and Objector:

We have before us the above-referenced application (Application) for a construction permit for a new low power FM (LPFM) station at Union City, Pennsylvania, filed by Community Media of Union City (Community Media) on December 14, 2023.¹ We also have before us a petition to deny (Petition) the Application, filed by Union City Family Support Center (UCFSC) on January 10, 2024, and a related responsive pleading.² For the reasons set forth below, we dismiss the Petition as a petition to deny, consider and deny it as an informal objection (Objection), and grant the Application.

Background. Community Media filed the Application during the 2023 LPFM filing window.³ In the Application, Community Media listed Brian R. Silvis (Silvis) as its technical consultant.⁴ The Objection alleges that the Application should be denied based on the fact that Silvis “started and operate[s]” two existing LPFM stations, WUUK-LP, Canadohta Lake, Pennsylvania, and WHYP-LP,

¹ Application File No. 0000232840.

² Pleading File No. 0000235097. Community Media filed an opposition to the Petition on February 13, 2024 (Opposition). Pleading File No. 0000238875.

³ *Media Bureau Announces Filing Procedures and Requirements for November 1 – November 8, 2023, Low Power FM Filing Window*, Public Notice, DA 23-642 (MB July 31, 2023). Based on a request from LPFM advocates, the Bureau subsequently delayed the window until December 6, 2023. *Media Bureau Announces Revised Dates for LPFM New Station Application Filing Window*, Public Notice, DA 23-984 (MB Oct. 17, 2023). The Bureau subsequently extended the close of the window until December 15, 2023. *Media Bureau Announces Extension of LPFM New Station Application Filing Window*, Public Notice, DA 23-1150 (MB Dec. 11, 2023).

⁴ Application, Contact Information.

Corry, Pennsylvania, and is also associated with the Application.⁵ In its Opposition, Community Media explains that Silvis acted as a technical consultant to aid Community Media in completing the Application, and asserts that Silvis has no attributable interest in Community Media or the Application.⁶ Community Media subsequently amended its Application on February 12, 2024, to remove Silvis from the Application.⁷

Discussion. Pursuant to section 309(d) of the Communications Act of 1934, as amended (Act),⁸ petitions to deny and informal objections must provide properly supported allegations of fact that, if true, would establish a substantial and material question of fact that grant of the application would be *prima facie* inconsistent with the public interest.⁹ We find that UCFSC has failed to meet this burden.

Procedural Matters. As an initial matter, we find that the Petition is procedurally defective as a petition to deny. UCFSC does not include a certificate of service, as required by section 309(d)(1) of the Act and section 1.47 of the Commission's rules (Rules).¹⁰ Accordingly, we will dismiss the Petition as procedurally flawed and consider it as an informal objection pursuant to section 73.3587 of the Rules.¹¹

Substantive Matters. We find that UCFSC has failed to demonstrate that Silvis possesses any prohibited attributable interest in Community Media that would merit denial of the Application. The Commission has previously held that the presence of common technical consultants in multiple applications does not, on its own, indicate that common control or attributable interests exist among the applications.¹² The Opposition explains that Silvis merely served as a technical consultant to Community Media during the application process, and that it has since removed Silvis from this role.¹³ Because UCFSC presents no concrete evidence to establish that Silvis' involvement with the Application is attributable,¹⁴ we must reject this argument.

Conclusion/Action. Accordingly, **IT IS ORDERED** that the Petition to Deny filed by Union City Family Support Center on January 10, 2024 (Pleading File No. 0000235097), **IS DISMISSED**, and when treated as an Informal Objection, **IS DENIED**.

⁵ Objection at 1. The facility ID numbers for stations WUUK-LP and WHYP-LP are 193671 and 195580, respectively.

⁶ Opposition at 1 and Attach. 1, "Contact Removal.pdf."

⁷ Application, Amendment (filed Feb. 12, 2024) (Amendment).

⁸ 47 U.S.C. § 309(d).

⁹ See, e.g., *WWOR-TV, Inc.*, Memorandum Opinion and Order, 6 FCC Rcd 193, 197 n.10 (1990), *aff'd sub nom. Garden State Broad. L.P. v. FCC*, 996 F. 2d 386 (D.C. Cir. 1993), *rehearing denied* (Sep. 10, 1993); *Gencom, Inc. v. FCC*, 832 F.2d 171, 181 (D.C. Cir. 1987); *Area Christian Television, Inc.*, Memorandum Opinion and Order, 60 RR 2d 862, 864, para. 6 (1986) (petitions to deny and informal objections must contain adequate and specific factual allegations sufficient to warrant the relief requested).

¹⁰ 47 U.S.C. § 309(d)(1); 47 CFR § 1.47(d).

¹¹ 47 CFR § 73.3587; see also *Geraldine R. Miller*, Letter Order, 24 FCC Rcd 11814, 11815 (MB 2009) (treating a petition to deny as an informal objection because the objector failed to properly serve the pleading on either the licensee or its counsel and because the objector did not provide an affidavit to support the allegations).

¹² See *Vanguard Association of Sunbelt Colleges Corporation*, Letter Order, DA 24-159, at 7-8 (MB Feb. 22, 2024) (citing *Mt. Zion Educ. Assoc.*, Letter Order, 25 FCC Rcd 15088, 15091-92 (MB 2010)).

¹³ Opposition at 1.

¹⁴ See 47 CFR § 73.858 (attribution of LPFM interests); 47 CFR § 73.855 (ownership limits for LPFM stations).

IT IS FURTHER ORDERED the Application of Community Media of Union City for a construction permit for a new low power FM station at Union City, Pennsylvania (Application File No. 0000232840) **IS GRANTED**.

Sincerely,

Albert Shuldiner
Chief, Audio Division
Media Bureau



PUBLIC NOTICE

Federal Communications Commission
45 L Street, NE
Washington, D.C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>

DA 24-335
Released: April 5, 2024

COMMENTS INVITED ON SECTION 214 APPLICATION(S) TO DISCONTINUE DOMESTIC NON-DOMINANT CARRIER TELECOMMUNICATIONS SERVICES

WC Docket No(s). 24-52

Comments Due: April 22, 2024

Unless otherwise specified, the following procedures and dates apply to the application(s) (the Section 214 Discontinuance Application(s)) listed in the Appendix.

The Wireline Competition Bureau (Bureau), upon initial review, has found the Section 214 Discontinuance Application(s) listed herein to be acceptable for filing and subject to the procedures set forth in Section 63.71 of the Commission's rules.¹ The application(s) request authority, under section 214 of the Communications Act of 1934, as amended,² and section 63.71 of the Commission's rules,³ to discontinue, reduce, or impair certain domestic telecommunications service(s) (Affected Service(s)) in specified geographic areas (Service Area(s)) as applicable and as fully described in each application.

In accordance with section 63.71(f) of the Commission's rules, the Section 214 Discontinuance Application(s) listed in the Appendix will be deemed granted automatically on **May 6, 2024**, the 31st day after the release date of this public notice, unless the Commission notifies any applicant(s) that their grant will not be automatically effective.⁴ We note that the date on which an application for Commission authorization is deemed granted may be different from the date on which applicants are authorized to discontinue, reduce, or impair service ("Authorized Date"). Any applicant whose application has been deemed granted may discontinue, reduce or impair their Affected Service(s) in their Service Area(s) on or after the authorized date(s) specified in the Appendix, in accordance with their filed representations. Accordingly, pursuant to section 63.71(f), and the terms outlined in each application, absent further Commission action, each applicant may discontinue, reduce or impair the Affected Service(s) in the Service Area(s) described in their application on or after the authorized discontinuance date(s) listed in the Appendix for that application. For purposes of computation of time when filing a petition for reconsideration, application for review, or petition for judicial review of the Commission's decision(s), the date of "public notice" shall be the later of the auto grant date stated above in this Public Notice, or the release date(s) of any further public notice(s) or order(s) announcing final Commission action, as

¹ 47 CFR § 63.71.

² 47 U.S.C. § 214.

³ 47 CFR § 63.71.

⁴ See 47 CFR § 63.71(f) (stating, in relevant part, that an application filed by a non-dominant carrier "shall be automatically granted on the 31st day... unless the Commission has notified the applicant that the grant will not be automatically effective.").

applicable. Should no petitions for reconsideration, applications for review, or petitions for judicial review be timely filed, the proceeding(s) listed in this Public Notice shall be terminated, and the docket(s) will be closed.

Comments objecting to any of the applications listed in the Appendix must be filed with the Commission on or before **April 22, 2024**.⁵ Comments should refer to the specific WC Docket No. and Comp. Pol. File No. listed in the Appendix for the particular Section 214 Discontinuance Application that the commenter intends to address. Comments should include specific information about the impact of the proposed discontinuance on the commenter, including any inability to acquire reasonable substitute service. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.⁶ Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs>. Filers should follow the instructions provided on the Web site for submitting comments. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket number.

Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit one additional copy for each additional docket or rulemaking number associated with the proceeding in which they choose to file comments. Filings can be sent by commercial overnight courier or by first-class or overnight U.S. Postal Service mail.⁷ All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, D.C. 20554.

Copies of the comments may also be emailed to the Competition Policy Division, Wireline Competition Bureau, Federal Communications Commission, using the contact information listed in the Appendix for the appropriate Section 214 Application. In addition, comments should be served upon the Applicant(s).

These proceedings are considered "permit but disclose" proceedings for purposes of the Commission's *ex parte* rules.⁸ Participants should familiarize themselves with the Commission's *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or

⁵ Comments are normally due 15 days after the Commission releases public notice of the proposed discontinuance. 47 CFR § 63.71(a). For purposes of computation of time, if the comment deadline falls on a weekend or officially recognized Federal legal holiday, however, comments will be due on the next business day. See 47 CFR § 1.4(e) and (j).

⁶ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

⁷ Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Filing*, Public Notice, 35 FCC Rcd 2788 (OMD 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

⁸ 47 CFR § 1.1200 *et seq.*

otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b).

People with Disabilities: We ask that requests for accommodations be made as soon as possible in order to allow the agency to satisfy such requests whenever possible. Send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418-0530.

For further information, please see the contact(s) for the specific discontinuance proceeding you are interested in as listed in the Appendix. For further information on procedures regarding section 214 please visit <https://www.fcc.gov/encyclopedia/domestic-section-214-discontinuance-service>.

– FCC –

Appendix

- 1) **Applicant(s): Level 3 Telecom of Kentucky, LLC (Level 3)**
WC Docket No. 24-52, Comp. Pol. File No. 1895
Link – [https://www.fcc.gov/ecfs/search/search-filings/results?q=\(proceedings.name:\(%2224-52*%22\)\)](https://www.fcc.gov/ecfs/search/search-filings/results?q=(proceedings.name:(%2224-52*%22)))
Affected Service(s) – Basic Business Line Service; Channel 12 Service; and VersiPak IPRI Service
Service Area(s) – Louisville, KY
Authorized Date(s) – on or after May 8, 2024
Contact(s) – Kimberly Jackson, (202) 418-7393 (voice), Kimberly.Jackson@fcc.gov, of the Competition Policy Division, Wireline Competition Bureau
Note: On April 4, 2024, Level 3 filed a supplemental letter to indicate that corrected notices were mailed to affected customers on April 4, 2024.



PUBLIC NOTICE

Federal Communications Commission
45 L St., N.E.
Washington, D.C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>

DA 24-336
Released: April 5, 2024

DOMESTIC SECTION 214 APPLICATION FILED FOR THE TRANSFER OF CONTROL OF LIGONIER TELEPHONE COMPANY AND LIGTEL COMMUNICATIONS, INC. TO DANIEL E. SCHLOSS AND ELIZABETH L. BURCHFIELD

STREAMLINED PLEADING CYCLE ESTABLISHED

WC Docket No. 24-43

Comments Due: April 19, 2024
Reply Comment Due: April 26, 2024

By this Public Notice, the Wireline Competition Bureau (Bureau) seeks comment from interested parties on an application filed by the Estate of Meshell L. Schloss (Decedent or the Estate), Daniel E. Schloss, and Elizabeth L. Burchfield (Daniel E. Schloss and Elizabeth L. Burchfield, together, Transferees) (Decedent and Transferees, collectively, the Applicants), pursuant to section 214(a) of the Communications Act of 1934, as amended, and sections 63.03-04 of the Commission's rules,¹ requesting approval for the involuntary transfer of control of Ligonier Telephone Company (Ligonier) and LigTel Communications, Inc. (LigTel) (together, the Companies) from the Decedent's Estate to her children, Daniel E. Schloss and Elizabeth L. Burchfield.²

Ligonier, an Indiana corporation, provides local exchange service and exchange access service as an incumbent local exchange carrier (LEC) to approximately 538 access lines in the Noble and Elkhart counties of Indiana.³ Ligonier also provides Internet access service. LigTel, an Indiana

¹ See 47 U.S.C. § 214(a); 47 CFR §§ 63.03-04.

² Amended Application for Transfer of Control of Ligonier Telephone Company and LigTel Communications, Inc to Daniel E. Schloss and Elizabeth L. Burchfield, pursuant to Section 214 of the Communications Act of 1934, as Amended, WC Docket No. 24-43 (filed Mar. 28, 2024) (Application); *see also* Application Transfer of Control of Ligonier Telephone Company to the Estate of Meshell L. Schloss, pursuant to Section 214 of the Communications Act of 1934, as Amended, WC Docket No. 24-43 (filed Feb. 7, 2024). Applicants also filed an application for the transfer of authorizations associated with international and wireless services. Any action on this domestic section 214 application is without prejudice to Commission action on other related, pending applications. On April 4, 2024, the Bureau granted the Applicants request for Special Temporary Authority (STA) for the Transferees to serve Ligonier's and LigTel's customers pending approval of the transfer of control application. Request for Special Temporary Authority Related to the Amended Application for Involuntary Transfer of Control of Domestic Section 214 Authorization, WC Docket No. 24-43, at 1 (granted Apr. 4, 2024). The Companies continued operations under their own names, but under the ultimate control of Transferees since that time until the present. *Id.*

³ Application at 3, 6.

corporation, provides voice service and broadband Internet access service as a competitive LEC in the Noble, LaGrange, Kosciusko, Whitley, and Dekalb counties of Indiana.⁴ Heartland Innovations, Inc. (Heartland) is a holding company and the direct owner of the Companies (100%).⁵ Heartland also owns Heartland Cellular, Inc. (100%) and Indiana RSA 2 Partnership (25%), wireless telecommunications providers in Indiana.⁶

At the time of her death on June 3, 2023, the Decedent held a 50.96% controlling interest in the Companies, which passed to her Estate.⁷ On August 15, 2023, as a function of probate, the Estate distributed Decedent's 50.96% interest in Heartland, and thus the Companies, to the shareholders of Heartland.⁸ As a result of the distribution, no one entity owns a controlling interest in Heartland.⁹ Transferees each hold a 29.49% ownership interest in Heartland and, in turn, the Companies, and the remaining 41.02% ownership interest is held by the other eight shareholders, none of whom hold 10% or greater interest.¹⁰ The Transferees do not hold a 10% or greater direct or indirect interest in any other domestic telecommunications provider.¹¹

Applicants request streamlined treatment of the proposed transaction under the Commission's rules and assert that a grant of the application would serve the public interest, convenience, and necessity. We accept the Application for streamlined processing under section 63.03(b)(1)(ii) of the Commission's rules.¹²

Domestic Section 214 Application Filed for the Transfer of Control of
Ligonier Telephone Company, WC Docket No. 24-43 (filed Mar. 28, 2024).

GENERAL INFORMATION

The transfer of control identified herein has been found, upon initial review, to be acceptable for filing as a streamlined application. The Commission reserves the right to return any transfer application if, upon further examination, it is determined to be defective and not in conformance with the Commission's rules and policies. Pursuant to section 63.03(a) of the Commission's rules, 47 CFR § 63.03(a), interested parties may file comments **on or before April 19, 2024**, and reply comments **on or before April 26, 2024**. Pursuant to section 63.52 of the Commission's rules, 47 CFR § 63.52, commenters must serve a copy of comments on the Applicants no later than the above comment filing date. Unless otherwise notified by the Commission, the Applicants may transfer control on the 31st day after the date of this notice.

⁴ *Id.*

⁵ *Id.* at 2.

⁶ *Id.* at 6.

⁷ *Id.* at 1. Decedent held, in her individual capacity, a 40.78% interest in Heartland. She also held, as sole trustee and beneficiary of the Rober P. Schloss Family Credit Shelter Trust, a 10.18% ownership interest in Heartland.
Id. at 2.

⁸ *Id.* at 2.

⁹ *Id.* at 5.

¹⁰ *Id.* at 4-5.

¹¹ *Id.* at 5.

¹² 47 CFR § 63.03(b)(1)(ii).

Pursuant to section 63.03 of the Commission's rules, 47 CFR § 63.03, parties to this proceeding should file any documents using the Commission's Electronic Comment Filing System (ECFS): <http://apps.fcc.gov/ecfs/>.

In addition, e-mail one copy of each pleading to each of the following:

- 1) Tracey Wilson, Competition Policy Division, Wireline Competition Bureau, tracey.wilson@fcc.gov;
- 2) Megan (Capasso) Danner, Competition Policy Division, Wireline Competition Bureau, megan.danner@fcc.gov;
- 3) David Krech, Office of International Affairs, david.krech@fcc.gov;
- 4) Nadja Sodos-Wallace, Broadband Division, Wireless Telecommunications Bureau, nadja.sodoswallace@fcc.gov; and
- 5) Jim Bird, Office of General Counsel, jim.bird@fcc.gov.

People with Disabilities: We ask that requests for accommodations be made as soon as possible in order to allow the agency to satisfy such requests whenever possible. Send an email to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530.

The proceeding in this Notice shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b), 47 CFR § 1.1206(b). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

To allow the Commission to consider fully all substantive issues regarding the application in as timely and efficient a manner as possible, petitioners and commenters should raise all issues in their initial filings. New issues may not be raised in responses or replies.¹³ A party or interested person seeking to raise a new issue after the pleading cycle has closed must show good cause why it was not possible for it to have raised the issue previously. Submissions after the pleading cycle has closed that seek to raise new issues based on new facts or newly discovered facts should be filed within 15 days after such facts are discovered. Absent such a showing of good cause, any issues not timely raised may be disregarded by the Commission.

For further information, please contact Megan (Capasso) Danner at (202) 418-1151.

FCC

¹³ See 47 CFR § 1.45(c).

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Pinal County, Arizona
Petition for Modification of the Satellite Television
Markets of KGUN-TV, KVOA, KOLD-TV,
KMSB, Tucson, Arizona
MB Docket No. 24-28

MEMORANDUM OPINION AND ORDER

Adopted: April 8, 2024

Released: April 8, 2024

By the Chief, Media Bureau:

I. INTRODUCTION

1. Pinal County, Arizona (Petitioner or the County), with the support of its residents, has filed a petition to modify the local satellite markets of four Tucson, Arizona television stations (collectively, the Stations or the Tucson stations). Pinal County, which lies between the Phoenix and Tucson metroplexes, has historically received stations only from the Phoenix Designated Market Area (DMA), thereby limiting residents' access to Tucson-related news, sports, politics, and crucial weather alerts. With this Memorandum Opinion and Order (Order), the Media Bureau grants the Petition in full.

2. Petitioner filed the above-mentioned Petition seeking to modify the local satellite carriage television markets of the Stations to include Pinal County, currently assigned to the Phoenix (Prescott) DMA. The Stations, all of which are located in the Tucson (Sierra Vista) DMA, are: KGUN-TV (ABC), KVOA (NBC), KOLD-TV (CBS), and KMSB (FOX). Pinal County conducted pre-filing coordination with both DBS carriers. DISH Network LLC (DISH) and DIRECTV, LLC (DIRECTV) filed Certifications regarding the technical and economic feasibility of the proposed modifications. DIRECTV states that its HD spot beams cover all current zip codes in Pinal County. DISH states that it is unaware of any factors, at this time, that would render carriage of the stations technically infeasible. The Petition

1 Pinal County, Arizona Petition for Special Relief for Modification of the Television Market of Station KGUN-TV (ABC), (Channel 9); KVOA (NBC), (Channel 4); KOLD-TV (CBS), (Channel 13); KMSB (FOX), (Channel 11), Tucson, Arizona with Respect to DISH Network and DIRECTV, MB Docket 24-28 (filed Dec. 20, 2023) (the Petition). The Media Bureau placed the Petition on public notice and sought comment. Special Relief and Show Cause Petitions, Public Notice, Report No. 0509 (MB Jan. 22, 2023).

2 Petition at 1.

3 Id. at 3-4.

4 See generally Petition Exh. 1, Letter from Alison Minea, DISH Network L.L.C. to Kevin Costello, Deputy County Attorney, Pinal County (Sept. 8, 2022) (DISH Certification); Petition Exh. 2, Letter from DIRECTV, LLC to Kevin Costello, Deputy County Attorney, Pinal County (Sept. 27, 2022) (DIRECTV Certification).

5 DIRECTV Certification at 1. DIRECTV notes that only its HD spot beam covers the requested zip codes in Pinal County. We note that lack of standard definition (SD) spot beam coverage does not impact our analysis.

6 DISH Certification at para. 3.

was unopposed.

II. BACKGROUND

3. Section 338 of the Communications Act authorizes satellite carriage of local broadcast stations into their local markets, which is called “local-into-local” service.⁷ A satellite carrier provides “local-into-local” service when it retransmits a local television signal back into the local market of that television station for reception by subscribers.⁸ Generally, a television station’s “local market” is defined by the DMA in which it is located, as determined by Nielsen.⁹ DMAs describe each television market in terms of a group of counties and are defined by Nielsen based on measured viewing patterns.¹⁰

4. The STELA Reauthorization Act of 2014 (STELAR) added satellite television carriage to the Commission’s market modification authority, which previously applied only to cable television carriage.¹¹ Market modification, which long has existed in the cable context, provides a means for the Commission to modify the local television market of a commercial television broadcast station and thereby avoid rigid adherence to DMAs. Specifically, to better reflect market realities, STELAR permits the Commission to add communities to, or delete communities from, a station’s local television market for purposes of satellite carriage, following a written request. In the Commission’s 2015 *STELAR Market Modification Report and Order*, the Commission adopted satellite television market modification rules that provide a process for broadcasters, satellite carriers, and county governments to request changes to the boundaries of a particular commercial broadcast television station’s local television market to include a new community located in a neighboring local market.¹² The rules enable a broadcast television station to be carried by a satellite carrier in such a new community if the station is shown to have a local relationship to that community.

⁷ 47 U.S.C. § 338(a)(1).

⁸ 47 CFR § 76.66(a)(6). Pursuant to section 338, satellite carriers are not required to carry local broadcast television stations; however, if a satellite carrier chooses to carry a local station in a particular DMA in reliance on the local statutory copyright license, it generally must carry any qualified local station in the same DMA that makes a timely election for retransmission consent or mandatory carriage. *See* 17 U.S.C. § 122. Satellite carriers have a statutory copyright license under the 1999 Satellite Home Viewers Improvement Act (SHVIA) for carriage of stations to any subscriber within a station’s local market (Satellite Home Viewers Improvement Act of 1999 (SHVIA), Pub. L. No. 106-113, 113 Stat. 1501 (1999)). *See also* 47 U.S.C. § 338(a)(1); 47 CFR § 76.66(b)(1). This is commonly referred to as the “carry one, carry all” requirement.

⁹ *See* 17 U.S.C. § 122(j)(2); 47 CFR § 76.66(e) (defining a television broadcast station’s local market for purposes of satellite carriage as the DMA in which the station is located).

¹⁰ The Nielsen Company delineates television markets by assigning each U.S. county (except for certain counties in Alaska) to a market based on which home-market stations receive a preponderance of total viewing hours in the county. For purposes of this calculation, Nielsen includes both over-the-air and multichannel video programming distributor (MVPD) viewing.

¹¹ The STELA Reauthorization Act of 2014, § 102, Pub. L. No. 113-200, 128 Stat. 2059, 2060-62 (2014) (STELAR) (adding 47 U.S.C. § 338(l)). “STELAR” refers to the Satellite Television Extension and Localism Act of 2010, Pub. L. No. 111-175. *See also* Consolidated Appropriations Act of 2019, Pub. L. No. 116-6 (Feb. 15, 2019); Conference Report (H. Rept. 116-9) at 673 (noting that “despite the reforms made in STELAR, many communities continue to struggle with market modification petitions,” and directing the Commission to continue to “provide a full analysis to ensure decisions on market modification are comprehensively reviewed and STELAR’s intent to promote localism is retained” and “adhere to statutory requirements and congressional intent when taking administrative action under STELAR.”).

¹² *Amendment to the Commission’s Rules Concerning Market Modification; Implementation of Section 102 of the STELA Reauthorization Act of 2014*, MB Docket No. 15-71, Report and Order, 30 FCC Rcd 10406 (2015) (*STELAR Market Modification Report and Order*) (revising 47 CFR § 76.59). A community is defined as a county for purposes of the satellite market modification rules. 47 CFR § 76.5(gg)(2).

5. Section 338(l) of the Act, added by the STELAR, creates a satellite market modification regime very similar to that in place for cable television, while adding provisions to address the unique nature of satellite television service, particularly issues of technical and economic feasibility that are specific to the satellite context.¹³ Notably, the STELAR carves out an exception to carriage obligations¹⁴ resulting from a market modification that would be technically or economically infeasible for a satellite carrier to implement. The statute provides that a market modification “shall not create additional carriage obligations for a satellite carrier if it is not technically and economically feasible for such carrier to accomplish such carriage by means of its satellites in operation at the time of the determination.”¹⁵ In enacting this provision, Congress recognized that the unique nature of satellite television service may make a particular market modification difficult for a satellite carrier to effectuate using its satellites in operation at the time of the determination and thus exempted the carrier from the resulting carriage obligation under those circumstances.¹⁶ This exception applies only in the satellite context.¹⁷

6. In the *STELAR Market Modification Report and Order*, the Commission concluded that the satellite carrier has the burden to demonstrate that the carriage resulting from a market modification is infeasible.¹⁸ The Commission requires different demonstrations of infeasibility depending on whether the claim of infeasibility is based on insufficient spot beam coverage or some other basis.¹⁹ Satellite carriers use spot beams to offer local broadcast stations to targeted geographic areas.²⁰ With respect to claims of “spot beam coverage infeasibility,” the Commission concluded that “it is *per se* not technically and economically feasible for a satellite carrier to provide a station to a new community that is, or to the

¹³ See 47 U.S.C. §§ 338(l), 534(h)(1)(C) (providing factors the Commission must take into account when considering satellite market modification requests). The Commission may determine that particular communities are part of more than one television market. 47 U.S.C. § 338(l)(2)(A). When the Commission modifies a station’s market to add a community for purposes of carriage rights, the station is considered local and is covered by the local statutory copyright license and may assert mandatory carriage (or pursue retransmission consent) by the applicable satellite carrier in the local market. Conversely, if the Commission modifies a station’s market to delete a community, the station is considered “distant” and loses its right to assert mandatory carriage (or retransmission consent) on the applicable satellite carrier in the local market.

¹⁴ See *supra* note 8 and accompanying text (describing the “carry one, carry all” satellite carriage requirement).

¹⁵ 47 U.S.C. § 338(l)(3)(A).

¹⁶ See Report from the Senate Committee on Commerce, Science, and Transportation accompanying S. 2799, 113th Cong., S. Rep. No. 113-322, 11 (2014) (*Senate Commerce Committee Report*) (recognizing “that there are technical and operational differences that may make a particular television market modification difficult for a satellite carrier to effectuate”).

¹⁷ In the cable context, if review of the factors and other evidence demonstrates that a community is part of a station’s market, the modification is granted without reference to issues of technical and economic feasibility. As explained in the *STELAR Market Modification Report and Order*, Congress recognized “the inherent difference between cable and satellite television service” by adopting certain “provisions specific to satellite,” including 47 U.S.C. § 338(l)(3)(A)’s feasibility exception. 30 FCC Rcd at 10408, n.6.

¹⁸ *STELAR Market Modification Report and Order*, 30 FCC Rcd at 10435, para. 38 (observing that, as a practical matter, only the satellite carriers have the specific information necessary to determine if the carriage contemplated in a market modification would not be technically and economically feasible by means of their satellites in operation).

¹⁹ *Id.* at 10435-36, 10438, paras. 39, 42

²⁰ *Id.* at 10430, n.162 (quoting DIRECTV to explain that “[s]pot-beam technology divides up a portion of the bandwidth available to a satellite into beams that cover limited geographic areas” and that “[d]oing so allows particular sets of frequencies to be reused many times. This spectral efficiency unlocked the potential for satellite carriers to offer local broadcast signals in the late 1990s, and it enables satellite carriers to offer local service today.”). This is in contrast to a “CONUS” beam, which provides coverage to the entire continental United States and generally carries signals that are available and accessed by subscribers throughout that entire area.

extent which it is, outside the relevant spot beam on which that station is currently carried.”²¹ With respect to other possible bases for a carrier to assert that carriage would be technically or economically infeasible, such as costs associated with changes to customer satellite dishes to accommodate reception from different orbital locations, the Commission determined that it will review infeasibility claims on a case-by-case basis.²²

7. Once the threshold issue of technical and economic feasibility is resolved, section 338(l) provides that the Commission must afford particular attention to the value of localism in ruling on requests for market modification by taking into account the following five factors:

- (1) whether the station, or other stations located in the same area—(a) have been historically carried on the cable system or systems within such community; and (b) have been historically carried on the satellite carrier or carriers serving such community;
- (2) whether the television station provides coverage or other local service to such community;
- (3) whether modifying the local market of the television station would promote consumers’ access to television broadcast station signals that originate in their State of residence;
- (4) whether any other television station that is eligible to be carried by a satellite carrier in such community in fulfillment of the requirements of this section provides news coverage of issues of concern to such community or provides carriage or coverage of sporting and other events of interest to the community; and
- (5) evidence of viewing patterns in households that subscribe and do not subscribe to the services offered by multichannel video programming distributors within the areas served by such multichannel video programming distributors in such community.²³

The five statutory factors are not intended to be exclusive. Each factor is valuable in assessing whether a particular community should be included in or excluded from a station’s local market. The importance of particular factors will vary depending on the circumstances of each case. The Commission may also consider other relevant information.²⁴

²¹ *Id.* at 10429-30, para. 30. This is because the only available options to implement the market modification would be: (1) to put the signal on the satellite provider’s CONUS beam (using spectrum that could otherwise be deployed for signals available to subscribers throughout the entire continental U.S.); (2) to reorient existing spot beams (which are already oriented to most efficiently serve the largest number of subscribers); or (3) to carry the same signal on an additional spot beam (using twice as much overall spectrum for the channel at issue as for other channels, which are carried on a single spot beam whenever possible). The Commission found each of these options infeasible. *Id.* at 10431-32, para. 32. The Commission allows satellite carriers to demonstrate spot beam coverage infeasibility by providing a detailed and specialized certification, under penalty of perjury. *Id.* at 10435-36, para. 39.

²² *Id.* at 10438, para. 42. To demonstrate such infeasibility, the Commission requires carriers to provide detailed technical and/or economic information to substantiate its claim of infeasibility. *Id.*; *see also id.* at 10434-35, para. 36 (requiring satellite carriers to demonstrate infeasibility for reasons other than insufficient spot beam coverage “through the submission of evidence specifically demonstrating the technical or economic reason that carriage is infeasible”).

²³ 47 U.S.C. § 338(l)(2)(B)(i)-(v).

²⁴ 47 U.S.C. § 338(l)(2)(B) directs the Commission to “afford particular attention to the value of localism by taking into account *such factors as*” those described above (emphasis added). The Commission must also consider other relevant information, however, when necessary to develop a result that will “better effectuate the purposes” of the law. *See* 47 U.S.C. § 338(l)(1); *Definition of Markets for Purposes of the Cable Television Broadcast Signal Carriage Rules*, CS Docket No. 95-178, Order on Reconsideration and Second Report and Order, 14 FCC Rcd 8366, 8389, para. 53 (1999) (*Cable Market Modification Second Report and Order*).

8. Significantly, in the STELAR, Congress added the new statutory factor three quoted above, requiring consideration of access to television stations that are located in the same state as the community considered for modification.²⁵ This new factor and the legislative history reflect Congress's intent to promote consumer access to in-state and other relevant television programming. Indeed, the legislative history expresses Congress's concern that "many consumers, particularly those who reside in DMAs that cross State lines or cover vast geographic distances," may "lack access to local television programming that is relevant to their everyday lives" and indicates Congress's intent that the Commission "consider the plight of these consumers when judging the merits of a [market modification] petition . . . , even if granting such modification would pose an economic challenge to various local television broadcast stations."²⁶

9. In the *STELAR Market Modification Report and Order*, the Commission determined that a satellite market modification petition must include specific evidence describing the station's relationship to the community at issue. This standardized evidence approach was based on the existing approach for cable market modifications.²⁷ Accordingly, the rules require that the following evidence be submitted:

- (1) A map or maps illustrating the relevant community locations and geographic features, station transmitter sites, cable system headend or satellite carrier local receive facility locations, terrain features that would affect station reception, mileage between the community and the television station transmitter site, transportation routes and any other evidence contributing to the scope of the market;
- (2) Noise-limited service contour maps delineating the station's technical service area and showing the location of the cable system headends or satellite carrier local receive facilities and communities in relation to the service areas;
- (3) Available data on shopping and labor patterns in the local market;
- (4) Television station programming information derived from station logs or the local edition of the television guide;
- (5) Cable system or satellite carrier channel line-up cards or other exhibits establishing historic carriage, such as television guide listings;
- (6) Published audience data for the relevant station showing its average all day audience (*i.e.*, the reported audience averaged over Sunday-Saturday, 7 a.m.-1 a.m., or an equivalent time period) for both multichannel video programming distributor (MVPD) and non-MVPD households or other specific audience information, such as station advertising and sales data or viewer contribution records; and
- (7) If applicable, a statement that the station is licensed to a community within the same state as the relevant community.²⁸

Petitions for special relief to modify satellite television markets that do not include the above evidence will be dismissed without prejudice and may be re-filed at a later date with the appropriate filing fee.²⁹ The Bureau may waive the requirement to submit certain evidence for good cause shown, particularly if is

²⁵ See 47 U.S.C. §§ 338(1)(2)(B)(iii), 534(h)(1)(C)(ii)(III).

²⁶ *Senate Commerce Committee Report* at 11.

²⁷ See *STELAR Market Modification Report and Order*, 30 FCC Rcd at 10421-22, para. 20.

²⁸ 47 CFR § 76.59(b)(1)-(7).

²⁹ *STELAR Market Modification Report and Order*, 30 FCC Rcd at 10424, para. 22.

in a position to resolve the petition without such evidence.³⁰ Parties may submit whatever additional evidence they deem appropriate and relevant.³¹

10. In the instant proceeding, the County filed a Petition seeking modification of the local television markets of the Stations to include Pinal County, Arizona. During the pre-filing coordination process, the satellite carriers each filed Feasibility Certifications. The *DISH Certification* states that its current satellites and spot beam configurations render carriage technically feasible, but asserts that carriage may become economically infeasible due to additional costs associated with retransmission consent fees.³² The *DIRECTV Certification* says that HD service to all zip codes in the County is currently feasible.³³ In addition, Pinal County residents polled by the County were substantially in favor of filing this Petition.³⁴

11. The Commission must make two determinations with respect to the Petition: (1) whether the carriage of a station resulting from a proposed market modification is technically and economically feasible for each of the satellite carriers; and (2) if so, whether the petition demonstrates that a modification to the station's television market is warranted, based on the five statutory factors and any other relevant information.³⁵

III. DISCUSSION

12. For the reasons set forth below, we find that it is feasible for both DISH and DIRECTV to carry the Stations throughout the County. We further conclude that the evidence weighs in favor of expanding the markets for each of the Stations to include the County. We therefore modify the markets of the Stations to include Pinal County, Arizona.

A. Technical and Economic Feasibility

13. We find that it is technically and economically feasible for both DISH and DIRECTV to provide each of the Stations to the entirety of the County. In their Feasibility Certifications, both satellite providers indicate that there is no "spot beam infeasibility," and that relevant spot beam(s) cover all of the County. DIRECTV states that delivery of the signal to all of the current zip codes in Pinal County in HD is feasible.³⁶ DISH states that, at this time, it is unaware of any factors that would make carriage of the Stations technically infeasible; however, it asserts that it "reserves the right to amend this Feasibility Certification at any time due to, among other things, a satellite equipment failure or a different satellite being brought into service for the area that includes the County which has different coverage capabilities than the satellite(s) currently being used."³⁷

³⁰ *Tobacco Valley Communications*, 31 FCC Rcd 8972, 8976 n.22 (MB 2016); 47 CFR § 1.3.

³¹ *Id.*

³² *DISH Certification* at paras. 3-4.

³³ *DIRECTV Certification* at 1.

³⁴ See generally *Petition Exh. 7 (Survey)* (polling Pinal County residents for their interest in receiving Tucson broadcasts).

³⁵ 47 U.S.C. § 338(l); see also 47 CFR § 76.59.

³⁶ *DIRECTV Certification* at 1.

³⁷ *DISH Certification* at para. 3. DISH also notes that if any of the Stations elects retransmission consent and it is unable to reach an agreement with a given Station, then it would not be able to provide that Station's signal into the County, and argues that it "may be technically or economically infeasible, or both, for DISH to launch a customer offering with only the remaining stations that did grant retransmission consent." *Id.* at para. 4. The results of these hypothetical private retransmission consent negotiations play no part in the Commission's technical and economic feasibility analysis and would not be a proper basis for a claim of infeasibility. Since no such claim is asserted here, however, we simply disregard these statements.

B. Market Modification Analysis³⁸

14. *Historic Carriage.* The first factor we must consider is “whether the station, or other stations located in the same area, have been historically carried on the cable system or systems within such community; or have been historically carried on the satellite carrier or carriers serving such community.”³⁹ Petitioner offers no evidence with respect to historic MVPD carriage, and concedes that there has been no historic satellite carriage of the Tucson/Sierra Vista DMA in Pinal County.⁴⁰ Given the lack of evidence as to MVPD carriage and the undisputed statement that the Tucson Stations have no history of satellite carriage in Pinal County, this factor weighs against the proposed market modification.

15. *Local Service.* Second, we consider “whether the television station provides coverage or other local service to the community.” Such “local service” can include, for example, the presence of a high quality over-the-air signal; geographic proximity of the station to the community; shopping and labor connections between the local community and the station’s community of license; support of the local community by the station; and programming, including news or sports coverage, specifically about or addressing the community.

16. With regard to the presence of a high quality over-the-air signal, Petitioner provides noise-limited service contour maps for each of the Stations that demonstrate substantial coverage of the community, including the county seat of Florence, and also submits the results of an over-the-air analysis of the Stations showing ample signal strength in Florence.⁴¹ With respect to geographic proximity, Petitioner submits a map illustrating the distance between the Pinal County seat in Florence and the main transmitter for the Stations in Tucson. While the mountainous terrain means the transmitter is over 100 miles driving distance from the Pinal County Seat in Florence, it is fewer than 60 miles “as the crow flies,” and portions of Pinal County are fewer than 10 miles from the Stations’ transmitters on Mount Bigelow.⁴²

17. With regard to local shopping and labor patterns, Petitioner submits the results of a survey showing an overwhelmingly greater connection to Tucson than Phoenix.⁴³ While the Petition does not provide detailed information about methodology, it does appear to have been an online, self-selected survey specifically addressed only to residents of southern Pinal County. With regard to local programming, the Petitioner submits multi-day programming lineups for the Stations. The Stations

³⁸ Because the Stations are identically situated with respect to carriage into Pinal County, we consider them collectively in our analysis below.

³⁹ 47 U.S.C. § 338(1)(2)(B)(i).

⁴⁰ Petition at 5.

⁴¹ Petition Exh. 5.

⁴² See Petition Exh. 4. In past market modification petitions, we have considered similar distances to demonstrate proximity. See, e.g., *Brenmor Cable Partners, L.P. D/B/A Intermedia Partners for Modification of the Atlanta, Georgia ADI*, Memorandum Opinion and Order, 14 FCC Rcd 11742, 11754, paras. 32, 34 (1999) (denying a petition to delete communities from a market where the average distance between the transmitter and the communities was 62.1 miles); *Monongalia County, West Virginia and Preston County, West Virginia, Petitions for Modification of the Satellite Television Markets of WDTV, Weston, West Virginia, and WBOY-TV and WVFX, Clarksburg, West Virginia*, Memorandum Opinion and Order, 33 FCC Rcd 1168, 1177 para. 21 (MB 2018) (approving a satellite market modification for a station 60-70 miles away from the county seat); *WRNN Licensing Company, LLC for Modification of the Television Market of Station WRNN-TV, New Rochelle, New York*, Memorandum Opinion and Order, 36 FCC Rcd 4226, 4234 para. 17 (MB 2021) (approving a cable market modification for a station 75 miles away from the community).

⁴³ Petition at 5 and Exh. 7 (indicating that 99% of respondents shop and seek services in Tucson rather than Phoenix, almost none work in Phoenix while many work in Tucson, and almost all would like to receive television service from Tucson).

regularly broadcast news, weather, and sports for the Tucson local area where many Pinal County residents commute, work, and shop.⁴⁴ Specifically, Petitioner explains that Pinal County is primarily desert and particularly susceptible to flash floods, and therefore residents of southern Pinal County need access to critical weather advisories and alerts from the Tucson area.⁴⁵ Additionally, Petitioner asserts that despite having a large alumni base for both schools within Pinal County, residents are “unable to follow events involving the [Tucson-area] University of Arizona even though it is much closer than [Phoenix-based] Arizona State University.”⁴⁶

18. The record demonstrates that the Stations are not only geographically proximate to the bulk of the community, but provide significant over-the-air coverage of the community within their service contours and extensive and important local programming. We thus find that the second statutory factor weighs strongly in favor of the requested modification.

19. *Access to In-State Stations.* The third factor we consider is “whether modifying the local market of the television station would promote consumers’ access to television broadcast station signals that originate in their State of residence.”⁴⁷ This factor is intended to ensure that MVPD subscribers are “receiving news, politics, sports, emergency information, and other television programming relevant to their home state” and “relevant to their everyday lives.”⁴⁸ A petitioner is considered to satisfy this factor if the involved station is licensed to a community within the same state as the new community.⁴⁹ As Petitioner explains, the proposed market modification would promote access to in-state broadcast signals because each of the Stations’ signals originates in Arizona, where Pinal County is located.⁵⁰ We therefore find that this factor weighs in favor of the modification.

20. *Other Local Stations.* Fourth, we consider “whether any other television station that is eligible to be carried by a satellite carrier in such community in fulfillment of the requirements of this section provides news coverage of issues of concern to such community or provides carriage or coverage of sporting or other events of interest to the community.”⁵¹ In general, the Commission has interpreted this factor as enhancing a station’s market modification petition if other stations do not sufficiently serve the communities at issue; however, other stations’ service to the communities has rarely counted against a petition.⁵² The Petitioner argues that “whether other television stations carried by a satellite carrier in Pinal County provide coverage of issues of concern or interest to the community, depends primarily upon where within Pinal County the resident resides.”⁵³ Nonetheless, we must consider the county as a whole in our analysis. Given the large number of Phoenix stations carried by the DBS providers, we cannot agree that absolutely none serve the interests of the residents at issue and that the Tucson Stations are

⁴⁴ See Petition Exh. 8; Petition 8-10.

⁴⁵ Petition at 6.

⁴⁶ *Id.*

⁴⁷ 47 U.S.C. § 338(l)(2)(B)(iii).

⁴⁸ *STELAR Market Modification Report and Order*, 30 FCC Rcd at 10407, para. 1, 10420, para. 18 (citing Report from the Senate Committee on Commerce, Science, and Transportation accompanying S. 2799, 113th Cong., S. Rep. No. 113-322, at 11 (2014)).

⁴⁹ *STELAR Market Modification Report and Order*, 30 FCC Rcd at 10420, para. 18.

⁵⁰ Petition at 5.

⁵¹ 47 U.S.C. § 338(l)(2)(B)(iv).

⁵² See, e.g., *Petition for Modification of Dayton, OH Designated Mkt. Area with Regard to Television Station WHIOTV, Dayton, OH*, Memorandum Opinion and Order, 28 FCC Rcd 16011, 16019, para. 22 (MB 2013); *Petition of Tennessee Broad. Partners for Modification of the Television Market for WBBJ-TV/DT, Jackson, Tennessee*, Memorandum Opinion and Order, 23 FCC Rcd 3928, 3947, para. 49 (MB 2008).

⁵³ Petition at 5.

uniquely qualified to serve the Community. Accordingly, consistent with our precedent, we assign no weight to this factor.

21. *Viewing Patterns.* Finally, we consider “evidence of viewing patterns in households that subscribe to the services offered by multichannel video programming distributors within the areas served by such multichannel video programming distributors in such community.”⁵⁴ Petitioner submits combined MVPD and non-MVPD information provided by Nielsen based on the 2023-2024 Television season. Viewing shares for the Sunday-Saturday, 6 AM-2 AM daypart for MVPD and non-MVPD sources were as follows: KGUN-TV at 0.27, KMSB at 0.08, KVOA at 0.15, and KOLD-TV at 0.10.⁵⁵ This evidentiary submission is not indicative of significant viewership. Nonetheless, it is rare to find any evidence of viewership at all in a DBS market modification petition, and we have taken into consideration the likelihood that viewership is higher in the portions of the county closer to Tucson. We therefore find that this factor weighs against modification of the Stations’ market, but give it limited weight.

IV. CONCLUSION

22. The issue before us is whether to grant Petitioners’ requests to modify the local satellite carriage markets of KGUN-TV, KMSB, KVOA, and KOLD-TV, all of which are located in the Tucson (Sierra Vista) DMA, to include Pinal County, Arizona, which is currently assigned to the Phoenix (Prescott) DMA. Section 338(l) permits the Commission to add or exclude communities from a station’s local television market to better reflect market realities and to promote residents’ access to local programming from broadcasters located in their State.⁵⁶ Under this statutory provision, the Commission must afford particular attention to the value of localism.⁵⁷

23. With respect to each of the Stations, after considering each of the statutory factors and other indicia of localism, we are persuaded by the overall strength of the evidence that a sufficient nexus exists between the Station and Pinal County. The outcome that best serves the intent of Congress in promoting localism is to include the petitioning county within the local markets of the Stations.⁵⁸ We therefore grant the requests for market modification, and order the addition of Pinal County to the local markets of KGUN-TV, KMSB, KVOA, and KOLD-TV on both DISH and DIRECTV.⁵⁹

⁵⁴ 47 U.S.C. § 338(l)(2)(B)(v).

⁵⁵ Petition Exh. 9, Letter of Don Lowery, Senior Vice President of Community Engagements, The Nielsen Company to Ian Daranyi, Deputy County Attorney, Pinal County (Nov. 6, 2023).

⁵⁶ *STELAR Market Modification Report and Order*, 30 FCC Rcd at 10412-13, para. 7.

⁵⁷ *Id.*

⁵⁸ *Id.*; 47 U.S.C. § 338(l)(2)(B) (directing the Commission to “afford particular attention to the value of localism” when considering requests to modify a satellite market).

⁵⁹ We remind KGUN-TV, KMSB, KVOA, and KOLD-TV of their individual obligations to elect retransmission consent or mandatory carriage with respect to Pinal County within 30 days of release of this item. We also remind DISH and DIRECTV of their obligation to commence carriage within 90 days of that election, unless the station(s) have elected retransmission consent and the parties have not agreed to carriage. 47 CFR § 76.66(d)(6).

V. ORDERING CLAUSES

24. Accordingly, **IT IS ORDERED**, pursuant to section 338 of the Communications Act, as amended, 47 U.S.C. § 338, and section 76.59 of the Commission's rules, 47 CFR § 76.59, that the captioned petition for special relief (MB Docket No. 24-28) filed by Pinal County, Arizona, with respect to KGUN-TV, Tucson, Arizona, KMSB, Tucson, Arizona, KVOA, Tucson, Arizona, and KOLD-TV, Tucson, Arizona, **IS GRANTED**.

25. This action is taken pursuant to authority delegated by section 0.283 of the Commission's Rules.

FEDERAL COMMUNICATIONS COMMISSION

Holly Saurer
Chief, Media Bureau



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-338
Released: April 8, 2024

FCC ANNOUNCES MAY 16, 2024 MEETING OF THE DISABILITY ADVISORY COMMITTEE

By this Public Notice,¹ the Federal Communications Commission (FCC) announces the next meeting of the Disability Advisory Committee (DAC) to be held on Thursday, May 16, 2024, at 10:00 a.m. EST. The DAC meeting will be held remotely at www.fcc.gov/live.

At this meeting, DAC members are expected to (i) discuss current and emerging challenges and opportunities in the area of digital accessibility; (ii) receive updates from the working groups; and (iii) address any other topics relevant to the DAC's work. The meeting agenda will be available at <https://www.fcc.gov/news-events/events/2024/05/disability-advisory-committee-meeting> and may be modified at the discretion of the DAC Co-Chairs and Designated Federal Officer (DFO).

The DAC meeting is open to the public. During the meeting, members of the public may submit questions and comments to the DAC via email: livequestions@fcc.gov. These comments or questions may be addressed during the public comment period.

Open captioning and sign language interpreting will be provided for this event. Other reasonable accommodations for people with disabilities are available upon request. Requesters of such accommodations may contact the Consumer and Governmental Affairs Bureau at fcc504@fcc.gov, or (202) 418-0530. Such requests should include a detailed description of the accommodation needed and how the requester can be contacted. Requests should be made as early as possible.

For general information about the DAC, visit www.fcc.gov/dac. For specific questions about the DAC, contact Joshua Mendelsohn, DFO, DAC@fcc.gov, or (202) 559-7304.

– FCC –

¹ This Public Notice is released consistent with the Federal Advisory Committee Act, 5 U.S.C. § 1001 *et seq.*



PUBLIC NOTICE

Federal Communications Commission
45 L Street, NE
Washington, DC 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>
TTY: 1-888-835-5322

DA 24-339

April 8, 2024

PUBLIC SAFETY AND HOMELAND SECURITY BUREAU ANNOUNCES COMPLIANCE DATE AND PRA APPROVAL FOR RESILIENT NETWORKS MANDATORY DISASTER RESPONSE INITIATIVE (MDRI)

PS Docket Nos. 21-346 and 15-80; ET Docket No. 04-35

By this Public Notice, the Federal Communications Commission's Public Safety and Homeland Security Bureau (Bureau) announces that facilities-based mobile wireless providers must comply with the requirements of the Mandatory Disaster Response Initiative (MDRI) by **May 1, 2024**.¹ The MDRI may be activated when any one of the following three conditions applies: 1) any entity authorized to declare Emergency Support Function 2 (ESF-2) activates ESF-2 for a given emergency or disaster; 2) the Commission activates the Disaster Information Reporting System (DIRS); or 3) the Chief of the Commission's Public Safety and Homeland Security Bureau issues a Public Notice activating the Mandatory Disaster Response Initiative in response to a state request to do so, where the state has also either activated its Emergency Operations Center, activated mutual aid or proclaimed a local state of emergency.²

As of May 1, 2024, and whenever the MDRI is activated thereafter, facilities-based mobile wireless providers must have each of their bilateral roaming agreements and mutual aid arrangements executed and in place.³ These facilities-based mobile wireless providers also must have taken reasonable measures to enhance municipal preparedness and restoration, increase consumer readiness and preparation, and improve public awareness and stakeholder

¹ See *Resilient Networks; Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications; New Part 4 of the Commission's Rules Concerns Disruptions to Communications*, PS Docket Nos. 21-346 and 15-80; ET Docket No. 04-35, Order on Reconsideration, FCC 23-71, at 6-9, paras. 12-23 (Sept. 15, 2023) (*Order on Reconsideration*); see also *Resilient Networks; Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications; New Part 4 of the Commission's Rules Concerns Disruptions to Communications*, PS Docket Nos. 21-346 and 15-80; ET Docket No. 04-35, Report and Order and Further Notice of Proposed Rulemaking, 37 FCC Rcd 8059 (2022); Federal Communications Commission, *Resilient Networks; Disruptions to Communications*, Final rule; withdrawal; re-issuance; announcement of compliance date, 89 Fed. Reg. 20,860 (Mar. 26, 2024) (announcing that on, October 27, 2023, the Office of Management and Budget approved the information collection requirements associated with the rules adopted in the *Report and Order*).

² See 47 CFR § 4.17(a)(1)-(3).

³ See *id.* § 4.17(a)(3)(i)-(ii); see *Order on Reconsideration* at 8-9, para. 23 (determining that requirement to enter into mutual aid agreements is subject to the same implementation timing as other MDRI requirements). Facilities-based mobile wireless providers must have performed a complete first round of testing of their roaming capabilities by May 1, 2024. See *id.* § 4.17(b). Facilities-based mobile wireless providers are required retain their roaming agreements for a period of at least one year after their expiration and supply copies of such agreements to the Commission promptly upon Commission request. *Id.* § 4.17(d).

communications on service and restoration status.⁴ Facilities-based mobile wireless providers operating in a certain geographic area in the aftermath of a disaster must submit reports to the Commission detailing the timing, duration, and effectiveness of their implementation of the MDRI's provisions within 60 days of the Public Safety and Homeland Security Bureau's issuance of a Public Notice announcing that such reports must be filed.⁵

Pursuant to authority delegated by the Commission, the Bureau has published notice of both the effective date and the compliance date associated with the MDRI final rule in the Federal Register and has revised the text of the rule adopted by the Commission accordingly.⁶ For further information regarding this proceeding, please contact Logan S. Bennett, Attorney Advisor, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau at (202) 418-7790 or Logan.Bennett@fcc.gov.

⁴ *See id.* § 4.17(a)(3)(iii)-(v).

⁵ *See id.* § 4.17(c).

⁶ FCC Resilient Networks Final Rule 2024 Update.

Before the
Federal Communications Commission
Washington, D.C. 20554

In re Applications of
Prairie Public Broadcasting, Inc.
For Renewal of License for
Stations KBME-TV, Bismark, ND; KCGE-DT,
Crookston, MN; KMDE(TV), Devils Lake, ND;
KSRE(TV), Minot, ND; KWSE(TV), Williston,
ND; KJRE(TV), Ellendale, ND; and KFME(TV),
Fargo, ND
FRN: 0014558217
NAL/Acct. Nos. 202241420007,
202241420008, 202241420009,
202241420010, and 202441420005
Facility ID Nos. 53324, 132606, 162016,
53313, 53318, 53315, and 53321
LMS File Nos. 0000171009, 0000171015,
0000171030, 0000171014, 0000171016,
0000171022, and 0000171028

ORDER

Adopted: April 11, 2024

Released: April 11, 2024

By the Chief, Media Bureau:

1. In this Order, we adopt the attached Consent Decree entered into by the Media Bureau (Bureau) and Prairie Public Broadcasting, Inc. (Licensee), licensee of noncommercial educational (NCE) stations KBME-TV, Bismark, North Dakota; KCGE-DT, Crookston, Minnesota; KMDE(TV), Devils Lake, North Dakota; KSRE, Minot, North Dakota; KWSE(TV), Williston, North Dakota; KJRE(TV), Ellendale, North Dakota; and KFME(TV), Fargo, North Dakota (Stations). The Consent Decree resolves issues arising from the Bureau’s review of the captioned license renewal applications (Applications) for the Stations. In particular, the Consent Decree resolves the Bureau’s investigation and forfeiture proceeding involving the Licensee’s compliance with section 73.3514(a) of the Commission’s rules (Rules),¹ which requires licensee’s to provide all required information in an application,² and section 73.3527(e)(8) of the Rules,³ which sets forth the requirement for NCE stations to place quarterly issues/programs lists in their online public inspection file.

2. The Bureau and Licensee have negotiated the attached Consent Decree in which Licensee stipulates that it violated sections 73.3514(a) and 73.3527(e)(8) of the Rules and provides that Licensee make a civil penalty payment to the United States Treasury in the amount of eight thousand one hundred and fifty dollars (\$8,150) and implement a compliance plan to ensure future compliance. The Bureau agrees to terminate its investigation and all open forfeiture proceedings.⁴

1 See 47 CFR § 73.3514(a).

2 Id.

3 See 47 CFR § 73.3527(e)(8).

4 Prairie Public Broadcasting, Inc., Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, 37 FCC Rcd 6622 (Vid. Div. Jun. 6, 2022) (finding Licensee liable for \$6000 for KBME-TV public file violations) (KBME NAL); Prairie Public Broadcasting, Inc., Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, 37 FCC Rcd 6628 (Vid. Div. Jun. 6, 2022) (finding Licensee liable for \$9000 for KCGE-DT public file violations); Prairie Public Broadcasting, Inc., Memorandum Opinion and Order and Notice (continued....)

3. After reviewing the terms of the Consent Decree, we find that the public interest will be served by its approval. Based on the record before us, we also conclude that grant of the Stations' renewal applications, as captioned above, are appropriate. In evaluating an application for license renewal, the Commission's decision is governed by section 309(k) of the Act.⁵ That section provides that if, upon consideration of the application and pleadings, we find that: (1) the station has served the public interest, convenience, and necessity; (2) there have been no serious violations of the Act or the Rules; and (3) there have been no other violations which, taken together, constitute a pattern of abuse, we are to grant the renewal application.⁶ If, however, the licensee fails to meet that standard, the Commission may deny the application—after notice and opportunity for a hearing under section 309(e) of the Act—or grant the application “on terms and conditions as are appropriate, including renewal for a term less than the maximum otherwise permitted.”⁷

4. As we concluded in the *NALs*,⁸ we find that the Licensee's violation of sections 73.3514(a) and 73.3527(e)(8) of the Rules does not constitute a “serious violation” warranting designation of the Applications for evidentiary hearing. Moreover, we find no evidence of violations that, when considered together, constitute a pattern of abuse.⁹ Further, based on our review of the Applications, we find that the Stations served the public interest, convenience, and necessity during the subject license term. We will therefore grant the Applications, consistent with the terms and conditions set forth in the Consent Decree.

5. **ACCORDINGLY, IT IS ORDERED** that, pursuant to sections 4(i), 4(j), and 503(b) of the Communications Act of 1934, as amended,¹⁰ and by the authority delegated by sections 0.61 and 0.283 of the Rules,¹¹ the Consent Decree attached hereto **IS ADOPTED** without change, addition, or modification.

6. **IT IS FURTHER ORDERED** that the investigation by the Media Bureau of the matters discussed above and the above captioned forfeiture proceedings **ARE TERMINATED**.

of Apparent Liability for Forfeiture, 37 FCC Rcd 6634 (Vid. Div. Jun. 6, 2022) (finding Licensee liable for \$6000 for KMDE public file violations); and *Prairie Public Broadcasting, Inc.*, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, 37 FCC Rcd 6639 (Vid. Div. Jun. 6, 2022) (finding Licensee liable for \$9000 for KSRE public file violations) (collectively, “*NALs*”).

⁵ 47 U.S.C. § 309(k).

⁶ 47 U.S.C. § 309(k)(1).

⁷ 47 U.S.C. §§ 309(k)(2), 309(k)(3).

⁸ See e.g., KBME NAL at 3, para. 10.

⁹ For example, we do not find here that the Licensee's Stations operation “was conducted in an exceedingly careless, inept and negligent manner and that the licensee is either incapable of correcting or unwilling to correct the operating deficiencies.” See *Heart of the Black Hills Stations*, Decision, 32 FCC 2d 196, 198, para. 6 (1971). Nor do we find on the record here that “the number, nature and extent” of the violations indicate that “the licensee cannot be relied upon to operate [the station] in the future in accordance with the requirements of its licenses and the Commission's Rules.” *Id.* at 200, paras. 10-11. See also *Center for Study and Application of Black Econ. Dev.*, Hearing Designation Order, 6 FCC Rcd 4622 (1991); *Calvary Educ. Broad. Network, Inc.*, Hearing Designation Order, 7 FCC Rcd 4037 (1992).

¹⁰ 47 U.S.C. §§ 154(i), 154(j), 503(b).

¹¹ 47 CFR §§ 0.61, 0.283.

7. **IT IS FURTHER ORDERED** that, pursuant to section 309(k) of the Communications Act of 1934, as amended,¹² the applications of Prairie Public Broadcasting, Inc. for renewal of licenses, as captioned above, shall be granted consistent with the terms and conditions of the Consent Decree.

8. **IT IS FURTHER ORDERED** that copies of this Order shall be sent, by First Class and Certified Mail, Return Receipt Requested, to Prairie Public Broadcasting, Inc., PO Box 3240, Fargo, ND 58108 and by electronic mail to jharris@prairiepublic.org. A copy shall also be sent to Licensee's counsel, Derek Teslik, Esq., by electronic mail to dteslik@graymillerpersh.com.

FEDERAL COMMUNICATIONS COMMISSION

Holly Saurer
Chief
Media Bureau

¹² 47 U.S.C. § 309(k).

**Before the
Federal Communications Commission
Washington, D.C. 20554**

| | | |
|---|---|---|
| In re Application of |) | |
| |) | |
| Prairie Public Broadcasting, Inc. |) | FRN: 0014558217 |
| |) | NAL/Acct. Nos. 202241420007, |
| For Renewal of License for |) | 202241420008, 202241420009, |
| Stations KBME-TV, Bismark, ND; KCGE-DT, |) | 202241420010, and 202441420005 |
| Crookston, MN; KMDE(TV), Devils Lake, ND; |) | Facility ID Nos. 53324, 132606, 162016, |
| KSRE(TV), Minot, ND; KWSE(TV), Williston, |) | 53313, 53318, 53315, and 53321 |
| ND; KJRE(TV), Ellendale, ND; KFME(TV), |) | LMS File Nos. 0000171009, 0000171015, |
| Fargo, ND |) | 0000171030, 0000171014, 0000171016, |
| |) | 0000171022, and 0000171028 |

CONSENT DECREE

Adopted: April 11, 2024

Released: April 11, 2024

I. INTRODUCTION

1. The Media Bureau of the Federal Communications Commission (hereafter “Bureau,” as defined below) and Prairie Public Broadcasting, Inc. (hereafter “Licensee,” as defined below), by their authorized representatives, hereby enter into this Consent Decree for the purpose of terminating the Bureau’s investigation and forfeiture proceeding into the Licensee’s compliance with section 73.3514(a) of the Commission’s rules (hereafter “Rules,” as defined below), which requires licensee’s to provide all required information in an application, and section 73.3527(e)(8) of the Rules,¹³ which requires noncommercial educational stations to place quarterly issues/programs lists in their online public inspection file. To resolve these matters, the Licensee agrees to pay a civil penalty payment to the United States Treasury in the amount of eight thousand one hundred and fifty dollars (\$8,150) and implement a comprehensive Compliance Plan to ensure its future compliance with sections 73.3514(a) and 73.3527(e)(8) of the Rules. The Bureau agrees to terminate its investigation, and grant the Stations’ pending license renewal applications, subject to the terms and conditions set forth below.

II. DEFINITIONS

2. For the purposes of this Consent Decree, the following definitions shall apply:
 - (a) “Act” means the Communications Act of 1934, as amended, 47 U.S.C. § 151 *et seq.*
 - (b) “Adopting Order” means an Order of the Bureau adopting the terms of this Consent Decree without change, addition, deletion, or modification.
 - (c) “Applications” means applications of Prairie Public Broadcasting, Inc. for renewal of the television broadcast licenses for stations KBME-TV, Bismark, ND, LMS File No. 0000171009; KCGE-DT, Crookston, MN, LMS File No. 0000171015; KMDE(TV), Devils Lake, ND, LMS File No. 0000171030; KSRE(TV), Minot, ND, LMS File No. 0000171014; KWSE(TV), Williston, ND, LMS File No.. 0000171016; KJRE(TV), Ellendale, ND, LMS File No. 0000171022; KFME(TV), Fargo, ND, LMS File No.0000171028.
 - (d) “Bureau” means the Media Bureau of the Federal Communications Commission.

¹³ 47 CFR §§ 73.3514(a), 73.3527(e)(8).

- (e) “Content of Applications Rule” means 47 CFR § 73.3514(a).
- (f) “Commission” or “FCC” means the Federal Communications Commission and all of its bureaus and offices.
- (g) “Covered Employees” means all employees, volunteers, and agents of the Licensee, who are responsible for performing, supervising, overseeing, or managing activities related to the filing of timely issues/programs lists as required by the Issues and Programs Lists Rule and submitting applications as required by the Content of Applications Rule.
- (h) “Division” means the Media Bureau’s Video Division.
- (i) “Effective Date” means the date by which both the Bureau and the Licensee have signed the Consent Decree.
- (j) “Issues and Programs Lists Rule” means 47 CFR § 73.3527(e)(8).
- (k) “Investigation” means the Bureau’s examination of Licensee’s apparent violations of 47 CFR § 73.3527(e)(8).
- (l) “Licensee” or “Prairie” means Prairie Public Broadcasting, Inc. and its affiliates, subsidiaries, predecessors-in-interest, and successors-in-interest.
- (m) “NALs” or “Forfeiture Proceeding” means, collectively, *Prairie Public Broadcasting, Inc.*, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, 37 FCC Rcd 6622 (Vid. Div. Jun. 6, 2022); *Prairie Public Broadcasting, Inc.*, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, 37 FCC Rcd 6628 (Vid. Div. Jun. 6, 2022); *Prairie Public Broadcasting, Inc.*, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, 37 FCC Rcd 6634 (Vid. Div. Jun. 6, 2022); and *Prairie Public Broadcasting, Inc.*, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, 37 FCC Rcd 6639 (Vid. Div. Jun. 6, 2022).
- (n) “NCE” means noncommercial educational as defined by 47 CFR § 73.621.
- (o) “OPIF” means the respective station’s online public inspection file as defined by 47 CFR § 73.3527.
- (p) “Parties” means the Licensee and the Bureau, each of which is a “Party.”
- (q) “Rules” means the Commission’s regulations found in Title 47 of the Code of Federal Regulations.
- (r) “Stations” means collectively KBME-TV, Bismark, ND (KBME); KCGE-DT, Crookston, MN (KCGE); KMDE(TV), Devils Lake, ND (KMDE); KSRE(TV), Minot, ND (KSRE); KWSE(TV), Williston, ND (KWSE); KJRE(TV), Ellendale, ND (KJRE); and KFME(TV), Fargo, ND (KFME).

III. BACKGROUND

3. On November 23, 2021, the Licensee filed the Applications. In its application to renew the license of KMDE, the Licensee disclosed that it failed to timely file the issues/programs list for the first quarter of 2020.¹⁴ However, a Division staff review identified an additional ten untimely filed issues/programs lists in KMDE’s OPIF. In total, KMDE’s OPIF included three issues/programs lists that were filed under one month late, four issues/programs lists filed between one month and one year late,

¹⁴ Application of Prairie Public Broadcasting, Inc. for Renewal of License, LMS File No. 0000171030 (filed Nov. 23, 2021) at Attachment KMDE FCC Public File Addendum Nov. 2021.

and four issues/programs lists filed over one year late. Division staff also identified late issues/programs lists in the OPIFs of the six other stations licensed to Prairie, none of which were disclosed in the station's respective license renewal application.

- KBME's OPIF included three issues/programs lists that were filed under one month late, four issues/programs lists that were filed between one month and one year late, and three issues/programs lists that were filed over one year late.
- KSRE's OPIF included four issues/programs lists that were filed under one month late, three issues/programs lists that were filed between one month and one year late, and four issues/programs lists that were filed over one year late.
- KCGE's OPIF included four issues/programs lists that were filed under one month late, three issues/programs lists that were filed between one month and one year late, and four issues/programs lists that were filed over one year late.
- KWSE's OPIF included four issues/programs lists that were filed under one month late, three issues/programs lists that were filed between one month and one year late, and four issues/programs lists that were filed over one year late.
- KJRE's OPIF included five issues/programs lists that were filed under one month late, three issues/programs lists that were filed between one month and one year late, and four issues/programs lists that were filed over one year late.
- KFME's OPIF included five issues/programs lists that were filed under one month late, three issues/programs lists that were filed between one month and one year late, and four issues/programs lists that were filed over one year late.

4. Section 73.3514(a) of the Rules provides that “[e]ach application shall include all information called for by the particular form on which the application is required to be filed.”¹⁵ The question entitled Online Public Inspection File of the license renewal application requires the licensee to certify that during the license term it has placed all documents required by section 73.3527 of the Rules into the station's OPIF when required.

5. Section 73.3527(e)(8) of the Rules requires every NCE television licensee to place in its OPIF, on a quarterly basis, an issues/programs list that details programs that have provided the station's most significant treatment of community issues during the preceding three month period and must include a brief narrative of the issues addressed, as well as the time, date, duration, and title of each program in which the issues were treated.¹⁶ Issues/programs lists must be placed in the station's OPIF by the tenth day of the succeeding calendar quarter and copies must be retained until final action on the station's next license renewal application.¹⁷

6. On June 6, 2022, the Division released the *NALs*. In the *NALs*, the Division found KBME liable for \$6,000, KSRE liable for \$9,000, KCGE liable for \$9,000, and KMDE liable for \$6,000. Upon issuance of the *NALs*, the Licensee's counsel contacted Division staff to inquire about entering into a consent decree to resolve the public file deficiencies for the *NALs*, as well as other Stations for which notices of apparent liability for forfeiture had not yet been released, but had similar OPIF violations

¹⁵ 47 CFR § 73.3514(a).

¹⁶ 47 CFR § 73.3527(e)(8).

¹⁷ *Id.*

(KJRE and KFME).¹⁸ The Licensee also filed a joint request for additional time to respond.¹⁹ In the Request, the Licensee indicated that the late filings were the result of errors made by station personnel.²⁰ We note that “employee acts or omissions, such as clerical errors in failing to file required forms, do not excuse violations”²¹ and Licensees are responsible for the errors or oversights of their employees.²²

7. The Licensee also indicated to Division staff via phone conversations that the reason for the extent of violations was the unique nature of the Licensee’s network of NCE stations, all of which air the same content,²³ and as a result, the same late filing would often occur in multiple stations’ OPIFs. This is consistent with the review of the OPIFs by Division staff, which found that across the stations, the late filed issues/programs lists were generally for the same quarters, and the late filings were submitted on the same day.

8. In consideration of the unique facts and nature of the Stations in this case, the Licensee’s history of compliance, and the Licensee’s agreement to pay a civil penalty and implement a compliance plan, the Bureau has negotiated the terms of this Consent Decree with the Licensee that terminates the Investigation, resolves the Forfeiture Proceedings, and grants the Applications, subject to the terms and conditions set forth below. The Licensee has agreed to pay a civil penalty of Eight Thousand One Hundred and Fifty Dollars (\$8,150) to the U.S. Treasury and maintain a Compliance Plan designed to ensure its future compliance with the Issues and Programs List Rule and Content of Applications Rule.

IV. TERMS OF AGREEMENT

9. **Adopting Order.** The Parties agree that the provisions of this Consent Decree shall be incorporated by reference by the Bureau in an Adopting Order without change, addition, deletion, or modification.

10. **Jurisdiction.** The Licensee agrees that the Bureau has jurisdiction over it and the matters contained in this Consent Decree and has the authority to enter into and adopt this Consent Decree.

11. **Effective Date.** The Parties agree that this Consent Decree shall become effective on the Effective Date. As of the Effective Date, the Parties agree that this Consent Decree shall have the same force and effect as any other order of the Commission.

12. **Violations.** The Parties agree that any violation of the Adopting Order or the terms of this Consent Decree, in whole or in part, shall constitute a separate violation of a Commission order, entitling the Commission, or its delegated authority to exercise any rights and remedies attendant to the

¹⁸ For two other of the Licensee’s stations, KDSE(TV), Dickinson, ND (KDSE) and KGFE(TV), Grand Forks, ND (KGFE), Division staff also identified late issues/programs lists, however the extent and nature of those late filings were deemed *de minimis* and did not warrant an NAL. As such, the renewal applications for KGFE and KDSE were granted on April 11, 2022. See Applications of Prairie Public Broadcasting, Inc. for Renewal of License, LMS File Nos. 0000171018 and 0000171023.

¹⁹ Prairie Public Broadcasting, Inc. Request for Additional Time to Respond (dated July 5, 2022) (Request).

²⁰ Request at 2.

²¹ *Standard Comm’ens Corp.*, Memorandum Opinion and Order, 1 FCC Rcd 358, 358, para. 4 (1986); See also, *Southern California*, 6 FCC Rcd at 4387, para. 3 (stating that “inadvertence... is at best, ignorance of the law, which the Commission does not consider a mitigating circumstance”).

²² *Heidelberg Coll.*, 24 F.C.C. Rcd 11923, 11924–25 (2009) (quoting *Eure Family Limited Partnership*, Memorandum Opinion and Order, 17 FCC Rcd 21861, 21863–64 (2002)) (“Moreover, the Commission has long held that ‘licensees are responsible for the acts and omission of their employees and independent contractors,’ and has consistently ‘refused to excuse licensees from forfeiture penalties where the actions of employees or independent contractors have resulted in violations.’”).

²³ The Stations serve North Dakota and a portion of Minnesota.

enforcement of a Commission order.

13. **Admission of Liability.** The Licensee admits, for the purpose of this Consent Decree and for Commission civil enforcement purposes, that its actions described in Paragraphs 3 to 7 were willful and repeated violations of the Issues and Programs Lists Rule and Content of Applications Rule. By entering into this Consent Decree, the Licensee makes no other admission of liability of any Communications Law, and the Bureau makes no finding of any other liability or violation.

14. **Termination of Investigation.** In express reliance on the covenants and representations in this Consent Decree and to avoid further expenditure of public resources, the Bureau agrees to terminate the Investigation and Forfeiture Proceeding and to take the actions specified in Paragraph 15. The Bureau also agrees it shall take no further action to enforce the *NALs* issued as part of the Forfeiture Proceeding. In consideration for the termination of the Investigation and Forfeiture Proceeding, Licensee agrees to the terms, conditions, and procedures contained herein, including the actions specified in Paragraphs 17, 20, and 21.

15. The Bureau further agrees that, in the absence of new material evidence, that it will not use the facts developed in the Investigation or Forfeiture Proceedings, through the Effective Date, or the existence of this Consent Decree, to institute, on its own motion or in response to any petition to deny or other third-party objection, any new proceeding, formal or informal, or take any action on its own motion against the Licensee concerning the matters that were the subject of the Investigation or Forfeiture Proceedings. The Bureau also agrees that, in the absence of new material evidence, it will not use the facts developed in the Investigation or Forfeiture Proceedings through the Effective Date, or the existence of this Consent Decree, to institute on its own motion any proceeding, formal or informal, or to set for hearing the question of the Licensee's basic qualifications to be a Commission licensee or to hold Commission licenses or authorizations.²⁴ However, in the event of any future violations by the Licensee, the Commission or its delegated entity may consider the Licensee's admission in this Consent Decree as a basis for considering its history of compliance with the Rules in order to determine an appropriate forfeiture amount.²⁵

16. **Subsequent Investigations.** This Consent Decree shall not prevent the Commission or its delegated authority from investigating new evidence of noncompliance by the Licensee with the Rules or Act or from adjudicating complaints or other adjudicatory pleadings filed by third parties against the Licensee for alleged violations of the Communications Laws or for any alleged misconduct, regardless of when such misconduct took place. Further, except as expressly provided herein, the Licensee acknowledges that the Commission and its delegated authority (including the Bureau) retains the discretion and authority to propose sanctions against the Licensee, including the issuance of notices of apparent liability for forfeitures, for any apparent willful and/or repeated violation by the Licensee of the Rules or Act. The Commission's adjudication of any complaints or potential will be based solely on the record developed in subsequent proceedings.

17. **Civil Penalty.** The Licensee agrees to make a civil penalty payment to the United States Treasury in the amount of Eight Thousand One Hundred and Fifty Dollars (\$8,150) within thirty (30) calendar days after the Effective Date. It also acknowledges and agrees that upon execution of this Consent Decree, the Civil Penalty shall become a "Claim" or "Debt" as defined in section 3701(b)(1) of

²⁴ See 47 CFR § 1.93(b).

²⁵ The Commission may adjust its base forfeiture amount upward or downward by considering the factors enumerated in section 503(b)(2)(E) of the Act, including "the nature, circumstances, extent and gravity of the violation, and, with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, and such other matters as justice may require." 47 U.S.C. § 503(b)(2)(E). See *Forfeiture Policy Statement and Amendment of Section 1.80 of the Rules to Incorporate the Forfeiture Guidelines*, Report and Order, 12 FCC Rcd 17087 (1997), *recon. denied*, 15 FCC Rcd 303 (1999); 47 CFR § 1.80(b), paragraph (b)(10), Table 1 and Table 3.

the Debt Collection Improvement Act of 1996.²⁶ **The Licensee shall send electronic notification of payment to Andrew Manley at Andrew.Manley@fcc.gov on the date payment is made.** Payment of the forfeiture must be made by credit card, ACH (Automated Clearing House) debit from a bank account using CORES (the Commission's online payment system),²⁷ or by wire transfer. Payment should be made, in its entirety, under NAL account numbers 202441420005. Payments by check or money order are no longer accepted. Below are instructions that the Licensee should follow based on the form of payment selected:²⁸

- Payment by wire transfer must be made to ABA Number 021030004, receiving bank TREAS/NYC, and Account Number 27000001. A completed FCC Form 159 must be faxed to the Federal Communications Commission at 202-418-2843 or e-mailed to RROGWireFaxes@fcc.gov on the same business day the wire transfer is initiated. Failure to provide all required information in Form 159 may result in payment not being recognized as having been received. When completing FCC Form 159, enter the Account Number in block number 23A (202441420005), enter the letters "FORF" in block number 24A (payment type code), and enter in block number 11 the FRN(s) captioned above (Payor FRN).²⁹ For additional detail and wire transfer instructions, go to <https://www.fcc.gov/licensing-databases/fees/wire-transfer>.
- Payment by credit card must be made by using the Commission's Registration System (CORES) at <https://apps.fcc.gov/cores/userLogin.do>. To pay by credit card, log-in using the FCC Username associated to the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select "Manage Existing FRNs | FRN Financial | Bills & Fees" from the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the "Open Bills" tab and find the bill number associated with the NAL/Acct. No. The bill number is the NAL Acct. No. (e.g., NAL/Acct. No. 202441420005 would be associated with FCC Bill Number 202441420005). After selecting the bill for payment, choose the "Pay by Credit Card" option. Please note that there is a \$24,999.99 limit on credit card transactions.
- Payment by ACH must be made by using the Commission's Registration System (CORES) at <https://apps.fcc.gov/cores/paymentFrnLogin.do>. To pay by ACH, log in using the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select "Manage Existing FRNs | FRN Financial | Bills & Fees" on the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the "Open Bills" tab and find the bill number associated with the NAL/Acct. No. The bill number is the NAL/Acct. No. (e.g., NAL/Acct. No. 202441420005 would be associated with FCC Bill Number 202441420005). Finally, choose the "Pay from Bank Account" option. Please contact the appropriate financial institution to confirm the correct Routing Number and the correct account number from which payment will be made and verify with that financial institution that the designated account has authorization to accept ACH transactions.

18. **Event of Default.** The Parties agree that an Event of Default shall occur upon the failure by Licensee to pay the full amount of the Civil Penalty on or before the due date specified in Paragraph 17. After an Event of Default has occurred under this Consent Decree, the unpaid amount of the Civil Penalty shall accrue interest, computed using the U.S. Prime Rate in effect on the date of the Event of

²⁶ Debt Collection Improvement Act of 1996, Pub. L. No. 104-134, 110 Stat. 1321, 1358 (Apr. 26, 1996).

²⁷ Payments made using CORES do not require the submission of an FCC Form 159.

²⁸ For questions regarding payment procedures, please contact the Financial Operations Group Help Desk by phone at 1-877-480-3201 (option #6), or by e-mail at ARINQUIRIES@fcc.gov.

²⁹ Instructions for completing the form may be obtained at <https://www.fcc.gov/Forms/Form159/159.pdf>.

Default plus 4.75%, from the date of the Event of Default until payment in full. Upon an Event of Default, the then unpaid amount of the Civil Penalty, together with interest, any penalties permitted and/or required by the law, including but not limited to 31 U.S.C. § 3717 and administrative charges, plus the costs of collection, litigation, and attorneys' fees, shall become immediately due and payable, without notice, presentment, demand, protest, or notice of protest of any kind, all of which are waived by the Licensee.

19. **Grant of Applications.** In the Adopting Order, the Bureau has determined that grant of the Applications is in the public interest, convenience, and necessity, and consistent with section 309(k) of the Act. The Bureau agrees to grant the Applications, for a full license term of eight years from the prior license expiration date, once the following conditions have been met: (1) the Licensee has fully and timely satisfied its obligation to comply with Paragraph 17 of this Consent Decree and (2) there are no other issues that would preclude the grant of the Application.

20. **Compliance Plan.** For purposes of settling the matters set forth herein, the Licensee agrees that it shall, within 60 calendar days after the Effective Date, develop and implement a Compliance Plan designed to ensure future compliance with the Issues and Programs Lists Rule, the Content of Applications Rule, and the terms and conditions of this Consent Decree. The Compliance Plan shall apply to all classes of television stations owned by the Licensee. The Compliance Plan shall contain, at a minimum, the following elements:

- (a) **Compliance Officer.** Within thirty (30) calendar days after the Effective Date, the Licensee shall designate a person employed (on a full, part-time or contract basis) to serve as a Compliance Officer and to discharge the duties set forth below. The Compliance Officer must be provided all necessary corporate and organizational authority to ensure they are able to discharge their duties. The Compliance Officer shall report directly to the Licensee's President (or equivalent senior officer/owner) on a regular basis, and shall be responsible for developing, implementing, and administering the Compliance Plan and ensuring that the Licensee complies with the terms and conditions of the Compliance Plan and this Consent Decree. The Compliance Officer shall have specific knowledge of the Issues and Programs Lists Rule and Content of Applications Rule prior to assuming his/her duties.
- (b) **Compliance Manual.** Within sixty (60) calendar days after the Effective Date, the Compliance Officer shall develop and distribute a Compliance Manual to all Covered Employees. The Compliance Officer may distribute a Compliance Manual that they have personally prepared or one that has been prepared by a third party, such as a trade association or a law firm. The Compliance Manual shall:
 - i. thoroughly explain the requirements embodied in the Issues and Programs Lists Rule and Content of Applications Rule;
 - ii. establish Operating Procedures that Covered Employees must follow to help ensure the Licensee's compliance with the Issues and Programs Lists Rule and Content of Applications Rule. The Operating Procedures shall include internal procedures and policies specifically designed to ensure that the Licensee's stations upload all required information to their online public inspection files in a timely manner and otherwise maintain full, complete, and up to date information therein. The Operating Procedures shall also include a compliance checklist that describes the steps that a Covered Employee must follow to ensure compliance with the Issues and Programs Lists Rule and Content of Applications Rule; and
 - iii. be reviewed at least every six months by the Compliance Officer and revised as necessary to ensure that the information set forth therein remains current, complete, accurate, and effective. The Licensee shall distribute any revisions to the Compliance Manual promptly to all Covered Employees.

- (c) **Compliance Training Program.** The Licensee shall establish and implement a Compliance Training Program on compliance with the Issues and Programs Lists Rule, Content of Applications Rule, and the Operating Procedures. As part of the Compliance Training Program, Covered Employees shall be advised of the Licensee's obligation to report any noncompliance with the Issues and Programs Lists Rule and Content of Applications Rule, and shall be instructed on how to disclose noncompliance to the Compliance Officer. All Covered Employees shall receive initial training under the Compliance Training Program within ninety (90) calendar days after the Effective Date, except that any person who becomes a Covered Employee at any time after such initial training is provided shall receive training under the Compliance Training Program within thirty (30) calendar days after the date they become a Covered Employee. The Licensee shall provide the Compliance Training Program to all Covered Employees on at least an annual basis, and it shall review and revise the Compliance Training Program, as necessary, to ensure that it remains current, complete, and effective.
- (d) **Compliance Report.** The Licensee shall submit a Compliance Report to the Bureau one year after the Effective Date and within five business days following the Termination Date. The Compliance Report shall contain a certification as to whether over the past year the Licensee complied with the Online Public Inspection File Rule and the requirements of Paragraphs 20 and 21 of this Consent Decree. The Compliance Report shall also disclose each instance non-compliance not previously reported to the Bureau under Paragraph 21. For each such instance of material noncompliance the Compliance Officer must explain (i) the steps that the Licensee has taken or will take to remedy such noncompliance, including the schedule on which proposed remedial actions will be taken, and (ii) the steps that have or will be taken to prevent the recurrence of any such noncompliance, including the schedule on which such preventative action will be taken. The Compliance Officer's certification must comply with section 1.16 of the Rules and be subscribed to as true under penalty of perjury.³⁰ The Bureau may, within its sole discretion, require the Licensee to submit documentation or material that supports the certification being provided by the Compliance Officer. The compliance report shall be submitted to Division staff as follows: Andrew Manley at Andrew.Manley@fcc.gov and David Brown at David.Brown@fcc.gov.

21. **Reporting Noncompliance.** The Licensee shall report any instance of noncompliance with the Issues and Programs Lists Rule, Content of Applications Rule, or any instance of noncompliance with any applicable terms and conditions of this Consent Decree (i.e., Paragraph 20) within 10 calendar days after discovery of such noncompliance. Such reports shall include a detailed explanation of: (i) each such instance of noncompliance; (ii) the steps that the Licensee has or will take to remedy such noncompliance, including the schedule on which such actions will be taken; and (iii) the steps that the Licensee has or will take to prevent the recurrence of any such noncompliance, including the schedule on which such preventative action will be taken. All reports of noncompliance shall be submitted to Division staff as follows: Andrew Manley at Andrew.Manley@fcc.gov and David Brown at David.Brown@fcc.gov.

22. **Termination Date.** The obligations to which the Licensee is subject pursuant to this Consent Decree shall terminate two years after the Effective Date, provided the Bureau is satisfied that the Licensee has demonstrated substantial compliance with its obligations. If the Bureau is not satisfied that the Licensee has demonstrated substantial compliance with its obligations, the Bureau may, within its sole discretion and authority, extend the termination date of this Consent Decree for up to an additional twenty-four (24) months.

23. **Waivers.** As of the Effective Date, the Licensee waives any and all rights it may have to

³⁰ 47 CFR § 1.16.

seek administrative or judicial reconsideration, review, appeal, or stay, or to otherwise challenge or contest the validity of this Consent Decree and the Adopting Order. The Licensee shall retain the right to challenge Commission interpretation of the Consent Decree or any terms contained herein. If either Party (or the United States on behalf of the Commission) brings a judicial action to enforce the terms of the Consent Decree or Adopting Order, neither the Licensee nor the Commission shall contest the validity of the Consent Decree or the Adopting Order, and the Licensee shall waive any statutory right to a trial *de novo*. The Licensee hereby agrees to waive any claims it may have under the Equal Access to Justice Act³¹ relating to the matters addressed in this Consent Decree.

24. **Severability**. The Parties agree that if any of the provisions of the Consent Decree shall be held unenforceable by any court of competent jurisdiction, such unenforceability shall not render unenforceable the entire Consent Decree, but rather the entire Consent Decree shall be construed as if not containing the particular unenforceable provision or provisions, and the rights and obligations of the Parties shall be construed and enforced accordingly.

25. **Invalidity**. In the event that this Consent Decree in its entirety is rendered invalid by any court of competent jurisdiction, it shall become null and void and may not be used in any manner in any legal proceeding.

26. **Subsequent Rule or Order**. The Parties agree that if any provision of this Consent Decree conflicts with any subsequent Rule or Order adopted by the Commission (except an order specifically intended to revise the terms of this Consent Decree to which the Licensee does not expressly consent) that provision will be superseded by such Rule or Order.

27. **Successors and Assigns**. The Licensee agrees that the provisions of this Consent Decree shall be binding on its successors, assigns, and transferees.

28. **Final Settlement**. The Parties agree and acknowledge that this Consent Decree shall constitute a final settlement between the Parties with respect to the Investigation.

29. **Modifications**. This Consent Decree cannot be modified without the advance written consent of both Parties.

30. **Paragraph Headings**. The headings of the paragraphs in this Consent Decree are inserted for convenience only and are not intended to affect the meaning or interpretation of this Consent Decree.

31. **Authorized Representative**. Each Party represents and warrants to the other that it has full power and authority to enter into this Consent Decree. Each person signing this Consent Decree on behalf of a Party hereby represents that he or she is fully authorized by the Party to execute this Consent Decree and to bind the Party to its terms and conditions.

32. **Counterparts**. This Consent Decree may be signed in counterpart (including electronically or by facsimile). Each counterpart, when executed and delivered, shall be an original, and

³¹ See 5 U.S.C. § 504; 47 CFR §§ 1.1501-1.1530.

all of the counterparts together shall constitute one and the same fully executed instrument.

Holly Saurer
Chief
Media Bureau

Date

John E. Harris III
President & CEO
Prairie Public Broadcasting, Inc.

Date



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-341

Released: April 9, 2024

MEDIA BUREAU AND OFFICE OF ECONOMICS AND ANALYTICS ACTION

FOURTH QUARTER 2023 INFLATION ADJUSTMENT FIGURES FOR CABLE OPERATORS USING FCC RATE REGULATION FORM 1240 NOW AVAILABLE

This Public Notice is applicable to rate-regulated cable operators that use FCC Forms to justify their cable rates.¹ Cable operators adjusting the non-external cost portion of their rates for inflation should follow the instructions provided with the applicable FCC Form. All inflation adjustment figures are based on changes in the Gross National Product Price Index (GNP-PI) published by the United States Department of Commerce, Bureau of Economic Analysis (BEA). The chain-type price indexes were obtained from the BEA Table 1.7.4 (Price Indexes for Gross Domestic Product, Gross National Product, and Net National Product) Line 4 (Gross National Product) on March 28, 2024.²

Operators filing FCC Form 1240 may make an adjustment based on quarterly figures. The fourth quarter 2024 inflation factor for operators using FCC Form 1240 is 1.63%. The adjustment factor of 1.63% is a measure of the annualized change in prices occurring over the period from October 1, 2023 to December 31, 2023. The inflation adjustment factor is calculated by dividing the GNP-PI for the fourth quarter of 2023 (123.196) by the GNP-PI for the third quarter of 2023 (122.699). The result of this calculation is converted from a quarterly change measurement factor to an annual change measurement factor by raising it to the fourth power. We then convert the calculation to an inflation adjustment factor by subtracting one.

Operators calculating the Inflation Factor for a True-Up Period that includes some portion of the third quarter of 2023 should enter the inflation factor on the appropriate lines of Worksheet 1 of FCC Form 1240 as “0.0163.” Operators using this factor for calculating the Projected Period Inflation Segment of FCC Form 1240 should enter this number on Line C3 (January 1996 version), or Line C5 (July 1996 version) as “1.0163”.

Each quarter the Commission releases a quarterly inflation factor for use with FCC Form 1240. The following table lists these factors beginning in 2018.³

¹ Pursuant to 47 CFR § 76.922(d)(2) and § 76.922(e)(2) of the Commission’s rules, cable operators may adjust the non-external cost portion of their rates for inflation.

² Table 1.7.4 can be found at this link:

<https://apps.bea.gov/iTable/?reqid=19&step=2&isuri=1&categories=survey#eyJhcHBpZCI6MTksInN0ZXBzIjpbMlJkYXRhIjpbWyJjYXRIZ29yaWVzIiwuU3VydmlV5lI0sWyJOSVBBX1RhYmxiX0xc3QiLCI0MiJdXX0=>

³ For pre-2017 inflation figures see DA 17-646, 32 FCC Rcd 5479 (rel. Jul. 5, 2017), *available at* <https://www.fcc.gov/general/inflation-updates-forms-1210-and-1240>.

| Year | Quarter | Dates Covered | Inflation Factor |
|------|---------|------------------------------|------------------|
| 2018 | First | Jan. 1, 2018 – Mar. 31, 2018 | 2.20% |
| 2018 | Second | Apr. 1, 2018 – Jun. 30, 2018 | 3.04% |
| 2018 | Third | Jul. 1, 2018 – Sep. 30, 2018 | 1.81% |
| 2018 | Fourth | Oct. 1, 2018 – Dec. 31, 2018 | 1.68% |
| 2019 | First | Jan. 1, 2019 – Mar. 31, 2019 | 0.90% |
| 2019 | Second | Apr. 1, 2019 – Jun. 30, 2019 | 2.42% |
| 2019 | Third | Jul. 1, 2019 – Sep. 30, 2019 | 1.81% |
| 2019 | Fourth | Oct. 1, 2019 – Dec. 31, 2019 | 1.28% |
| 2020 | First | Jan. 1, 2020 – Mar. 31, 2020 | 1.41% |
| 2020 | Second | Apr. 1, 2020 – Jun. 30, 2020 | -1.82% |
| 2020 | Third | Jul. 1, 2020 – Sep. 30, 2020 | 3.51% |
| 2020 | Fourth | Oct. 1, 2020 – Dec. 31, 2020 | 2.04% |
| 2021 | First | Jan. 1, 2021 – Mar. 31, 2021 | 4.32% |
| 2021 | Second | Apr. 1, 2021 – Jun. 30, 2021 | 6.07% |
| 2021 | Third | Jul. 1, 2021 – Sep. 30, 2021 | 5.95% |
| 2021 | Fourth | Oct. 1, 2021 – Dec. 31, 2021 | 7.13% |
| 2022 | First | Jan. 1, 2022 – Mar. 31, 2022 | 8.19% |
| 2022 | Second | Apr. 1, 2022 – Jun. 30, 2022 | 9.00% |
| 2022 | Third | Jul. 1, 2022 – Sep. 30, 2022 | 4.37% |
| 2022 | Fourth | Oct. 1, 2022 – Dec. 31, 2022 | 3.88% |
| 2023 | First | Jan. 1, 2023 – Mar. 31, 2023 | 4.14% |
| 2023 | Second | Apr. 1, 2023 – Jun. 30, 2023 | 1.74% |
| 2023 | Third | Jul. 1, 2023 – Sep. 30, 2023 | 3.33% |
| 2023 | Fourth | Oct. 1, 2023 – Dec. 31, 2023 | 1.63% |

The Commission releases a new quarterly inflation factor for operators using FCC Form 1240 four times each year. The inflation factor for a given quarter is usually released between three and four months after the end of the quarter, depending on the schedule of the Department of Commerce. The release of a new factor is posted on the Commission's Internet site at: <https://www.fcc.gov/general/inflation-updates-forms-1210-and-1240>.

For additional information, contact Jake Riehm, jake.riehm@fcc.gov, (202) 418-2166 or Zaira Gonzalez, zaira.gonzalez@fcc.gov, (202) 418-2743.

TTY: (202) 418-0432 or 1 (888) 835-5322

–FCC–



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DA 24-342

Released: April 9, 2024

WIRELINE COMPETITION BUREAU ANNOUNCES THE MAXIMUM PARTIAL REIMBURSEMENT AMOUNTS FOR MAY 2024 AFFORDABLE CONNECTIVITY PROGRAM BENEFITS

WC Docket No. 21-450

In this Public Notice, the Wireline Competition Bureau (Bureau) announces the maximum partial reimbursement amounts for the Affordable Connectivity Program (ACP) benefits passed through to ACP households by providers who elect to claim reimbursement for the May 2024 service month. Absent additional funding from Congress, April 2024 will be the last month for which ACP households can receive the full ACP benefit. The remaining ACP funds will not be able to reimburse providers for the full statutory benefit amount for service and device benefits applied to ACP service bills in May 2024.¹ Below, we list the May 2024 maximum partial reimbursement amount for each benefit type.

| Benefit Type | Statutory Maximum | Maximum Reimbursement Amount for May 2024 |
|------------------------------|-------------------------------|---|
| Non-Tribal Service Benefit | \$30 per month ² | \$14 |
| Tribal Lands Service Benefit | \$75 per month ³ | \$35 |
| ACP Connected Device Benefit | \$100 per device ⁴ | \$47 |

These maximum benefit amounts for May were calculated by comparing the estimated funding needs for May to the total non-obligated funds available in April 2024. The funding needs for the May service month are based on the total non-Tribal and Tribal subscribers in the National Lifeline Accountability Database (NLAD), as well as the total number of devices claimed since the enrollment freeze. Additionally, these amounts take into account claims made to date, including claims for the

¹ *Wireline Competition Bureau Announces the Final Month of the Affordable Connectivity Program*, WC Docket No. 21-450, Public Notice, DA 24-195, at 1-2 (WCB Mar. 4, 2024) (*March 4th Public Notice*) (explaining that April 2024 would be the last fully funded month for the ACP benefit and that May 2024 would only be a partially funded month for the ACP benefit).

² 47 U.S.C. § 1752(a)(7)(A).

³ *Id.*

⁴ 47 U.S.C. § 1752(b)(5). Providers seeking to claim reimbursement for ACP devices provided to ACP households in May 2024 shall satisfy all Commission requirements related to device reimbursement, including that the provider “shall charge and collect from the eligible household more than \$10.00 but less than \$50.00 for such connected device.” 47 CFR § 54.1803(b).

September 2023-January 2024 service months, which were due April 1, 2024.⁵ With the claims data for these five months now finalized, the Bureau, in conjunction with the Office of Economics and Analytics and the Office of the Managing Director, have determined the maximum partial reimbursement amounts for the May 2024 service month and these amounts are not expected to change.⁶

We encourage providers to take efforts to keep consumers connected at this crucial time. As set forth in the *ACP Wind-Down Order*, we are dedicated to providing ACP households an orderly transition out of the program and to keeping as many ACP households as possible connected to broadband service after the end of the program.⁷ In addition, providers may, but are not required to, offer a discount larger than the maximum May partial reimbursement amount announced by the Bureau to help defray the change in benefit. Providers can also help consumers stay connected and mitigate their financial burden by offering to move consumers to low-cost internet service plans that the providers already offer or that they newly adopt as an offering to low-income consumers.⁸

We remind providers that they are prohibited from billing ACP households for more than what the household would pay had the full ACP benefit been applied to the bill if the household has not affirmatively opted in to paying a higher amount.⁹ Moreover, providers offering ACP-supported service and devices in May 2024 are expected to fully comply with the ACP rules. Providers offering ACP-supported service in May 2024 must provide service to ACP households subject to the same terms as non-ACP households,¹⁰ and they may claim only those households to which they provided service at the time of the snapshot date.¹¹

⁵ *Wireline Competition Bureau Announces Reimbursement Rate Estimates for May 2024 Affordable Connectivity Program Benefits*, WC Docket No. 21-450, Public Notice, DA 24-274 at 3 (WCB Mar. 19, 2024) (*March 19th Public Notice*) (reminding providers that May 2024 will be the last month for which providers will be able to seek reimbursement for the ACP and providing the estimated reimbursement range for each benefit type which the partial reimbursement amount may fall).

⁶ The Antideficiency Act precludes an agency from making or authorizing an expenditure from, or creating or authorizing an obligation under, any appropriation or fund in excess of the amount available in the appropriation. See 31 U.S.C. § 1341(a)(1)(A). If paying out the maximum reimbursement amount per benefit type would result in an expenditure or obligation in excess of the amount available in the appropriation, the Commission will reduce the reimbursements across each benefit type in order to protect against a violation of the Antideficiency Act.

⁷ *Affordable Connectivity Program*, WC Docket No. 21-450, Order, DA 24-23, at 1, para. 1 (WCB Jan. 11, 2024) (*ACP Wind-Down Order*).

⁸ See *March 4th Public Notice*, at 3, paras. 6,8. Providers that intend to claim and pass through a partial benefit to ACP households for May 2024, where the household has opted in to continue to receive and pay for broadband service after the full ACP benefit is no longer applied, must provide written notice to those households that the benefit amount applied to the May bill may be less than the full ACP benefit the household has been receiving.

⁹ See *ACP Wind-Down Order* at 6-8, paras. 15-19. There are two elements to establish that a household has affirmatively opted in to continue receiving broadband service after the end of the ACP. The first element is established by the household's acknowledgment of having reviewed the required disclosures when enrolling in the EBB Program or the ACP, which include a statement informing the household that it will be subject to the provider's undiscounted rates and general terms and conditions if the program ends. The second element is establishing the household's willingness and ability to pay for broadband service after the end of the ACP. Households are considered to have demonstrated a willingness and ability if they: (1) have informed their provider, either orally or in writing, that they want to continue receiving broadband service after the end of the ACP and are willing to pay a higher rate than the discounted rate they received under the ACP; (2) were existing paying internet service customers with their current broadband provider at the time they enrolled in the EBB Program or the ACP; or (3) currently pay a fee for their ACP-supported broadband service.

¹⁰ 47 U.S.C. § 1752(b)(7).

¹¹ 47 CFR § 54.1808(a).

For further information about the Public Notice, contact Sherry Ross, Attorney Advisor, Telecommunications Access Policy Division, Wireline Competition Bureau by email at Sherry.Ross@fcc.gov.

- FCC -

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
Lincoln County, Maine) File No. 0010757782
Request for Waiver of Sections 90.203(a),)
90.242(a)(2)(iv), and 90.242(b)(4)(iii) of the)
Commission’s Rules)

ORDER

Adopted: April 10, 2024

Released: April 10, 2024

By the Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau:

I. INTRODUCTION

1. We have before us a waiver request submitted by Lincoln County, Maine (the County) to operate a Travelers’ Information Station (TIS) using equipment not certified for part 90 use on frequency 1620 kilohertz in the AM radio band under call sign WREW773. On October 31, 2023, the County filed its application to modify its authorization and request for waiver of section 90.203(a) of the Commission’s rules to use a transmitter that is not certified for use under part 90 of the Commission’s rules.1 The County also seeks waiver of sections 90.242(a)(2)(iv) and 90.242(b)(4)(iii).2 For the reasons set forth below, we deny the request.

II. BACKGROUND

2. The County seeks a waiver of section 90.203 because it “desires to instead operate a conventional AM broadcast transmitter - certified for use under FCC Rules Part 73 with a capacity of 500 watts - but operating at 10 watts. The proposed transmitter is not certified under Part 90.203[,]” as “its specifications substantially exceed the required standards for a TIS transmitter.”3 The County states that “[i]n this instance, the proposed transmitter’s maximum power capability is 500 watts, though it will only be operated at 10 watts in accordance with the Travelers Information Station Rules cited above. The transmitter would only operate at a power level exceeding 10 watts if and only if permitted by a separate Special Temporary Authority (STA) were it granted by the Commission.”4

3. The County states that “The Armstrong Transmitter Corporation – Model X500B transmitter can function in every way as a TIS transmitter while operating at 10 watts, which is the power

1 File No. 0010757782 and accompanying Waiver Justification of Lincoln County (filed October 31, 2023) (Waiver Justification). See 47 CFR § 90.203(a) (each transmitter utilized for operation under this part ... must be of a type which has been certified for use under this part.)

2 Waiver Justification at 1; 47 CFR § 90.242(a)(2)(iv) (Each application for a station or system shall be accompanied by: For each transmitter site, the transmitter’s output power, the type of antenna utilized, its length (for a cable system), its height above ground, distance from transmitter to the antenna, and the elevation at the transmitting site); 47 CFR § 90.242(b)(4)(iii) (Transmitter RF output power shall not exceed 10 watts to enable the user to comply with the specified field strength limit).

3 Waiver Justification at 1.

4 Waiver Justification at 1. See also id., attached Armstrong Transmitter Corporation X-500B & X-1000B product sheet. See also 47 CFR § 90.242(b)(4)(iii).

level allowed for station WREW773.”⁵ The County states that “[a]t this time there is not a sufficient need or sales volume to encourage commercial transmitter manufacturers such as Armstrong Transmitter to obtain certifications for their transmitters for the TIS service. Therefore, this waiver of the Part 90 certification requirement for this licensee is respectfully submitted.”⁶

4. The County argues that “[t]he presence of the 500-watt transmitter would make a power increase for TIS station WREW773 - which could be permitted if approved by FCC via a future Special Temporary Authority - quicker to implement during a major emergency, which is the purpose driving this request.”⁷ As stated earlier, in order to use this transmitter in a TIS environment, the County also seeks waiver of two “associated TIS power rules”: 90.242(a)(2)(iv) and 90.242(b)(4)(iii).⁸ The County states that the first rule “requires the TIS application to state the power capability of the transmitter[;]” and the second rule “states that the output power of the transmitter shall be limited to 10 watts.”⁹

III. DISCUSSION

5. Under section 1.925(b)(3) of the rules, “the Commission may grant a request for waiver if it is shown that: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.”¹⁰ An applicant seeking a waiver faces a high hurdle and must plead with particularity the facts and circumstances that warrant a waiver.¹¹

6. We find that the County has failed to satisfy either prong of the waiver standard. Under the first prong, regarding the purpose of section 90.203, the Commission has stated that:

“The Act and the Commission’s rules set forth requirements for radio frequency devices to obtain equipment authorization and to be operated in a manner consistent with the authorization. Section 302(b) of the Act mandates that ‘[n]o person shall... use devices [] which fail to comply with regulations promulgated pursuant to this section.’ In the context of Private Land Mobile Radio services, section 90.203 of the Commission’s rules requires that ‘each transmitter utilized for operation under this part . . . must be of a type which has been certified for use under this part.’”¹²

The Commission established section 90.203 as part of its long-standing equipment certification requirements.¹³ We note that the Commission has developed technical standards and other requirements

⁵ Waiver Justification at 2.

⁶ *Id.*

⁷ *Id.*

⁸ *See supra* n. 2.

⁹ Waiver Justification at 1.

¹⁰ 47 CFR § 1.925(b)(3).

¹¹ *WAIT Radio v. FCC*, 413 F.2d 1153, 1157 (D.C. Cir. 1969) (*WAIT Radio*), *aff’d*, 459 F.2d 1203 (1973), *cert. denied*, 409 U.S. 1027 (1972) (*citing Rio Grande Family Radio Fellowship, Inc. v. FCC*, 406 F.2d 664 (D.C. Cir. 1968)); *Birach Broad. Corp.*, Memorandum Opinion and Order, 18 FCC Rcd 1414, 1415 (2003).

¹² IOU Acquisitions, Inc., Forfeiture Order, 36 FCC Rcd 8880, 8881 para. 2 (2021) (*IOU Order*) *citing* 47 U.S.C. § 302a(b), 47 CFR § 90.203(a). “The Act” refers to the Communications Act of 1934, as amended (the Act).

¹³ In 1978, the Commission created section 90.203 by combining existing certification rules, former 47 CFR §§ 89.117, 91.109(a) and (b), and 93.109, when it consolidated former parts 89, 91, and 93 of the Commission’s rules into part 90. *See In the Matter of Amendment of the Commission's Rules governing the private land mobile radio*

(continued....)

for radio frequency [RF] equipment and parts or components thereof “to carry out its responsibilities under the Communications Act and the various treaties and international regulations,” and “to promote efficient use of the radio spectrum.”¹⁴ The Commission’s equipment certification program “ensures that RF devices used in the United States operate effectively without causing harmful interference and otherwise comply with the Commission’s rules.”¹⁵ Although the County asserts that the proposed equipment “has a power level function which can be programmed to exactly 10 watts,”¹⁶ that capability has not been verified for TIS operation using well-established FCC equipment certification procedures and calibrated measuring equipment. Grant of the waiver would create a long-term potential for non-compliance with the Commission’s TIS rules under a permanent regular authorization¹⁷ and thus would frustrate the purpose of the certification rule, that is, ensuring that RF devices used in the United States operate effectively without causing harmful interference and otherwise comply with the Commission’s rules.

7. Next, when the Commission adopted the TIS rules, it stated that TIS “is intended to serve a 3 km zone with generally repetitive information pertinent to travelers.”¹⁸ In limiting the TIS coverage zone, the Commission primarily was motivated to minimize the potential for TIS to cause interference to broadcast stations.¹⁹ Since the County did not include an engineering analysis in its instant request, we cannot determine whether operation of the proposed transmitter at its maximum output power of 500 watts would interfere with incumbent AM broadcast stations. Therefore, the County has not shown how grant of the waiver would not frustrate the underlying purpose of the TIS power rules, that is, to maintain a limited TIS coverage zone and prevent interference to broadcast stations.

8. Under the second prong, the County states that it is “faced with severe summer, fall, and winter storms that produce heavy winds and cause long-term power outages” and “is also heavily forested and at risk for wildfires.”²⁰ Though these circumstances may be factual, and though we do not downplay the severity of such threats, we find that these do not constitute unique or unusual circumstances, as these circumstances could apply to many areas of the country. Further, the County has not demonstrated that it has no reasonable alternative. The County only states that “[o]ur TIS is in a great geographical location, which is the best and only location we have.” However, this statement does not sufficiently discuss other siting alternatives and address why they would not be feasible. Similarly, we question whether the

service to provide a new Part 90 that re-regulates and consolidates Parts 89, 91, and 93, Docket No. 21348, Report and Order, 69 F.C.C.2d 1612 (1978). See also 43 FR 54889, 93, 97 (showing § 90.203 in a cross reference table, which shows conversion of rules from parts 89, 91, and 93 to part 90).

¹⁴ 47 CFR § 2.901(a).

¹⁵ Federal Communications Commission, Equipment Authorization, <https://www.fcc.gov/engineering-technology/laboratory-division/general/equipment-authorization> (last visited Jan. 19, 2024)

¹⁶ Waiver Justification at 2.

¹⁷ Cf. *Municipality of San Juan, Request for Waiver of Section 90.203 of the Commission’s Rules*, Order, 16 FCC Rcd 17178 (WTB-PSPWD 2001) (*San Juan*) (granting a time-limited waiver of approximately eight months to allow San Juan, Puerto Rico to use transmitters that are not certified until it can acquire new type-certified equipment). Our decision today to deny a permanent waiver is consistent with *San Juan* in adhering to the purpose of the rules by not granting waiver authority to use transmitters that are certified *on a permanent basis*).

¹⁸ Amendment of Parts 2 and 89 of the Rules to Provide for the Use of Frequencies 530, 1606, and 1612 kHz by Stations in the Local Government Radio Services for the Transmission of Certain Kinds of Information to the Traveling Public, Docket No. 20509, *Report and Order*, 67 F.C.C.2d 917, 925 para. 27 (1977) (*TIS Report and Order*).

¹⁹ *Id.* at 924 para. 25.

²⁰ Waiver Justification at 3, Letter from Maury Prentiss, Director, Lincoln County Office of Emergency Management, to FCC (dated Oct. 30, 2023).

County has performed its due diligence regarding equipment options when it states, “there is not a sufficient need or sales volume to encourage commercial transmitter manufacturers such as Armstrong Transmitter to obtain certifications for its transmitters for the TIS service.”²¹ The County has not addressed the suitability of any part-90 certified TIS transmitters that have the capability to exceed 10 watts,²² and whether they could provide improved signal coverage during emergencies.

9. Finally, we disagree with the County’s contention that grant of the waiver is warranted because it would “make a power increase ... quicker to implement during a major emergency.”²³ Not only has the County failed to quantify the time savings grant of the waiver might achieve, the County prematurely presumes how the Bureau would evaluate future STA requests. A waiver grant here might cause the Bureau to evaluate such a request in the County’s favor, potentially to the detriment of incumbent AM broadcast stations. Even the appearance of such prejudice is contrary to the public interest. Thus, a waiver grant would limit the Bureau’s flexibility to consider future requests for STA based on consideration of factual circumstances of each case. Notwithstanding that the County has previously received favorable waiver treatment,²⁴ a waiver grant here would frustrate the Bureau’s ability to evaluate waiver requests and STA requests on their own merits and without bias. Accordingly, we deny the waiver request and dismiss the application without prejudice.

IV. ORDERING CLAUSES

10. Accordingly, IT IS ORDERED, pursuant to sections 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and section 1.925 of the Commission’s rules, 47 CFR § 1.925, that the Request for Waiver of Lincoln County, Maine, filed on October 31, 2023, IS DENIED.

11. IT IS FURTHER ORDERED, that application File No. 0010757782, filed by Lincoln County, Maine, IS DISMISSED without prejudice consistent with this Order and the Commission’s rules.

FEDERAL COMMUNICATIONS COMMISSION

John A. Evanoff
Chief, Policy and Licensing Division
Public Safety and Homeland Security Bureau

²¹ Waiver Justification at 2.

²² See <https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm> (interested parties may search TIS equipment authorizations by Rule 90.242).

²³ Waiver Justification at 2.

²⁴ Lincoln County operates WREW773 under two prior waivers. On January 13, 2021, the Public Safety and Homeland Security Bureau’s (Bureau) Policy and Licensing Division granted a waiver of 47 CFR § 90.242(b)(4)(i) to allow Lincoln County to use an antenna height of 32 meters at the TIS transmitter site, above the 15-meter rule limit. See *County of Lincoln*, Maine, Order, 36 FCC Rcd 174 (PSHSB PLD 2021). On March 7, 2022, the Bureau’s Licensing Branch granted a waiver of 47 CFR § 90.242(b)(4)(iv) to allow Lincoln County’s 2.0 mV/m signal contour to fall at a maximum of 3.0 kilometers from the transmitting antenna, beyond the 1.5-kilometer rule limit. See call sign WREW733, special condition.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Waldo County, Maine) File No. 0010901948
)
Request for Waiver of Sections 90.203(a),)
90.242(a)(2)(iv), and 90.242(b)(4)(iii) of the)
Commission’s Rules)

ORDER

Adopted: April 10, 2024

Released: April 10, 2024

By the Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau:

I. INTRODUCTION

1. We have before us a waiver request submitted by Waldo County, Maine (the County) to operate a Travelers’ Information Station (TIS) using equipment not certified for part 90 use on frequency 530 kilohertz in the AM radio band under call sign WRBR686. On January 31, 2024, the County filed its applications to modify its authorization and request for waiver of section 90.203(a) of the Commission’s rules to use a transmitter that is not certified for use under part 90 of the Commission’s rules.1 The County also seeks waiver of sections 90.242(a)(2)(iv) and 90.242(b)(4)(iii).2 For the reasons set forth below, we deny the request.

II. BACKGROUND

2. The County seeks a waiver of section 90.203 because it “desires to instead operate a conventional AM broadcast transmitter - certified for use under FCC Rules Part 73 with a capacity of 500 watts - but operating at 10 watts. The proposed transmitter is not certified under Part 90.203,” as “its specifications substantially exceed the required standards for a TIS transmitter.”3 The County states that “[i]n this instance, the proposed transmitter’s maximum power capability is 500 watts, though it will only be operated at 10 watts in accordance with the Travelers Information Station Rules cited above. The transmitter would only operate at a power level exceeding 10 watts if and only if permitted by a separate Special Temporary Authority (STA) were it granted by the Commission.”4

3. The County states that “The Armstrong Transmitter Corporation – Model X500B transmitter can function in every way as a TIS transmitter while operating at 10 watts, which is the power

1 File No. 0010901948 and accompanying Waiver Justification of Waldo County (filed January 31, 2024) (Waiver Justification). See 47 CFR § 90.203(a) (each transmitter utilized for operation under this part ... must be of a type which has been certified for use under this part.)

2 Waiver Justification at 1; 47 CFR § 90.242(a)(2)(iv) (Each application for a station or system shall be accompanied by: For each transmitter site, the transmitter’s output power, the type of antenna utilized, its length (for a cable system), its height above ground, distance from transmitter to the antenna, and the elevation at the transmitting site); 47 CFR § 90.242(b)(4)(iii) (Transmitter RF output power shall not exceed 10 watts to enable the user to comply with the specified field strength limit).

3 Waiver Justification at 1.

4 Waiver Justification at 1. See also id., attached Armstrong Transmitter Corporation X-500B & X-1000B product sheet. See also 47 CFR § 90.242(b)(4)(iii).

level allowed for station WREW773.”⁵ The County states that “[a]t this time there is not a sufficient need or sales volume to encourage commercial transmitter manufacturers such as Armstrong Transmitter to obtain certifications for their transmitters for the TIS service. Therefore, this waiver of the Part 90 certification requirement for this licensee is respectfully submitted.”⁶

4. The County argues that “[t]he presence of the 500-watt transmitter would make a power increase for TIS station WRBR686 - which could be permitted if approved by FCC via a future Special Temporary Authority - quicker to implement during a major emergency, which is the purpose driving this request.”⁷ As stated earlier, in order to use this transmitter in a TIS environment, the County also seeks waiver of two “associated TIS power rules”: 90.242(a)(2)(iv) and 90.242(b)(4)(iii).⁸ The County states that the first rule “requires the TIS application to state the power capability of the transmitter[;]” and the second rule “states that the output power of the transmitter shall be limited to 10 watts.”⁹

III. DISCUSSION

5. Under section 1.925(b)(3) of the rules, “the Commission may grant a request for waiver if it is shown that: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.”¹⁰ An applicant seeking a waiver faces a high hurdle and must plead with particularity the facts and circumstances that warrant a waiver.¹¹

6. We find that the County has failed to satisfy either prong of the waiver standard. Under the first prong, regarding the purpose of section 90.203, the Commission has stated that:

“The Act and the Commission’s rules set forth requirements for radio frequency devices to obtain equipment authorization and to be operated in a manner consistent with the authorization. Section 302(b) of the Act mandates that ‘[n]o person shall... use devices [] which fail to comply with regulations promulgated pursuant to this section.’ In the context of Private Land Mobile Radio services, section 90.203 of the Commission’s rules requires that ‘each transmitter utilized for operation under this part . . . must be of a type which has been certified for use under this part.’”¹²

The Commission established section 90.203 as part of its long-standing equipment certification requirements.¹³ We note that the Commission has developed technical standards and other requirements

⁵ Waiver Justification at 2.

⁶ *Id.*

⁷ *Id.*

⁸ *See supra* n. 2.

⁹ Waiver Justification at 1.

¹⁰ 47 CFR § 1.925(b)(3).

¹¹ *WAIT Radio v. FCC*, 413 F.2d 1153, 1157 (D.C. Cir. 1969) (*WAIT Radio*), *aff’d*, 459 F.2d 1203 (1973), *cert. denied*, 409 U.S. 1027 (1972) (*citing Rio Grande Family Radio Fellowship, Inc. v. FCC*, 406 F.2d 664 (D.C. Cir. 1968)); *Birach Broad. Corp.*, Memorandum Opinion and Order, 18 FCC Rcd 1414, 1415 (2003).

¹² IOU Acquisitions, Inc., Forfeiture Order, 36 FCC Rcd 8880, 8881 para. 2 (2021) (*IOU Order*) *citing* 47 U.S.C. § 302a(b), 47 CFR § 90.203(a). “The Act” refers to the Communications Act of 1934, as amended (the Act).

¹³ In 1978, the Commission created section 90.203 by combining existing certification rules, former 47 CFR §§ 89.117, 91.109(a) and (b), and 93.109, when it consolidated former parts 89, 91, and 93 of the Commission’s rules into part 90. *See In the Matter of Amendment of the Commission's Rules governing the private land mobile radio*

(continued....)

for radio frequency [RF] equipment and parts or components thereof “to carry out its responsibilities under the Communications Act and the various treaties and international regulations,” and “to promote efficient use of the radio spectrum.”¹⁴ The Commission’s equipment certification program “ensures that RF devices used in the United States operate effectively without causing harmful interference and otherwise comply with the Commission’s rules.”¹⁵ Although the County asserts that the proposed equipment “has a power level function which can be programmed to exactly 10 watts,”¹⁶ that capability has not been verified for TIS operation using well-established FCC equipment certification procedures and calibrated measuring equipment. Grant of the waiver would create a long-term potential for non-compliance with the Commission’s TIS rules under a permanent regular authorization¹⁷ and thus would frustrate the purpose of the certification rule, that is, ensuring that RF devices used in the United States operate effectively without causing harmful interference and otherwise comply with the Commission’s rules.

7. Next, when the Commission adopted the TIS rules, it stated that TIS “is intended to serve a 3 km zone with generally repetitive information pertinent to travelers.”¹⁸ In limiting the TIS coverage zone, the Commission primarily was motivated to minimize the potential for TIS to cause interference to broadcast stations.¹⁹ Since the County did not include an engineering analysis in its instant request,²⁰ we cannot determine whether operation of the proposed transmitter at its maximum output power of 500 watts would interfere with incumbent AM broadcast stations. Therefore, the County has not shown how grant of the waiver would not frustrate the underlying purpose of the TIS power rules, that is, to maintain a limited TIS coverage zone and prevent interference to broadcast stations.

8. Under the second prong, the County states that it is “a coastal jurisdiction and is susceptible to severe summer and winter storms, in the form of blizzards, nor-easters, ice storms, tropical storms and hurricanes,” and that it “can experience out-of-control forest fires that can burn into

service to provide a new Part 90 that re-regulates and consolidates Parts 89, 91, and 93, Docket No. 21348, Report and Order, 69 F.C.C.2d 1612 (1978). *See also* 43 FR 54889, 93, 97 (showing § 90.203 in a cross reference table, which shows conversion of rules from parts 89, 91, and 93 to part 90).

¹⁴ 47 CFR § 2.901(a).

¹⁵ Federal Communications Commission, Equipment Authorization, <https://www.fcc.gov/engineering-technology/laboratory-division/general/equipment-authorization> (last visited Jan. 19, 2024)

¹⁶ Waiver Justification at 2.

¹⁷ *Cf. Municipality of San Juan, Request for Waiver of Section 90.203 of the Commission’s Rules*, Order, 16 FCC Rcd 17178 (WTB-PSPWD 2001) (*San Juan*) (granting a time-limited waiver of approximately eight months to allow San Juan, Puerto Rico to use transmitters that are not certified until it can acquire new type-certified equipment). Our decision today to deny a permanent waiver is consistent with *San Juan* in adhering to the purpose of the rules by not granting waiver authority to use transmitters that are certified *on a permanent basis*).

¹⁸ Amendment of Parts 2 and 89 of the Rules to Provide for the Use of Frequencies 530, 1606, and 1612 kHz by Stations in the Local Government Radio Services for the Transmission of Certain Kinds of Information to the Traveling Public, Docket No. 20509, *Report and Order*, 67 F.C.C.2d 917, 925 para. 27 (1977) (*TIS Report and Order*).

¹⁹ *Id.* at 924 para. 25.

²⁰ Prior to the instant requests, Waldo County requested Special Temporary Authority (STA) to test a Armstrong Transmitter Corporation Model X500B transmitter at 200 watts over a two-day period, which the Public Safety and Homeland Security Bureau, Policy and Licensing Division’s Licensing Branch (Branch) granted on August 10, 2021. The STA request included an engineering analysis that was based on the transmitter operating at 0.3 kW (300 watts). *See* File No. 0009635412, attached STA justification (filed July 26, 2021). Since the Waldo County STA engineering analysis does not predict transmitter operation at the full 500 watts, we do not incorporate it into our waiver analysis.

neighborhoods and cut off escape routes.”²¹ Though these circumstances may be factual, and though do not downplay the severity of such threats, we find that these do not constitute unique or unusual circumstances, as these circumstances could apply to other areas of the country. Further, the County have not demonstrated that they have no reasonable alternative. The County does not mention other siting alternatives or address why they would not be feasible. Similarly, we question whether the County have performed their due diligence regarding equipment options when it states, “there is not a sufficient need or sales volume to encourage commercial transmitter manufacturers such as Armstrong Transmitter to obtain certifications for their transmitters for the TIS service.”²² The County has not addressed the suitability of any part-90 certified TIS transmitters that have the capability to exceed 10 watts,²³ and whether they could provide improved signal coverage during emergencies.

9. Finally, we disagree with the County’s contention that grant of the waiver is warranted because it would “make a power increase . . . quicker to implement during a major emergency.”²⁴ Not only has the County failed to quantify the time savings grant of the waiver might achieve, the County prematurely presumes how the Bureau would evaluate future STA requests. A waiver grant here might cause the Bureau to evaluate such a request in the County’s favor, potentially to the detriment of incumbent AM broadcast stations. Even the appearance of such prejudice is contrary to the public interest. Thus, a waiver grant would limit the Bureau’s flexibility to consider future requests for STA based on consideration of factual circumstances of each case. Notwithstanding that the County has previously received favorable waiver treatment,²⁵ a waiver grant here would frustrate the Bureau’s ability to evaluate waiver requests and STA requests on their own merits and without bias. Accordingly, we deny the waiver request and dismiss the application without prejudice.

IV. ORDERING CLAUSES

10. Accordingly, IT IS ORDERED, pursuant to sections 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and section 1.925 of the Commission’s rules, 47 CFR § 1.925, that the Request for Waiver of Waldo County, Maine, filed on January 31, 2024, IS DENIED.

²¹ Waiver Justification at 3, Letter from Dale D. Rowley, Director, Waldo County Emergency Management Agency, to FCC (undated).

²² Waiver Justification at 2.

²³ See <https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm> (interested parties may search TIS equipment authorizations by Rule 90.242).

²⁴ Waiver Justification at 2.

²⁵ On January 31, 2024, the Bureau’s Licensing Branch granted a waiver of 47 CFR § 90.242(b)(4)(iv) to allow Waldo County’s 2.0 mV/m signal contour to fall at a maximum of 5.0 kilometers from the transmitting antenna, beyond the 1.5-kilometer rule limit. See call sign WRBR686, special condition.

11. IT IS FURTHER ORDERED, that application File No. 0010901948, filed by Waldo County, Maine, IS DISMISSED without prejudice consistent with this Order and the Commission's rules.

FEDERAL COMMUNICATIONS COMMISSION

John A. Evanoff
Chief, Policy and Licensing Division
Public Safety and Homeland Security Bureau



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
45 L STREET NE
WASHINGTON D.C. 20554

News media information 202-418-0500
Internet: <http://www.fcc.gov> (or <ftp.fcc.gov>)
TTY (202) 418-2555

DA No. 24-345

Report No. SCL-00458

Thursday April 11, 2024

Actions Taken Under Cable Landing License Act

Section 1.767(a) Cable Landing Licenses, Modifications, and Assignments or Transfers of Control of Interests in Cable Landing Licenses (47 CFR § 1.767(a))

By the Chief, Telecommunications and Analysis Division, Office of International Affairs:

Pursuant to an Act relating to the landing and operation of submarine cables in the United States, 47 U.S.C. §§ 34-39 (Cable Landing License Act), Executive Order No. 10530, Exec. Ord. No. 10530 reprinted as amended in 3 U.S.C. § 301, and section 1.767 of the Commission's rules, 47 CFR § 1.767, the following applications ARE GRANTED. These grants of authority are taken under section 0.261 of the Commission's rules. 47 CFR § 0.261. Petitions for reconsideration under section 1.106 or applications for review under section 1.115 of the Commission's rules may be filed within thirty (30) days of the date of this public notice. 47 CFR §§ 1.106, 1.115.

These applications have been coordinated with the Department of State and other Executive Branch agencies pursuant to section 1.767(b) of the Commission's rules and consistent with procedures established with the Department of State. 47 CFR § 1.767(b); see Review of Commission Consideration of Applications under the Cable Landing License Act, IB Docket No. 00-106, Report and Order, 16 FCC Rcd 22167, 22192-93, paras. 51-52 (2001) (Submarine Cable Landing License Report and Order); Commission Announces Department of State's Revised Procedures for its Consideration of Submarine Cable Landing License Applications, IB Docket No. 16-155, Public Notice, DA 22-435 (rel. Apr. 19, 2022).

This public notice serves as each cable landing licensee's Cable Landing License, or modification thereto, pursuant to the Cable Landing License Act and sections 1.767 and 1.768 of the Commission's rules. 47 CFR §§ 1.767, 1.768. Cable landing licensees should review the terms and conditions of their licenses. Failure to comply with these terms and conditions or relevant Commission rules and policies could result in fines or forfeitures.

SCL-ASG-20231004-00031 E Jason Aleksander Kardachi
Assignment
Grant of Authority Date of Action: 04/10/2024

Current Licensee: RTI JGA Pte. Ltd.

FROM: RTI JGA Pte. Ltd.

TO: Jason Aleksander Kardachi

Notification filed on October 4, 2023, of the involuntary assignment of assets and interests held by RTI JGA Pte Ltd. (RTI JGA) in the cable landing licenses for the Japan-Guam-Australia North cable system (JGA North) (SCL-LIC-20181106-00035) and the Japan-Guam-Australia South cable system (JGA South) (SCL-LIC-20190502-00016) to Jason Aleksander Kardachi and Cosimo Borrelli as the court-appointed managers and receivers for RTI JGA Pte. Ltd. as Debtor Under the Receivership and Management of Messrs. Cosimo Borrelli and Jason Aleksander Kardachi. RTI JGA, a Singapore entity, is a licensee on the JGA North system which connects Guam and Japan and the JGA South cable system which connects Guam and Australia. This transaction does not affect the remaining interests held by the other licensees of the JGA North and JGA South cable systems. The Applicants filed a supplement on February 8, 2024.

Poseidon International Connectivity Pte. Ltd. (Poseidon JGA Lender) is the sole lender of record and secured creditor to RTI JGA and the holder of security interests in certain assets and interests including the interests held by RTI JGA in JGA North and JGA South. In an effort to enforce its rights under the credit agreements, on August 15, 2023, Poseidon JGA Lender entered into a Transaction Support Agreement that provides for it to obtain receivers to operate, manage, and control of RTI JGA's interests in JGA North and JGA South during the pendency of the debt restructuring process. Concurrently with the execution of the Transaction Support Agreement, on August 15, 2023, Poseidon JGA Lender filed an application with the High Court of the Republic of Singapore (High Court) seeking the appointment of the independent receivers and managers over RTI JGA's relevant assets pursuant to the provisions of the credit agreements. On September 5, 2023, the High Court issued an order approving that request and appointing Messrs. Cosimo Borrelli and Jason Aleksander Kardachi as the receivers and managers.

Jason Aleksander Kardachi and Cosimo Borrelli are both citizens of Australia. They certify that they will accept and abide by the routine conditions set forth in section 1.767(g) of the Commission's rules. 47 CFR § 1.767(g).

SCL-ASG-20231004-00032 E Jason Aleksander Kardachi
Assignment
Grant of Authority Date of Action: 04/10/2024

Current Licensee: RTI Connectivity Pte. Ltd.

FROM: RTI Connectivity Pte. Ltd.

TO: Jason Aleksander Kardachi

Notification filed on October 4, 2023, of the involuntary assignment of assets and interests held by RTI Connectivity Pte Ltd. (RTI-C) in the cable landing licenses for the Japan-Guam-Australia North cable system (JGA North) (SCL-LIC-20181106-00035) and the Japan-Guam-Australia South cable system (JGA South) (SCL-LIC-20190502-00016) to Jason Aleksander Kardachi and Cosimo Borrelli as the court-appointed managers and receivers for RTI Connectivity Pte. Ltd. as Debtor Under the Receivership and Management of Messrs. Cosimo Borrelli and Jason Aleksander Kardachi. RTI-C, a Singapore entity, is a licensee on the JGA North system which connects Guam and Japan and the JGA South cable system which connects Guam and Australia. This transaction does not affect the remaining interests held by the other licensees of the JGA North and JGA South cable systems. The Applicants filed a supplement on February 8, 2024.

Poseidon International Connectivity Pte. Ltd. (Poseidon JGA Lender) is the sole lender of record and secured creditor to RTI-C and the holder of security interests in certain assets and interests including the interests held by RTI-C in JGA North and JGA South. In an effort to enforce its rights under the credit agreements, on August 15, 2023, Poseidon JGA Lender entered into a Transaction Support Agreement that provides for it to obtain receivers to operate, manage, and control of RTI-C's interests in JGA North and JGA South during the pendency of the debt restructuring process. Concurrently with the execution of the Transaction Support Agreement, on August 15, 2023, Poseidon JGA Lender filed an application with the High Court of the Republic of Singapore (High Court) seeking the appointment of the independent receivers and managers over RTI-C's relevant assets pursuant to the provisions of the credit agreements. On September 5, 2023, the High Court issued an order approving that request and appointing Messrs. Cosimo Borrelli and Jason Aleksander Kardachi as the receivers and managers.

Jason Aleksander Kardachi and Cosimo Borrelli are both citizens of Australia. They certify that they will accept and abide by the routine conditions set forth in section 1.767(g) of the Commission's rules. 47 CFR § 1.767(g).

SCL-ASG-20231030-00034 E Michael Wyse
Assignment
Grant of Authority Date of Action: 04/10/2024

Current Licensee: RAM Telecom International, Inc.
FROM: RAM Telecom International, Inc.
TO: Michael Wyse

Notification filed on October 30, 2023, of the involuntary assignment of assets and interests held by RAM Telecom International, Inc. (RAM) in the cable landing licenses for the Southeast Asia-United States (SEA-US) (SCL-LIC-20150626-00016) to Michael Wyse as the court-appointed receiver for RAM Telecom International, Inc. as Debtor Under the Receivership of Michael Wyse. RAM-T, a Delaware company, is a licensee of SEA-US that connects the continental United States to Guam, Hawaii, the Philippines, and Indonesia. This transaction does not affect the remaining interests held by the other licensees of SEA-US.

Poseidon International Connectivity II, LLC (Poseidon SEA-US Lender) is the sole lender of record and secured creditor to RAM-T and the holder of security interests in certain assets and interests including the interests held by RAM-T in SEA-US. In an effort to enforce its rights under the credit agreements, on August 15, 2023, Poseidon SEA-US Lender entered into a Transaction Support Agreement that provides for it to obtain a receiver to operate, manage, and control of RAM-T's interests in SEA-US during the pendency of the debt restructuring process. Concurrently with the execution of the Transaction Support Agreement, on August 15, 2023, Poseidon SEA-US Lender filed a petition with the Court of Chancery of the State of Delaware (Chancery Court) seeking the appointment of the independent receivers and managers over RAM-T's relevant assets pursuant to the provisions of the credit agreements. On September 5, 2023, the Chancery Court issued an order approving that request and appointing Michael Wyse as the receiver.

Michael Wyse is a U.S. citizen. He certifies that he will accept and abide by the routine conditions set forth in section 1.767(g) of the Commission's rules. 47 CFR § 1.767(g).

SCL-ASG-20231109-00035 E AT&T Enterprises, LLC
Assignment
Grant of Authority Date of Action: 04/10/2024

Current Licensee: AT&T Corp, Inc.
FROM: AT&T Corp, Inc.
TO: AT&T Enterprises, LLC

On November 9, 2023, AT&T Corp. and AT&T Enterprises, LLC filed an application requesting Commission consent for the pro forma assignment of AT&T Corp.'s interest in the submarine cable landing licenses for the Americas II (SCL-LIC-19980429-00019, SCL-MOD-20191202-00038), Antillas-1 (SCL-LIC-19951013-00002), and Maya-1 (SCL-LIC-19990325-00006) cable systems, to AT&T Enterprises, LLC. These cables were licensed prior to March 15, 2002, and require prior consent for pro forma assignments. On March 22, 2024, the Applicants filed a Supplement revising the description of the planned transaction.

Americas II, which was licensed in 2000, connects the United States to the Caribbean and South America. AT&T Corp. holds a 14.88% voting interest in Americas II, and holds ownership interests in the following segments of Americas II: (1) West (89.19%), (2) North (43.87%), (3) South (7.70%), (4) Access-MIU (0.87%), and (5) So. West (0.00%). AT&T Corp. was an original licensee on the Antillas-1, which was licensed in 1997 and connects Puerto Rico to the Dominican Republic. Maya-1, which was licensed in 2000, connects the United States to Mexico, the Caribbean, Central America, and South America. AT&T Corp. holds a 13.51% voting interest in Maya-1 and a 9.64% ownership interest in the U.S.-Central America segment of Maya-1.

AT&T Corp. is a direct subsidiary of AT&T Inc., a Delaware corporation. In a planned corporate reorganization, AT&T Corp. will be merged with AT&T Enterprises, Inc., a direct wholly owned subsidiary of AT&T Inc. AT&T Enterprises, Inc. will be the surviving entity. AT&T Inc. will then transfer 100% direct ownership in AT&T Enterprises, Inc. to BellSouth Mobile Data Inc. (BSMD), a Georgia corporation and a direct wholly-owned subsidiary of AT&T Inc. BSMD will then transfer 100% direct ownership in AT&T Enterprises, Inc. to AT&T DW Holdings, Inc. (DWH), a Delaware corporation that will be created as a direct, wholly-owned subsidiary of BSMD. AT&T Enterprises, Inc. will then be converted to a Delaware limited liability company named AT&T Enterprises, LLC. Finally, DWH will transfer 100% direct ownership of AT&T Enterprises, LLC to AT&T Wireline Holdings, Inc. (AWH), a Delaware corporation that will be a direct, wholly-owned subsidiary of DWH. Consequently, upon completion of the restructuring, AT&T Enterprises, LLC will hold the interests in the cable systems and will be a direct wholly owned subsidiary of AWH and will remain an indirect wholly owned subsidiary of AT&T Inc.

INFORMATIVE

SCL-STA-20231013-00033 HUB Advanced Networks, LLC

HUB Advanced Networks, LLC has withdrawn the request for special temporary authority (STA) to continue operation of the Antillas-1 Cable (SCL-LIC-19950818-00001, SCL-LIC-19951013-00002).



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
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News media information 202-418-0500
Internet: <http://www.fcc.gov> (or <ftp.fcc.gov>)
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DA No. 24-346

Thursday April 11, 2024

Report No. TEL-02355

International Authorizations Granted

Section 214 Applications (47 CFR §§ 63.18, 63.24); Section 310(b) Petitions (47 CFR § 1.5000)

By the Chief, Telecommunications and Analysis Division, Office of International Affairs:

The following applications have been granted pursuant to the Commission's processing procedures set forth in sections 63.12 and 63.20 of the Commission's rules. 47 CFR §§ 63.12, 63.20.

Unless otherwise noted, these grants authorize the applicants to: (1) become a facilities-based international common carrier subject to 47 CFR §§ 63.21, 63.22 and/or a resale-based international common carrier subject to 47 CFR §§ 63.21, 63.23; (2) assign or transfer control of international section 214 authority in accordance with 47 CFR § 63.24; or (3) exceed the foreign ownership benchmarks applicable to common carrier radio licensees under 47 U.S.C. § 310(b); see Subpart T of Part 1 of the Commission's rules, 47 CFR §§ 1.5000-5004.

THIS PUBLIC NOTICE SERVES AS EACH NEWLY AUTHORIZED CARRIER'S SECTION 214 CERTIFICATE. It contains general and specific conditions, which are set forth below. Newly authorized carriers should carefully review the terms and conditions of their authorizations. Failure to comply with general or specific conditions of an authorization, or with other relevant Commission rules and policies, could result in fines and forfeitures.

Petitions for reconsideration under section 1.106 or applications for review under section 1.115 of the Commission's rules, 47 CFR §§ 1.106, 1.115, in regard to the grant of any of these applications may be filed within 30 (thirty) days of this public notice. See 47 CFR § 1.4(b)(2).

ITC-214-20230829-00107 E Rocstar Wireless LLC
International Telecommunications Certificate
Service(s): Global or Limited Global Resale Service
Grant of Authority Date of Action: 04/10/2024

Rocstar Wireless LLC (Rocstar) filed an application for authority to provide resale services in accordance with section 63.18(e)(2) of the Commission's rules. 47 CFR § 63.18(e)(2). Rocstar filed a supplement on February 7, 2024.

Rocstar is a Texas limited liability company. CRBT Inc., a Texas corporation that is wholly owned by Darius Allen, a U.S. citizen, holds a 75% ownership interest in Rocstar. Roccage Holdings, a California entity that is wholly owned by Leon Youngblood Jr., a U.S. citizen, holds a 25% ownership interest in Rocstar.

ITC-214-20230830-00108 E LV.Net
International Telecommunications Certificate
Service(s): Global or Limited Global Resale Service
Grant of Authority Date of Action: 04/10/2024

LV.Net filed an application for authority to provide resale services in accordance with section 63.18(e)(2) of the Commission's rules. 47 CFR § 63.18(e)(2). LV.Net filed a supplement on February 8, 2024.

LV.Net, a Nevada limited liability company, is wholly owned by Marty Mizrahi, a U.S. citizen.

ITC-214-20231017-00127 E BFFmobile Inc.
International Telecommunications Certificate
Service(s): Global or Limited Global Resale Service
Grant of Authority Date of Action: 04/10/2024

BFFmobile Inc. (BFFmobile) filed an application for authority to provide resale services in accordance with section 63.18(e)(2) of the Commission's rules. 47 CFR § 63.18(e)(2). BFFmobile filed a supplement on February 8, 2024.

BFFmobile, a Delaware corporation, has two 10% or greater owners, both U.S. citizens: Igor Gorin (64.75%) and Dimitry Gorin (34%).

ITC-214-20231019-00129 E EZ Mobile LLC
International Telecommunications Certificate
Service(s): Global or Limited Global Resale Service
Grant of Authority Date of Action: 04/10/2024

EZ Mobile LLC (EZ Mobile) filed an application for authority to provide resale services in accordance with section 63.18(e)(2) of the Commission's rules. 47 CFR § 63.18(e)(2). EZ Mobile filed a supplement on February 20, 2024.

EZ Mobile, a Delaware limited liability company, has two 10% or greater owners: Professional Team Multi Services LLC (PTMS) (60%) and Equity UX LLC (Equity UX) (40%). PTMS, a Florida limited liability company, is wholly owned by Renel Coutilien, a U.S. citizen. Equity UX, a Florida limited liability company, is wholly owned by Jean Renel St. Firmin, a U.S. citizen.

ITC-214-20240124-00016 E SWING WIRELESS LLC
International Telecommunications Certificate
Service(s): Global or Limited Global Resale Service
Grant of Authority Date of Action: 04/10/2024

Swing Wireless LLC (Swing Wireless) filed an application for authority to provide resale services in accordance with section 63.18(e)(2) of the Commission's rules. 47 CFR § 63.18(e)(2). Swing Wireless filed a supplement on February 7, 2024.

Swing Wireless, a Texas limited liability company, is wholly owned by Yehuda Herman, a U.S. citizen.

ITC-214-20240125-00019 E Perfect Voice and Data, LLC
International Telecommunications Certificate
Service(s): Global or Limited Global Resale Service
Grant of Authority Date of Action: 04/10/2024

Perfect Voice and Data, LLC (Perfect Voice) filed an application for authority to provide resale services in accordance with section 63.18(e)(2) of the Commission's rules. 47 CFR § 63.18(e)(2). Perfect Voice filed supplements on February 7, 2024 and February 8, 2024.

Perfect Voice, an Ohio limited liability company, is wholly owned by Marshall Larabee, a U.S. citizen.

ITC-214-20240227-00040 E Pulaski White Rural Telephone Cooperative Inc
International Telecommunications Certificate
Service(s): Global or Limited Global Resale Service
Grant of Authority Date of Action: 04/05/2024

Pulaski White Rural Telephone Cooperative Inc. d/b/a LightStream (LightStream) filed an application for authority to provide resale services in accordance with section 63.18(e)(2) of the Commission's rules. 47 CFR § 63.18(e)(2).

LightStream, an Indiana nonprofit corporation, is owned by its members, none of which holds a 10% or greater interest.

LightStream filed a request for Special Temporary Authority (STA) related to this application (ITC-STA-20240227-00041), which was granted on March 13, 2024.

Grant of this application is without prejudice to any enforcement action by the Commission for non-compliance with the Communications Act of 1934, as amended, or the Commission's rules.

ITC-214-20240312-00046 E POWER MOBILE LLC
International Telecommunications Certificate
Service(s): Global or Limited Global Facilities-Based Service, Global or Limited Global Resale Service
Grant of Authority Date of Action: 04/05/2024

Power Mobile LLC (Power Mobile) filed an application for authority to provide facilities-based service in accordance with section 63.18(e)(1) of the Commission's rules and resale service in accordance with section 63.18(e)(2) of the Commission's rules. 47 CFR § 63.18(e)(1), (2).

Power Mobile is a Delaware limited liability corporation. The 10% or greater direct owners of Power Mobile are Free G LLC (37.5%) and JMT Holdings LLC (28.75%), both U.S. entities, and Mark Marmurstein (28.75%), a U.S. citizen. Herman Shtem, a U.S. citizen, is the sole owner of Free G LLC. Michael Treff, a U.S. citizen, is the sole owner of JMT Holdings LLC.

INFORMATIVE

ITC-STA-20240328-00056 LIGTEL COMMUNICATIONS INC.

We grant the request for special temporary authority (STA) filed on March 28, 2024, by Ligtel Communications Inc. (Ligtel), an Indiana corporation that holds an international section 214 authorization to provide global resale serviced (ITC-214-20000207-00064), to continue to provide international service to its customers at its own risk while the Commission considers the applications for the transfer of control of Ligtel from Meschell L. Schloss (Deceased) to the Shareholders of Heartland Innovations, Inc. (see ITC-T/C-20240207-00029, ITC-T/C-20240207-00030). Ligtel acknowledges that grant of such STA will not prejudice action by the Commission on the underlying application and that the STA is subject to cancellation or modification upon notice without a hearing.

The STA expires on October 7, 2024.

SURRENDER

ITC-214-20010412-00216 Texas RSA 19 Limited Partnership

Texas RSA 19 Limited Partnership notified the Commission of the surrender of its international section 214 authorization.

CONDITIONS APPLICABLE TO INTERNATIONAL SECTION 214 AUTHORIZATIONS

- (1) These authorizations are subject to the Exclusion List for International Section 214 Authorizations, which identifies restrictions on providing service to particular countries or using particular facilities. The most recent Exclusion List is at the end of this Public Notice. The list applies to all U.S. international carriers, including those that have previously received global or limited global section 214 authority, whether by Public Notice or specific written order. Carriers are advised that the attached Exclusion List is subject to amendment at any time pursuant to the procedures set forth in Streamlining the International Section 214 Authorization Process and Tariff Requirements, IB Docket No. 95-118, 11 FCC Rcd 12884 (1996), para. 18. A copy of the current Exclusion List is maintained in the FCC Reference Information Center and is available at <https://www.fcc.gov/exclusion-list-international-section-214-authorizations>. It is also attached to each Public Notice that grants international Section 214 authority.
- (2) The export of telecommunications services and related payments to countries that are subject to economic sanctions may be restricted. For information concerning current restrictions, call the Office of Foreign Assets Control, U.S. Department of the Treasury, (202) 622-2520.
- (3) Carriers shall comply with the requirements of Section 63.11 of the Commission's rules, which requires notification by, and in certain circumstances prior notification by, U.S. carriers acquiring an affiliation with foreign carriers. A carrier that acquires an affiliation with a foreign carrier will be subject to possible reclassification as a dominant carrier on an affiliated route pursuant to the provisions of section 63.10 of the rules.
- (4) A carrier may provide switched services over its authorized resold private lines in the circumstances specified in section 63.23(d) of the rules, 47 CFR § 63.23(d).
- (5) Carriers shall comply with the "No Special Concessions" rule, section 63.14, 47 CFR § 63.14.
- (6) Carriers regulated as dominant for the provision of a particular communications service on a particular route for any reason other than a foreign carrier affiliation under section 63.10 of the rules shall file tariffs pursuant to Section 203 of the Communications Act, as amended, 47 U.S.C. § 203, and Part 61 of the Commission's Rules, 47 CFR Part 61. Carriers shall not otherwise file tariffs except as permitted by section 61.19 of the rules, 47 C.F.R. § 61.19. Except as specified in section 20.15 with respect to commercial mobile radio service providers, carriers regulated as non-dominant, as defined in section 61.3, and providing detariffed international services pursuant to section 61.19, must comply with all applicable public disclosure and maintenance of information requirements in sections 42.10 and 42.11.
- (7) International facilities-based service providers must file and maintain a list of U.S.-international routes on which they have direct termination arrangements with a foreign carrier. 47 CFR § 63.22(h). A new international facilities-based service provider or one without existing direct termination arrangements must file its list within thirty (30) days of entering into a direct termination arrangement(s) with a foreign carrier(s). Thereafter, international facilities-based service providers must update their lists within thirty (30) days after adding a termination arrangement for a new foreign destination or discontinuing an arrangement with a previously listed destination. See Process For The Filing Of Routes On Which International Service Providers Have Direct Termination Arrangements With A Foreign Carrier, ITC-MS-C-20181015-00182, Public Notice, 33 FCC Rcd 10008 (IB 2018).
- (8) Any U.S. Carrier that owned or leased bare capacity on a submarine cable between the United States and any foreign point must file a Circuit Capacity Report to provide information about the submarine cable capacity it holds. 47 CFR § 43.82(a)(2). See <https://www.fcc.gov/circuit-capacity-data-us-international-submarine-cables>.
- (9) Carriers should consult section 63.19 of the rules when contemplating a discontinuance, reduction or impairment of service.
- (10) If any carrier is reselling service obtained pursuant to a contract with another carrier, the services obtained by contract shall be made generally available by the underlying carrier to similarly situated customers at the same terms, conditions and rates. 47 U.S.C. § 203.
- (11) To the extent the applicant is, or is affiliated with, an incumbent independent local exchange carrier, as those terms are defined in section 64.1902 of the rules, it shall provide the authorized services in compliance with the requirements of section 64.1903.
- (12) Except as otherwise ordered by the Commission, a carrier authorized here to provide facilities-based service that (i) is classified as dominant under section 63.10 of the rules for the provision of such service on a particular route and (ii) is

affiliated with a carrier that collects settlement payments for terminating U.S. international switched traffic at the foreign end of that route may not provide facilities-based switched service on that route unless the current rates the affiliate charges U.S. international carriers to terminate traffic are at or below the Commission's relevant benchmark adopted in International Settlement Rates, IB Docket No. 96-261, Report and Order, 12 FCC Rcd 19806 (1997). See also Report and Order on Reconsideration and Order Lifting Stay in IB Docket No. 96-261, FCC 99-124 (rel. June 11, 1999). For the purposes of this rule, "affiliated" and "foreign carrier" are defined in section 63.09.

(13) Carriers shall comply with the Communications Assistance for Law Enforcement Act (CALEA), see 47 CFR §§ 1.20000 et seq.

(14) Every carrier must designate an agent for service in the District of Columbia. see 47 U.S.C. § 413, 47 CFR §§ 1.47(h), 64.1195.

(15) Each carrier shall notify the Commission of any change in its contact information. Such notification shall be filed in the file number(s) for the international section 214 authorization(s) through the International Communications Filing System (ICFS).

Exclusion List for International Section 214 Authorizations

The following is a list of countries and facilities not covered by grant of global section 214 authority under section 63.18(e)(1) of the Commission's Rules, 47 CFR § 63.18(e)(1). Carriers desiring to serve countries or use facilities listed as excluded hereon shall file a separate section 214 application pursuant to section 63.18(e)(3) of the Commission's Rules. See 47 CFR § 63.22(c).

Countries:

None.

Facilities:

Any non-U.S.-licensed space station that has not received Commission approval to operate in the U.S. market pursuant to the procedures adopted in the Commission's DISCO II Order, IB Docket No. 96-111, Report and Order, FCC 97-399, 12 FCC Rcd 24094, 24107-72 paragraphs 30-182 (1997) (DISCO II Order). Information regarding non-U.S.-licensed space stations approved to operate in the U.S. market pursuant to the Commission's DISCO II procedures is maintained at <https://www.fcc.gov/approved-space-station-list>.

This list is subject to change by the Commission when the public interest requires. The most current version of the list is maintained at <https://www.fcc.gov/exclusion-list-international-section-214-authorizations>.

For additional information, contact the Office of International Affairs, Telecommunications and Analysis Division at (202) 418-1480.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
SHELBY BROADCAST ASSOCIATES, LLC) NAL/Acct. No. MB-202441410005
Licensee of Station W252BE) FRN: 0018897223
Tarrant, Alabama) Facility ID No. 141124
) File Nos. 0000091616, BALFT-
) 20200608AAG, BLFT-20181016ABE,
) BSTA-20180720AAR

FORFEITURE ORDER

Adopted: April 11, 2024

Released: April 11, 2024

By the Chief, Audio Division, Media Bureau:

I. INTRODUCTION

1. In this Forfeiture Order, we affirm our Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture (NAL)1 and issue a monetary forfeiture in the amount of sixteen thousand five hundred dollars (\$16,500) to Shelby Broadcast Associates, LLC, (Licensee), licensee of FM translator station W252BE, Tarrant, Alabama (Station), for willfully and repeatedly operating the Station at variance from its license without Commission authorization, in violation of section 301 of the Communications Act of 1934, as amended (Act)2 and section 73.1745(a)3 of the Commission’s rules (Rules), willfully failing to timely file for special temporary authorization (STA) to operate with its nonconforming technical facilities in violation of section 73.1635(a)(1)4 of the Rules, and willfully failing to disclose material information regarding such unauthorized operation, in violation of section 1.17 of the Rules by failing to disclose material information regarding such unauthorized operations for the Station.5

II. BACKGROUND

2. Section 301 of the Act and section 73.1350 of the Rules prohibit the operation of a broadcast station except under, and in accordance with, a Commission-granted authorization.6 Section 73.1745(a)7 further prohibits the operation of a broadcast station at variance from the terms of the Station’s authorization. Pursuant to section 73.1635, a licensee may request special temporary authority to operate for a limited time at variance from the terms of its authorization.8 However, the licensee must

1 Shelby Broadcast Associates, LLC, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, DA 24-51 (MB Jan. 17, 2024).

2 47 U.S.C. § 301.

3 47 CFR § 73.1745(a).

4 47 CFR § 73.1635(a)(1).

5 47 CFR § 1.17.

6 See 47 U.S.C. § 301; 47 CFR § 73.1350.

7 47 CFR § 73.1745(a).

8 47 CFR § 73.1635.

request STA ten days prior to beginning operation at variance from the terms of its authorization.⁹ We found that the Station suffered damage, adjusted its parameters, and applied for STA in 2015, then subsequently operated without authorization, at parameters at variance from its authorization, since November 19, 2016, when an STA extension expired. Licensee continued operating the Station at variance from its license, without authorization, and made no attempt to address this issue until July 19, 2018.

3. Section 1.17(a)(2) of the Rules provides that no person may provide, in any written statement of fact, “material factual information that is incorrect or omit material information that is necessary to prevent any material factual statement that is made from being incorrect or misleading without a reasonable basis for believing that any such material factual statement is correct and not misleading.”¹⁰ Even absent an intent to deceive, a false statement may constitute an actionable violation of section 1.17(a)(2) if it is submitted without a reasonable basis for believing that the statement is correct and not misleading.¹¹ We also found that Licensee lacked a reasonable basis for certifying in the Renewal Application¹² that there had been no violations by the licensee of the Act or the Rules, because the Station had operated with an incorrect antenna height.

4. Accordingly, on January 17, 2024, we released the *NAL*, which proposed a forfeiture of sixteen thousand five hundred dollars (\$16,500).¹³ As noted in the *NAL*, the Commission's *Forfeiture Policy Statement* and section 1.80(b)(11) of the Rules establish a base forfeiture amount of \$10,000 for operation without an instrument of authorization for the service, and \$3,000 for failure to file a required form or information.¹⁴ Taking into consideration all of the factors required by section 503(b)(2)(E) of the Act and the *Forfeiture Policy Statement*, we reduced the forfeiture for these apparent violations from the base amount of \$10,000 for unauthorized service to \$5,000, and from \$3,000 for the late-filed STA applications, to \$1,500 because, as a translator station, the Station is providing a secondary service.¹⁵ Finally, based on the gravity of the section 1.17(a)(2) violations, and Licensee's history or prior offenses, we proposed a forfeiture amount of \$10,000 for submitting false certifications in its Renewal Application.¹⁶ The *NAL* gave the Licensee thirty days to pay the full amount of the proposed forfeiture, or

⁹ 47 CFR 73.1740(a)(4); *South Seas Broad. Inc.*, Memorandum Opinion and Order and Notice of Apparent Liability, 23 FCC Rcd 6474, para. 2 (MB 2008).

¹⁰ See 47 CFR § 1.17(a)(2).

¹¹ See *Amendment of Section 1.17 of the Commission's Rules Concerning Truthful Statements to the Commission*, Report and Order, 18 FCC Rcd 4016, 4017, para. 5 (2003) (subsequent history omitted).

¹² Application File No. 0000091616 (filed Nov. 27, 2019).

¹³ *NAL* at 2, para. 2.

¹⁴ *NAL* at 9, para. 26 (citing *Forfeiture Policy Statement and Amendment of Section 1.80(b) of the Rules to Incorporate the Forfeiture Guidelines*, Report and Order, 12 FCC Rcd 17087, 17113-15 (1997) (*Forfeiture Policy Statement*), *recon. denied*, 15 FCC Rcd 303 (1999); 47 CFR § 1.80, Paragraph (b)(11), Table 1).

¹⁵ *NAL* at 10, para. 27 (citing *Corning Christian Radio Corp.*, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, DA 22-1084 (MB Oct. 12, 2022); *Virginia Center for Public Press*, Memorandum Opinion and Order and Notice for Apparent Liability for Forfeiture, 34 FCC Rcd 9312 (MB 2019) (each reducing forfeiture for untimely filed renewal application for LPFM station due to secondary service status)).

¹⁶ *Id.* (citing *E-String Wireless*, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, 31 FCC Rcd 133, 139, para. 16 and n.50 (MB 2016) (proposing \$5,000 forfeiture to licensee of translator that made false certifications in license to cover application, and noting a higher forfeiture would be appropriate for licensees of full-service stations); *San Francisco Unified School District*, Hearing Designation Order and Notice of Apparent Liability for Forfeiture, 19 FCC Rcd 13326, 13334, para. 19, n.40 (2004) (false certifications are abuses of Commission processes which waste Commission resources and which may not only violate 47 CFR § 73.1015 but also may subject the applicant to a monetary forfeiture as well as criminal liability under 18 U.S.C. § 1001)).

file a written statement seeking reduction or cancellation of the proposed forfeiture.¹⁷

5. On February 16, 2024, the Licensee submitted a written response to the *NAL* in which it does not dispute that it violated section 301 of the Act and sections 73.1745(a), 73.1635, and 1.17(a)(2) of the Rules, but argues that the proposed forfeiture should be cancelled or reduced based on its inability to pay the forfeiture.¹⁸ Licensee also argues that in light of Licensee's gross revenue and expenses, the forfeiture amount is significant, and notes that the Station has operated at a loss for two of the last three years and the proposed forfeiture will threaten Licensee's ability to continue operating.¹⁹ In support of these claims, Licensee attaches IRS tax returns from 2020, 2021, and 2022.²⁰

III. DISCUSSION

6. The proposed forfeiture amount in this case was assessed in accordance with section 503(b) of the Act,²¹ section 1.80 of the Rules,²² and the *Forfeiture Policy Statement*.²³ Section 503(b)(2)(E) of the Act requires that the Commission take into account the nature, circumstances, extent, and gravity of the violation and, with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, and other such matters as justice may require.²⁴

7. We have considered Licensee's response in light of these statutory factors. We affirm our finding that the Licensee willfully violated section 301 of the Act and sections 73.1745(a), 73.1635, and 1.17(a)(2) of the Rules. The Commission has previously held that a Licensee's gross revenue is the best indicator of its ability to pay a forfeiture.²⁵ The Commission has also found that forfeitures are not excessive when they amount to a small percentage of a licensee's gross revenue.²⁶ However, the Commission has also held that it "looks to all potential sources of income available to the entity" including the pending sale of a station, and has rejected a claim of inability to pay where a licensee failed to mention the pending sale of its station, which would yield a significantly larger sum than the forfeiture amount.²⁷

8. Although Licensee's tax submissions from 2020-2022 indicate that the proposed forfeiture would not constitute a small percentage of Licensee's gross income, as previously determined

¹⁷ *Id.* at 12, para. 35.

¹⁸ Forfeiture Cancellation Request, Pleading File No. 0000239090 (filed Feb. 16, 2024) (NAL Response). The NAL Response was redacted and included a request for confidential treatment of its tax information pursuant to 5 U.S.C. § 552(b)(4) and 47 CFR § 0.457(d)(1). In accordance with this request, Licensee also submitted an unredacted version of the NAL Response to Bureau staff. Email from Scott Woodworth, Esq., to Albert Shuldiner, Chief, Audio Division, FCC Media Bureau (Feb. 16, 2024, 07:44 EST).

¹⁹ NAL Response at 2.

²⁰ NAL Response, Exh. A.

²¹ 47 U.S.C. § 503(b).

²² 47 CFR § 1.80.

²³ See generally, *Forfeiture Policy Statement*.

²⁴ 47 U.S.C. § 503(b)(2)(E).

²⁵ *Unipoint Technologies, Inc.*, Forfeiture Order, 29 FCC Rcd 1633, 1643, para. 29 (2014); *Sunstar Travel & Tours, Inc.*, Forfeiture Order, 25 FCC Rcd 13804, 13808, para. 14 (2010).

²⁶ See *PJB Communications of Virginia, Inc.*, Memorandum Opinion and Order, 7 FCC Rcd at 2089 (forfeiture not deemed excessive where it represented approximately 2.02 percent of the violator's gross revenues); *Local Long Distance, Inc.*, Order of Reconsideration, 16 FCC Rcd at 10025 (forfeiture not deemed excessive where it represented approximately 7.9 percent of the violator's gross revenues); *Hoosier Broad. Corp.*, Memorandum Opinion and Order, 15 FCC Rcd 8640, 8641 (Enf. Bur. 2002) (forfeiture not deemed excessive where it represented approximately 7.6 percent of the violator's gross revenues).

²⁷ *D.T.V., LLC*, Forfeiture Order, 31 FCC Rcd 2650, 2658-59, paras. 21-22 (2016).

by the Commission, the *Forfeiture Policy Statement* provides that “we must look to the totality of the circumstances surrounding the individual case.”²⁸ Section 1.80 of the Rules also instructs that “substantial economic gain” is a factor that warrants upward adjustment of a forfeiture amount.²⁹ Here, Licensee has a pending sale of the Station for \$184,000,³⁰ which is significantly greater than the forfeiture amount. The forfeiture amount is only 8.9% of the purchase price, which is comparable to gross income percentages the Commission has previously deemed reasonable.³¹ Moreover, the Station sale price would be an addition to the gross income generated by the Station. The proceeds from the Station sale, combined with Licensee’s gross income, demonstrate Licensee’s ability to pay the forfeiture amount.³² Further, due to Licensee’s history of noncompliance, including unauthorized operations, and the extended duration of the violations, we find no basis to reduce or cancel the proposed forfeiture and affirm the *NAL*.

IV. ORDERING CLAUSES

9. Accordingly, **IT IS ORDERED** that, pursuant to section 503(b) of the Communications Act of 1934, as amended, and sections 0.283 and 1.80 of the Commission’s Rules, Shelby Broadcast Associates, LLC, **IS LIABLE FOR A MONETARY FORFEITURE** in the amount of \$16,500 for its willful violation of section 301 of the Communications Act and sections 73.1745(a), 73.1635, and 1.17(a)(2) of the Commission’s rules.

10. Payment of the Civil Penalty must be made by credit card, ACH (Automated Clearing House) debit from a bank account using CORES (the Commission’s online payment system),³³ or by wire transfer. Payments by check or money order to pay a civil penalty are no longer accepted. Below are instructions that payors should follow based on the form of payment selected:³⁴

- Payment by wire transfer must be made to ABA Number 021030004, receiving bank TREAS/NYC, and Account Number 27000001. A completed Form 159 must be faxed to the Federal Communications Commission at 202-418-2843 or e-mailed to RROGWireFaxes@fcc.gov on the same business day the wire transfer is initiated. Failure to provide all required information in Form 159 may result in payment not being recognized as having been received. When completing FCC Form 159, enter the Account Number in block number 23A (call sign/other ID), enter the letters “FORF” in block number 24A (payment type code), and enter in block number 11 the FRN(s) captioned above (Payor FRN).³⁵ For additional detail and wire transfer instructions, go to

²⁸ *Forfeiture Policy Statement*, 12 FCC Rcd at 17158, para. 113.

²⁹ 47 CFR § 1.80, Paragraph (b)(11), Table 3 (Adjustment Criteria for Section 503 Forfeitures).

³⁰ Assignment Application, Application File No. BALFT-20200608AAG, attach. “1817956_44975764.pdf” (filed June 10, 2020).

³¹ *See supra* note 26 (forfeiture amounts constituting 7.9 and 7.6 percent of violators’ gross revenues were not deemed excessive).

³² *Cf. Pinnacle Communications, Inc.*, Memorandum Opinion and Order, 11 FCC Rcd 15496 (1996) (*Pinnacle*) (finding rescission of *NAL* warranted due to inability to pay where licensee was in default of a 4,000,000 loan personally guaranteed by licensee’s principal, the station sale was entered into to avoid foreclosure, the buyer assumed certain outstanding liabilities from the seller, neither the licensee or its principal received any cash payment or proceeds, and the licensee did not retain any stations). *See also San Luis Obispo Broad. L.P.*, Memorandum Opinion and Order, 13 FCC Rcd 1020 (1998) (forfeiture not reduced because Licensee’s financial circumstances were not as dire as *Pinnacle*’s, and loan default was not personally guaranteed by a principal).

³³ Payments made using CORES do not require the submission of an FCC Form 159.

³⁴ For questions regarding payment procedures, please contact the Financial Operations Group Help Desk by phone at 1-877-480-3201 (option #6), or by e-mail at ARINQUIRIES@fcc.gov.

³⁵ Instructions for completing the form may be obtained at <https://www.fcc.gov/Forms/Form159/159.pdf>.

<https://www.fcc.gov/licensing-databases/fees/wire-transfer>.

- Payment by credit card must be made by using the Commission’s Registration System (CORES) at <https://apps.fcc.gov/cores/userLogin.do>. To pay by credit card, log-in using the FCC Username associated to the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Manage Existing FRNs | FRN Financial | Bills & Fees” from the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the “Open Bills” tab and find the bill number associated with the NAL/Acct. No. The bill number is the NAL Acct. No. (e.g., NAL/Acct. No. 1912345678 would be associated with FCC Bill Number 1912345678). After selecting the bill for payment, choose the “Pay by Credit Card” option. Please note that there is a \$24,999.99 limit on credit card transactions.
- Payment by ACH must be made by using the Commission’s Registration System (CORES) at <https://apps.fcc.gov/cores/paymentFrnLogin.do>. To pay by ACH, log in using the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Manage Existing FRNs | FRN Financial | Bills & Fees” on the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the “Open Bills” tab and find the bill number associated with the NAL/Acct. No. The bill number is the NAL/Acct. No. (e.g., NAL/Acct. No. 1912345678 would be associated with FCC Bill Number 1912345678). Finally, choose the “Pay from Bank Account” option. Please contact the appropriate financial institution to confirm the correct Routing Number and the correct account number from which payment will be made and verify with that financial institution that the designated account has authorization to accept ACH transactions.

11. Any request for making full payment over time under an installment plan should be sent to: Associate Managing Director—Financial Operations, Federal Communications Commission, 45 L Street, N.E., Washington, DC 20554.³⁶ Questions regarding payment procedures should be directed to the Financial Operations Group Help Desk by phone, 1-877-480-3201 (option #6), or by e-mail at ARINQUIRIES@fcc.gov.

12. **IT IS FURTHER ORDERED** that a copy of this *Forfeiture Order* shall be sent by First Class and Certified Mail, Return Receipt Requested, to Shelby Broadcast Associates, LLC, c/o Lee Reynolds, 5256 Valleybrook Trace, Birmingham, AL 35244, (and via email to: LEER@REYNOLDSTECHNICAL.COM), and to its counsel, Scott Woodworth, Esq., Edinger Associates PLLC, 1725 I Street N.W., Suite 300, Washington, DC 20006 (and via email to: swoodworth@edingerlaw.net), and to Marble City Media, LLC, c/o M. Scott Johnson, Esq., Smithwick and Belendiuk, P.C., 5028 Wisconsin Avenue, Suite 301, Washington, DC 20016 (and via email to: SJOHNSON@FCCWORLD.COM), and to Rivera Communications, c/o Larry Perry, Esq., 11464 Saga Lane, Ste. 400, Knoxville, TN 37931 (and via email to: larryperry@att.net).

FEDERAL COMMUNICATIONS COMMISSION

Albert Shuldiner
Chief, Audio Division
Media Bureau

³⁶ See 47 CFR § 1.1914.

**Before the
Federal Communications Commission
Washington, D.C. 20554**

| | | |
|--|---|------------------------------|
| In the Matter of |) | File No.: EB-IHD-21-00032418 |
| |) | NAL/Acct. No.: 202432080011 |
| KXOL Licensing, Inc. |) | FRN: 0009781352 |
| |) | |
| Licensee of Station KXOL-FM, Los Angeles, CA |) | |

NOTICE OF APPARENT LIABILITY FOR FORFEITURE

Adopted: April 12, 2024

Released: April 12, 2024

By the Chief, Enforcement Bureau:

I. INTRODUCTION

1. We propose a penalty of \$8,000 against KXOL Licensing, Inc. (KXOL or Licensee), licensee of Station KXOL-FM (Station), Los Angeles, California, for failing to conduct a contest in accordance with its announced terms and thus apparently violating the Federal Communications Commission’s (FCC or Commission) contest regulations (Contest Rule). The Commission’s Contest Rule requires that licensees fully and accurately disclose material contest terms and conduct contests substantially as announced and advertised. Here, KXOL’s announced contest terms (Contest Terms) specified when and how winners would receive their prizes. Despite being required to deliver prizes to contest winners within thirty business days, KXOL failed to meet its own deadline. In proposing this penalty, we reiterate the Commission’s longstanding commitment to protecting the public from deceptive broadcast contests.

II. BACKGROUND

2. *Legal Background.* Under section 73.1216 of the Commission’s rules, broadcast licensees must “fully and accurately disclose the material terms” of a licensee-conducted contest and conduct it “substantially as announced and advertised.”¹ Material terms “include any eligibility restrictions, means of selection of winners, and the extent, nature and value of prizes.”² Prizes “must be awarded promptly,”³ and the Commission or Enforcement Bureau (EB or Bureau) has previously found a Contest Rule violation where a broadcast station failed to provide prizes consistent with the station’s announced rules.⁴

3. *Factual Background.* The Commission received a complaint alleging that the Licensee did not conduct a contest in a manner substantially as announced by failing to award a promised cash prize of \$396 to the winner of a contest (Complainant) conducted on air on October 24, 2019.⁵ EB issued a Letter of

¹ 47 CFR § 73.1216.

² *Clear Channel Communications, Inc., et al.*, Notice of Apparent Liability for Forfeiture, 27 FCC Rcd 343, 345, para. 5 (EB 2012) (forfeiture paid) (citing 47 CFR § 73.1216, Note 1(b)).

³ *Gow Media, LLC Licensee of Station KFNC(FM), Mont Belvieu, TX*, Notice of Apparent Liability for Forfeiture, 35 FCC Rcd 6272, 6272-73, para. 2 (EB 2020) (forfeiture paid).

⁴ See, e.g., *Multicultural Radio Broadcasting Licensee, LLC*, Notice of Apparent Liability for Forfeiture, 22 FCC Rcd 21555, 21560, para. 8 (EB 2007) (*Multicultural Radio*) (licensee violated section 73.1216 in part by awarding prizes to ineligible parties) (forfeiture paid); see also *Gow Media*, 35 FCC Rcd at 6274 (finding that licensee’s failure to award the contest prize “in a timely manner constitutes a failure to conduct the Contest substantially as announced, in apparent violation of section 73.1216).

⁵ Complaint No. 4431571-1 (Dec. 11, 2020) (on file in EB-IHD-21-00032418) (Complaint).

Inquiry (LOI) investigating the Complaint on June 16, 2021.⁶ The Licensee submitted its timely response on July 16, 2021.⁷

4. In its LOI Response, the Licensee admitted that there was an “undue delay” in issuing the contest prize and that it failed to issue the award within the applicable timeframe.⁸ The contest at issue, “Mega Bomba,” aired from July 18, 2019 to October 25, 2019, with 459 winners (Contest). The Contest Terms provide, in two separate provisions, that each winner will be awarded their prize “within thirty (30) business days of the date the winner completes all required Station documents.”⁹ The Licensee acknowledged that the Complainant had completed required documents on January 16, 2020,¹⁰ and thus the Contest Terms required issuance of the prize on or before March 2, 2020.¹¹ Despite this, the Licensee issued the Complainant’s award in May 2021.¹²

5. The Licensee attributed its “undue delay”¹³ to three different events:

- First, the Licensee was still processing payments at the onset of the COVID-19 pandemic and unable to access necessary files after the transition to work-from-home in mid-March, 2020;
- Second, the Licensee was further delayed by a ransomware attack that disabled corporate IT systems between October 2020 and March 2021; and,
- Third, after recovering from the ransomware attack, the Licensee lacked the staff needed to complete the remaining work quickly.¹⁴

III. DISCUSSION

A. Licensee Apparently Violated the Commission’s Licensee-Conducted Contest Rule

6. We find that KXOL apparently willfully violated section 73.1216 of the Commission’s rules by failing to issue the Complainant’s prize pursuant to KXOL’s announced Contest Terms, thus

⁶ Letter of Inquiry from Christopher J. Sova, Deputy Chief, Investigations and Hearings Division, FCC, Enforcement Bureau, to KXOL Licensing, Inc. (June 16, 2021) (on file in EB-IHD-21-00032418).

⁷ See Response to Letter of Inquiry from Nancy A. Ory, Lerman Senter, Counsel to KXOL Licensing, Inc., to Marlene H. Dortch, Secretary, FCC, at 16 (July 16, 2021) (on file in EB-IHD-21-00032418) (LOI Response).

⁸ *Id.* at 4, 8.

⁹ *Id.* at 41, Exh. D, para. 5. (prize to be issued “within thirty (30) business days of the date the winner completes all required Station documents”); *id.*, Exh. D, para. 9 (again providing that prizes “will be available within thirty (30) business days” of completion of required documentation).

¹⁰ *Id.* at 7.

¹¹ Excluding weekends and federal holidays, 30 business days from January 16, 2020, is March 2, 2020.

¹² LOI Response, *supra* note 7, at 7-8. The Licensee further disclosed that a total of 98 prizes, including the Complainant’s prize, had been delayed beyond the timeframe required by the Contest Terms, but that all prizes were ultimately issued by May 2021. See *id.* at 4, Response to Inquiry 3(f) (disclosing 98 total delayed prizes out of 459 total winners); see also *id.* at 37-38 (table identifying late prize recipients, including date issued). Licensee also disclosed that it had extended the Contest beyond its announced end date without updating the Contest Terms. The Contest Terms provided for the Contest to conclude on September 20, 2019, but it was “extended past the original end date because funds remained in the Contest budget” for additional awards. The LOI Response does not clarify whether the extension was announced, although the Contest Terms included in the LOI Response provide for the original September end date. See *id.* at 40, Exh. D, para. 1 (identifying contest period of July 18, 2019, to September 20, 2019); *id.* at 5-6 (response to Inquiry 6(d)) (“The contest rules and/or material terms were not changed; however, the Contest Period was extended ... because funds remained”); see also *infra* note 31.

¹³ LOI Response, *supra* note 7, at 11.

¹⁴ *Id.* at 10. While the LOI Response does not identify the specific timing of the staff shortage, Licensee suggests that it began after recovery from the ransomware attack, sometime after March 2021. See *id.* (“The Cyber Attack incident resulted in substantial delay in processing the final four batches of Contest winner checks . . . In addition, two of the administrative employees who were handling payments were out on sick leave. Two temporary employees [had] difficulties completing the daily work.”)

failing to conduct its contest “fairly and substantially as represented to the public.”¹⁵ Here, as our precedents hold, “timely fulfillment of the prize” was a “material term of the Licensee’s own contest rules,”¹⁶ as demonstrated by the fact that the Contest Terms set forth a specific deadline for the Licensee to issue the prize to a given winner.¹⁷ KXOL admits that it failed to issue the Complainant’s cash prize in accordance with the Contest Terms, delaying issuance beyond thirty business days to over a year.¹⁸

7. We also find that the Licensee’s justifications for this delay do not excuse its liability for failure to issue the prize in accordance with its announced Contest Terms. As discussed above, the Complainant completed all necessary paperwork on January 16, 2020, and thus the Licensee’s announced Contest Terms required it to issue Complainant’s award on or before March 2, 2020.¹⁹ Each event the Licensee identifies as causing its delay began after March 2, 2020, and thus after the prize was already overdue—including the Licensee’s transition to work-from-home in “Mid-March 2020” caused by the COVID-19 Pandemic.²⁰ Likewise, the ransomware attack and subsequent staff shortage began after delivery of the prize was already overdue.²¹

8. Even assuming the COVID-19 Pandemic compounded the Licensee’s delay, as the Licensee seems to contend, our finding of liability stems from the Licensee’s failure to issue the Complainant’s prize within the timeframe required under Licensee’s own announced Contest Terms. Because the Licensee apparently failed to meet the deadline specified in the Contest Terms, even assuming, *arguendo*, that factors outside the Licensee’s control—the Pandemic and other events—caused additional substantial delay in prize award completion, these subsequent events did not cause the underlying failure to issue Complainant’s award within the thirty business day window required under the Contest Terms.²² For these reasons, we find that KXOL’s failure to issue the Complainant’s prize within the time period required by its announced Contest Terms is an apparent willful violation of section 73.1216.

B. Proposed Forfeiture

9. Section 503(b) of the Communications Act of 1934, as amended, (Act) authorizes the Commission to impose a forfeiture against any entity that “willfully or repeatedly fail[s] to comply with any of the provisions of [the Act] or of any rule, regulation, or order issued by the Commission[.]”²³ Here, section 503(b)(2) of the Act authorizes us to assess a forfeiture against KXOL of up to \$61,238 for each day of a continuing violation, up to a statutory maximum of \$612,395 for a single act or failure to act.²⁴ In exercising our forfeiture authority, we must consider the “nature, circumstances, extent, and

¹⁵ *Public Notice Concerning Failure of Broadcast Licensees to Conduct Contests Fairly*, Public Notice, 45 FCC 2d 1056, 1056 (1974) (*Contest Public Notice*).

¹⁶ *Gow Media, LLC Licensee of Station KFNC(FM), Mont Belvieu, TX*, Notice of Apparent Liability for Forfeiture, 35 FCC Rcd 6272, 6272-73, para. 2 (EB 2020) (forfeiture paid).

¹⁷ See LOI Response, *supra* note 7, at 41, Exh. D, para. 5 (providing that awards will be issued “within thirty (30) business days of the date the winner completes all required Station documents”); *id.* at 41, Exh. D, para. 9 (requiring same).

¹⁸ *Id.* at 10 (prize issued May 2021).

¹⁹ See *id.* at 12-13.

²⁰ See *id.* at 10-11.

²¹ See *id.*

²² The Licensee asserted that the awards were delayed due to its inability to access certain files after the switch to work-from-home in mid-March 2020, a further disabling October 2020 cyberattack, and a staff shortage. See *supra* para. 5. Each of these events began after the award was overdue and thus even assuming they compounded the delay, they do not appear related to the Licensee’s failure to issue the award when first due under the Contest Terms. See *supra* para. 7 (finding that Licensee’s justifications for delay do not excuse liability).

²³ 47 U.S.C. § 503(b).

²⁴ See 47 U.S.C. § 503(b)(2)(A); 47 CFR § 1.80(b)(1). See *Amendment of Section 1.80(b) of the Commission’s rules, Adjustment of Civil Monetary Penalties to Reflect Inflation*, Order, DA-22-1356, 2022 WL 18023008 (EB Dec. 23, 2023); see also *Annual* (continued...)

gravity of the violation and, with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, and such other matters as justice may require.”²⁵ In addition, the Commission has established forfeiture guidelines; they establish base penalties for certain violations and identify criteria that we consider when determining the appropriate penalty in any given case.²⁶ Under these guidelines, we may adjust a forfeiture upward for violations that are egregious, intentional, or repeated, or that cause substantial harm or generate substantial economic gain for the violator.²⁷ We may adjust a forfeiture downward for minor violations, good faith or voluntary disclosure, a history of overall compliance, or an inability to pay.²⁸

10. Section 1.80(b) of the Commission’s rules sets a base forfeiture of \$4,000 for violations pertaining to licensee-conducted contests for each violation or each day of a continuing violation.²⁹ We have discretion, however, to depart from these guidelines, taking into account the particular facts of each individual case.³⁰

11. In this matter, we assess a single violation related to KXOL’s apparent violation of section 73.1216 of the Commission’s rules based on its failure to conduct the Contest substantially as announced because it did not issue the Complainant’s prize within the timeframe set forth in KXOL’s announced Contest Terms.³¹ Accordingly, we propose a total base forfeiture of \$4,000.

12. In addition, given the totality of the circumstances, and consistent with the *Forfeiture Policy Statement*, we conclude that an upward adjustment is warranted. This adjustment is based upon the statutory factors, including the nature and circumstances of the violation. Here, the Commission has determined that large or highly profitable companies³² should expect to pay higher forfeitures for violations of the Act and the Commission’s rules.³³ Thus, to ensure that the forfeiture is an effective deterrent and not simply a cost of doing business for KXOL, an upward adjustment of the base forfeiture

Adjustment of Civil Monetary Penalties to Reflect Inflation, 88 Fed. Reg. 783 (Jan. 5, 2023) (setting January 15, 2023 as the effective date for the increases).

²⁵ 47 U.S.C. § 503(b)(2)(E).

²⁶ 47 CFR § 1.80(b)(11), Note 2 to paragraph (b)(11).

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.* § 1.80(b).

³⁰ *The Commission’s Forfeiture Policy Statement and Amendment of Section 1.80 of the Rules to Incorporate the Forfeiture Guidelines*, Report and Order, 12 FCC Rcd 17087, 17098–99, para. 22 (1997) (noting that “[a]lthough we have adopted the base forfeiture amounts as guidelines to provide a measure of predictability to the forfeiture process, we retain our discretion to depart from the guidelines and issue forfeitures on a case-by-case basis, under our general forfeiture authority contained in Section 503 of the Act”) (*Forfeiture Policy Statement*), *recons. denied*, Memorandum Opinion and Order, 15 FCC Rcd 303 (1999).

³¹ We acknowledge that KXOL disclosed a failure to issue promptly a total of 98 prizes. *See supra* note 12. The record is unclear whether each of the delayed prizes were overdue before the onset of the pandemic. In this matter, based on the totality of the circumstances and on the adjustments described *infra*, we forbear from assessing additional base forfeitures or otherwise adjusting the proposed forfeiture based on these additionally delayed prizes.

³² Spanish Broadcasting System, Inc., Annual Report at Part II, 49 (Form 10-K) (Mar. 30, 2020) (most recently available 10-K reporting annual revenue of \$156 million); Spanish Broadcasting System, Inc., *Spanish Broadcasting System, Inc. Reports Results for the Third Quarter 2023*, at 1 (Nov. 29, 2023), <https://www.spanishbroadcasting.com/wp-content/uploads/sites/5/2023/11/Earnings-Release-09302023.pdf> (reporting nine month net revenue of \$105 million).

³³ *See Forfeiture Policy Statement*, 12 FCC Rcd at 17099–17100, paras. 23–24 (cautioning all entities and individuals that the Commission will take into account the violator’s ability to pay in determining a forfeiture to guarantee that large or highly profitable entities do not consider forfeitures merely an affordable cost of doing business, and noting that such entities should expect proposed forfeitures against them to be well above the applicable base amount); *see also SM Radio, Inc.*, Order on Review, 23 FCC Rcd 2429, 2433, para. 12 (2008) (citations omitted); *Tesla Exploration, Inc.*, Notice of Apparent Liability for Forfeiture, 27 FCC Rcd 9808, 9811, para. 10 & n.20 (2012); *Union Oil*, Notice of Apparent Liability for Forfeiture, 27 FCC Rcd 13806, 13810, para. 10 (2012) (forfeiture paid); *GCI Commc’ns Corp.*, Notice of Apparent Liability for Forfeiture, 28 FCC Rcd 12991 (EB 2013) (doubling base forfeiture based on company’s ability to pay); *Am. Movil, S.A.B. de C.V., Parent of Puerto Rico Tel. Co., Inc.*, Notice of Apparent Liability for Forfeiture, 26 FCC Rcd 8672, 8676, para. 10 (EB 2011) (same).

amount is further justified. In the present case, a larger forfeiture will protect the interests of consumers and deter entities from violating the Commission's rules.³⁴

13. In applying the applicable statutory factors, we also consider whether there is any basis for a downward adjustment of the proposed forfeiture. Here, we find none. The Licensee failed to provide any explanation for why the prize could not be awarded to the winner sometime during the period of January 16, 2020, when the winner completed the requisite paperwork, and March 2, 2020, when the prize was due under the Contest Terms. All the Licensee's asserted excuses occurred after the prize was overdue. Moreover, even assuming, *arguendo*, that the Licensee's actions were inadvertent, negligent, or the result of human error, under pertinent Commission precedent, such factors are neither exculpatory nor mitigating, and do not support any downward adjustment.³⁵ Similarly, KXOL's eventual corrective measures do not justify a forfeiture reduction.³⁶

14. Therefore, after applying the *Forfeiture Policy Statement*, section 1.80 of the Commission's rules, and the statutory factors, we propose a total forfeiture of \$8,000, for which KXOL is apparently liable.

IV. CONCLUSION

15. We have determined that KXOL apparently willfully violated section 73.1216 of the Commission's rules. As such, KXOL is apparently liable for a forfeiture of \$8,000.

V. ORDERING CLAUSES

16. Accordingly, **IT IS ORDERED** that, pursuant to section 503(b) of the Act, 47 U.S.C. § 503(b), and section 1.80 of the Commission's rules, 47 CFR § 1.80, KXOL Licensing, Inc., is hereby **NOTIFIED** of this **APPARENT LIABILITY FOR A FORFEITURE** in the amount of eight thousand dollars (\$8,000) for willful and repeated violations of section 73.1216 of the Commission's rules, 47 CFR § 73.1216.

17. **IT IS FURTHER ORDERED** that, pursuant to section 1.80 of the Commission's rules, 47 CFR § 1.80, within thirty (30) calendar days of the release date of this Notice of Apparent Liability for Forfeiture, KXOL Licensing, Inc., **SHALL PAY** the full amount of the proposed forfeiture or **SHALL FILE** a written statement seeking reduction or cancellation of the proposed forfeiture consistent with paragraph 20 below.

18. In order for KXOL Licensing, Inc., to pay the proposed forfeiture, KXOL Licensing, Inc., shall notify Drew Tobias at Drew.Tobias@fcc.gov of its intent to pay, whereupon an invoice will be posted in the Commission's Registration System (CORES) at <https://apps.fcc.gov/cores/userLogin.do>. Upon payment, KXOL Licensing, Inc., shall send electronic notification of payment to Drew Tobias,

³⁴ See, e.g., *Forfeiture Policy Statement*, 12 FCC Rcd at 17098, para. 20 (1997) (recognizing the relevance of creating the appropriate deterrent effect in choosing a forfeiture); see also 47 CFR § 1.80(b)(11), Note to paragraph (b)(11) (identifying upward adjustment criteria for section 503 forfeitures).

³⁵ See *Unipoint Technologies, Inc. d/b/a Comfi.com d/b/a Masterbell.com d/b/a Pushline.com a/k/a Communications Fidelity*, Forfeiture Order, 29 FCC Rcd 1633, 1640, para. 21 (2014) ("It is immaterial whether [the licensee's] violations were inadvertent, the result of ignorance of the law, or the product of administrative oversight."), *default judgment entered, United States v. Unipoint Technologies, Inc.*, No. 14-12020-LTS, 2016 WL 8902575, at *1-2 (D. Mass. Apr. 27, 2016); *Texas Soaring Association, Inc. Midlothian, Texas*, Forfeiture Order, 28 FCC Rcd 10740, 10743-44, para. 7 (EB 2013) ("Even if administrative oversight, inadvertence, or a lack of familiarity with the [Commission's] Rules may have contributed to the violation, they do not ... mitigate liability arising therefrom") (footnotes omitted) (forfeiture paid); *Cascade Access, L.L.C.*, Forfeiture Order, 28 FCC Rcd 141, 145, para. 9 (EB 2013) (rejecting argument that the unintentional nature of the violation justifies mitigation of the forfeiture amount), *recons. denied*, Memorandum Opinion and Order, 30 FCC Rcd 14018 (EB 2015) (forfeiture paid); *América Móvil, S.A.B. de C.V. Parent of Puerto Rico Telephone Company, Inc.*, Notice of Apparent Liability for Forfeiture, 26 FCC Rcd 8672, 8676, para. 11 (EB 2011) ("While América Móvil claimed that the violation was a result of an inadvertent oversight, it is well established that administrative oversight or inadvertence is not a mitigating factor warranting a downward adjustment of a forfeiture.") (forfeiture paid).

³⁶ See *Saga Communications of New England, L.L.C.*, Forfeiture Order, 24 FCC Rcd 11934, 11937, para. 8 (EB 2009) (subsequent remedial steps to avoid recurrence and enhancement of awarded prizes "neither exculpatory nor mitigating").

Enforcement Bureau, Federal Communications Commission, at Drew.Tobias@fcc.gov on the date said payment is made. Payment of the forfeiture must be made by credit card using CORES at <https://apps.fcc.gov/cores/userLogin.do>, ACH (Automated Clearing House) debit from a bank account, or by wire transfer from a bank account. The Commission no longer accepts forfeiture payments by check or money order. Below are instructions that payors should follow based on the form of payment selected:³⁷

- Payment by wire transfer must be made to ABA Number 021030004, receiving bank TREAS/NYC, and Account Number 27000001. In the OBI field, enter the FRN(s) captioned above and the letters “FORF”. In addition, a completed Form 159³⁸ or printed CORES form³⁹ must be faxed to the Federal Communications Commission at 202-418-2843 or e-mailed to RROGWireFaxes@fcc.gov on the same business day the wire transfer is initiated. Failure to provide all required information in Form 159 or CORES may result in payment not being recognized as having been received. When completing FCC Form 159 or CORES, enter the Account Number in block number 23A (call sign/other ID), enter the letters “FORF” in block number 24A (payment type code), and enter in block number 11 the FRN(s) captioned above (Payor FRN).⁴⁰ For additional detail and wire transfer instructions, go to <https://www.fcc.gov/licensing-databases/fees/wire-transfer>.
- Payment by credit card must be made by using CORES at <https://apps.fcc.gov/cores/userLogin.do>. To pay by credit card, log-in using the FCC Username associated to the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Manage Existing FRNs | FRN Financial | Bills & Fees” from the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the “Open Bills” tab and find the bill number associated with the NAL Acct. No. The bill number is the NAL Acct. No. with the first two digits excluded (e.g., NAL 1912345678 would be associated with FCC Bill Number 12345678). After selecting the bill for payment, choose the “Pay by Credit Card” option. Please note that there is a \$24,999.99 limit on credit card transactions.
- Payment by ACH must be made by using CORES at <https://apps.fcc.gov/cores/userLogin.do>. To pay by ACH, log in using the FCC Username associated to the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Manage Existing FRNs | FRN Financial | Bills & Fees” on the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the “Open Bills” tab and find the bill number associated with the NAL Acct. No. The bill number is the NAL Acct. No. with the first two digits excluded (e.g., NAL 1912345678 would be associated with FCC Bill Number 12345678). Finally, choose the “Pay from Bank Account” option. Please contact the appropriate financial institution to confirm the correct Routing Number and the correct account number from which payment will be made and verify with that financial institution that the designated account has authorization to accept ACH transactions.

19. Any request for making full payment over time under an installment plan should be sent to: Chief Financial Officer—Financial Operations, Federal Communications Commission, 45 L Street, NE, Washington, D.C. 20554.⁴¹ Questions regarding payment procedures should be directed to the

³⁷ For questions regarding payment procedures, please contact the Financial Operations Group Help Desk by phone at 1-877-480-3201 (option #6).

³⁸ FCC Form 159 is accessible at <https://www.fcc.gov/licensing-databases/fees/fcc-remittance-advice-form-159>.

³⁹ Information completed using the Commission’s Registration System (CORES) does not require the submission of an FCC Form 159. CORES is accessible at <https://apps.fcc.gov/cores/userLogin.do>.

⁴⁰ Instructions for completing the form may be obtained at <http://www.fcc.gov/Forms/Form159/159.pdf>.

⁴¹ See 47 CFR § 1.1914.

Financial Operations Group Help Desk by phone, 1-877-480-3201, or by e-mail, ARINQUIRIES@fcc.gov.

20. The written statement seeking reduction or cancellation of the proposed forfeiture, if any, must include a detailed factual statement supported by appropriate documentation and affidavits pursuant to sections 1.16 and 1.80(g)(3) of the Commission's rules.⁴² The written statement must be mailed to the Office of the Secretary, Federal Communications Commission, 45 L Street, NE, Washington, D.C. 20554, ATTN: Enforcement Bureau – Investigations and Hearings Division, and must include the NAL/Account Number referenced in the caption. The statement must also be e-mailed to Drew Tobias at Drew.Tobias@fcc.gov; Kenneth M. Scheibel, Jr., at Kenneth.Scheibel@fcc.gov; and Patrick M. McGrath at Patrick.McGrath@fcc.gov.

21. The Commission will not consider reducing or canceling a forfeiture in response to a claim of inability to pay unless the petitioner submits the following documentation: (1) federal tax returns for the past three years; (2) financial statements for the past three years prepared according to generally accepted accounting practices; or (3) some other reliable and objective documentation that accurately reflects the petitioner's current financial status.⁴³ Any claim of inability to pay must specifically identify the basis for the claim by reference to the financial documentation. Inability to pay, however, is only one of several factors that the Commission will consider in determining the appropriate forfeiture, and we retain the discretion to decline reducing or canceling the forfeiture if other prongs of 47 U.S.C. § 503(b)(2)(E) support that result.⁴⁴

22. **IT IS FURTHER ORDERED** that a copy of this Notice of Apparent Liability for Forfeiture shall be sent by first class mail and certified mail, return receipt requested, to Richard D. Lara, Esq., Executive Vice President and General Counsel, KXOL Licensing, Inc., 7007 NW 77th Avenue, Miami, Florida 33166; and to Nancy A. Ory, Esq., Lerman Senter PLLC, 2001 L Street NW, Suite 400, Washington, DC 20036.

FEDERAL COMMUNICATIONS COMMISSION

Loyaan A. Egal
Chief
Enforcement Bureau

⁴² *Id.* §§ 1.16, 1.80(g)(3).

⁴³ 47 U.S.C. § 503(b)(2)(E).

⁴⁴ *See, e.g., Ocean Adrian Hinson, Surry County, North Carolina*, Forfeiture Order, 34 FCC Rcd 7619, 7621, para. 9 & n.21 (2019); *Yearl Pennington and Michael Williamson*, Forfeiture Order, 34 FCC Rcd 770, paras. 18–21 (2019); *Fabrice Polynice, Harold Sido and Veronise Sido, North Miami, Florida*, Forfeiture Order, 33 FCC Rcd 6852, 6860–62, paras. 21–25 (2018); *Adrian Abramovich, Marketing Strategy Leaders, Inc., and Marketing Leaders, Inc.*, Forfeiture Order, 33 FCC Rcd 4663, 4678–79, paras. 44–45 (2018); *Purple Communications, Inc.*, Forfeiture Order, 30 FCC Rcd 14892, 14903–904, paras. 32–33 (2015); *TV Max, Inc., et al.*, Forfeiture Order, 29 FCC Rcd 8648, 8661, para. 25 (2014).



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
45 L STREET NE
WASHINGTON D.C. 20554

News media information 202-418-0500
Internet: <http://www.fcc.gov> (or <ftp.fcc.gov>)
TTY (202) 418-2555

DA No. 24-349

Friday April 12, 2024

Report No. SCL-00459

Actions Taken Under Cable Landing License Act

Section 1.767(a) Cable Landing Licenses, Modifications, and Assignments or Transfers of Control of Interests in Cable Landing Licenses (47 CFR § 1.767(a))

By the Chief, Telecommunications and Analysis Division, Office of International Affairs:

Pursuant to an Act relating to the landing and operation of submarine cables in the United States, 47 U.S.C. §§ 34-39 (Cable Landing License Act), Executive Order No. 10530, Exec. Ord. No. 10530 reprinted as amended in 3 U.S.C. § 301, and section 1.767 of the Commission's rules, 47 CFR § 1.767, the following applications ARE GRANTED. These grants of authority are taken under section 0.261 of the Commission's rules. 47 CFR § 0.261. Petitions for reconsideration under section 1.106 or applications for review under section 1.115 of the Commission's rules may be filed within thirty (30) days of the date of this public notice. 47 CFR §§ 1.106, 1.115.

These applications have been coordinated with the Department of State and other Executive Branch agencies pursuant to section 1.767(b) of the Commission's rules and consistent with procedures established with the Department of State. 47 CFR § 1.767(b); see Review of Commission Consideration of Applications under the Cable Landing License Act, IB Docket No. 00-106, Report and Order, 16 FCC Rcd 22167, 22192-93, paras. 51-52 (2001) (Submarine Cable Landing License Report and Order); Commission Announces Department of State's Revised Procedures for its Consideration of Submarine Cable Landing License Applications, IB Docket No. 16-155, Public Notice, DA 22-435 (rel. Apr. 19, 2022).

This public notice serves as each cable landing licensee's Cable Landing License, or modification thereto, pursuant to the Cable Landing License Act and sections 1.767 and 1.768 of the Commission's rules. 47 CFR §§ 1.767, 1.768. Cable landing licensees should review the terms and conditions of their licenses. Failure to comply with these terms and conditions or relevant Commission rules and policies could result in fines or forfeitures.

Submarine Cable Landing License

Grant of Authority

Date of Action: 04/11/2024

Unicom, Inc. (Unicom) filed an application for a license to land and operate a non-common carrier fiber-optic submarine cable system connecting Dillingham, Platinum, and Eek, Alaska. The cable system will be known as the Airraq submarine cable system (Airraq). See Non-Streamlined Submarine Cable Landing License Applications, Accepted for Filing, Report No. SCL-00430S, Public Notice (OIA Sept. 8, 2023). No comments or oppositions were filed in response to the Public Notice.

The Application has been coordinated with the Department of State as required by Executive Order 10530, pursuant to section 1.767(b) of the Commission's rules, and consistent with the established Department of State procedures. Executive Order 10530, Section 5(a) reprinted as amended in 3 U.S.C. § 301; 47 CFR §1.767(b); Review of Commission Consideration of Applications under the Cable Landing License Act, IB Docket No. 00-106, Report and Order, 16 FCC Rcd 22167, 22192-93, paras. 51-52 (2001); Commission Announces Department of State's Revised Procedures for its Consideration of Submarine Cable Landing License Applications, IB Docket No. 16-155, Public Notice, DA 22-435 (rel. Apr. 19, 2022). The U.S. Department of Homeland Security as well as the U.S. Department of Justice, on behalf of the Committee for the Assessment of Foreign Participation in the United States Telecommunications Services Sector (Committee), filed letters to defer action on September 18, 2023 and September 25, 2023, respectively. The National Telecommunications and Information Administration (NTIA), on behalf of the Committee, filed a Petition to Adopt Conditions to Authorization and License on March 27, 2024. The Committee has no objection to the Commission granting the Application, provided that the Commission conditions its approval on the assurances of Unicom, Inc. and GCI Communication Corp. (together, the parties) to abide by the commitments and undertakings set forth in the March 18, 2024 Letter of Agreement (LOA) to the U.S. Department of Homeland Security and the U.S. Department of Defense.

Actions Taken: (1) Grant of Cable Landing License to Unicom, Inc. for the purpose of landing and operating a non-common carrier fiber optic submarine cable system, the Airraq submarine cable system, that connects Dillingham, Platinum, and Eek, Alaska; and (2) Grant of the Petition to Adopt Conditions to Authorization and License filed by the National Telecommunications and Information Administration on March 27, 2024.

Licensee Information: Unicom is a wholly owned subsidiary of GCI Communication Corp. (GCICC), both Alaska corporations. GCICC is a wholly owned subsidiary of GCI Holdings, Inc., which in turn is a wholly owned subsidiary of Ventures Holdco, LLC (Ventures Holdco), both Delaware entities. Ventures Holdco is a wholly owned subsidiary of GCI, LLC, which in turn is a wholly owned subsidiary of Grizzly Merger Sub 1 LLC, which is a direct wholly owned subsidiary of Liberty Broadband Corporation (Liberty Broadband), all Delaware entities. Dr. John C. Malone, a U.S. citizen, holds a 48.9% voting interest and an approximate 6.074% equity interest in Liberty Broadband. The Applicant states that no other individual or entity holds a 10% or greater ownership interest in Liberty Broadband.

Landing Points, Ownership, Cable Design, and Cable Capacity: Airraq will be a high-fiber-count system deploying space division multiplexing technology landing in three locations with two segments: (1) an approximately 381 kilometer segment connecting the Dillingham, Alaska cable landing station to the Platinum, Alaska cable landing station and (2) an approximately 155 kilometer segment connecting the Platinum, Alaska cable landing station to the Eek, Alaska cable landing station. Each segment will have 12 fiber pairs, each having a design capacity of approximately 3.2 terabits per second (Tbps) using current technology. All of the cable landing stations will be newly built. Unicom will own and control both segments and all three cable landing stations for Airraq.

Regulatory Status of the Cable: Unicom proposes to operate Airraq on a non-common-carrier basis. Unicom states that it will not sell capacity indifferently to the user public. Instead, Unicom will: (a) use Airraq system capacity as an input for other services offered to retail, enterprise, and government customers in Alaska and (b) sell bulk capacity to particular carrier, enterprise, and government customers pursuant to individually-negotiated indefeasible rights of use (IRUs) and capacity leases, the terms of which will vary depending on the characteristics and needs of the particular capacity purchaser. Unicom states that it and its affiliates will continue to compete vigorously with the incumbent provider, Alaska Communications Systems Group, Inc. (ACS), in the intra-Alaska and Alaska-Lower 48 markets, and provide customers in the three locations that rely solely on satellite links, which suffer from propagation delays and capacity constraints, with much-needed capacity and redundancy. In addition, Unicom states that it will compete vigorously with existing providers' facilities, including existing satellite service providers: ACS, Nushagak Electric & Telephone Cooperative, Inc., and Starlink.

The Applicant has provided information and demonstrated that the proposed operation of the cable on a non-common carrier basis satisfies the requirements set forth in National Association of Regulatory Utility Commissioners v. FCC, 525 F.2d 630, 642 (D.C. Cir 1976) (NARUC I), cert. denied, 425 U.S. 992 (1976). See also Submarine Cable Landing License Report and Order, 16 FCC Rcd at 22202-22203, paras. 69-70; Review of Commission Consideration of Applications under the Cable Landing License Act, IB Docket No. 00-106, Notice of Proposed Rulemaking, 15 FCC Rcd 20789, 20815-20818, paras. 62-67.

Conditions and Requirements: Unicom shall comply with the routine conditions specified in section 1.767(g) of the Commission's rules, 47 CFR § 1.767(g), and with the requirements of section 1.768 of the Commission's rules, 47 CFR § 1.768 (Notification by and prior approval for submarine cable landing licenses that are or propose to become affiliated with a foreign carrier).

We grant the Petition to Adopt Conditions to Authorization and License (Petition) filed in this proceeding by the National Telecommunications and Information Administration, on behalf of the Committee for the Assessment of Foreign Participation in the United States Telecommunications Services Sector (Committee), on March 27, 2024. Accordingly, we condition grant of this Application on Unicom, Inc. and GCI Communication Corp. abiding by the commitments and undertakings contained in their March 18, 2024 Letter of Agreement to the Under Secretary for Strategy, Policy and Plans, Office of Strategy, Policy, and Plans, U.S. Department of Homeland Security, and the Office of Foreign Investment Review, Director Undersecretary of Acquisition and Sustainment, U.S. Department of Defense (LOA). The Petition and the LOA are publicly available and may be viewed on the FCC website through the International Communications Filing System (ICFS) by searching SCL-LIC-20230718-00023 and accessing "Other filings related to this application" from the Document Viewing area.

A failure to comply and/or remain in compliance with any of these commitments and undertakings shall constitute a failure to meet a condition of the cable landing license and thus grounds for declaring the license terminated without further action on the part of the Commission. Failure to meet a condition of the license may also result in monetary sanctions or other enforcement action by the Commission.

License Term: Under the Commission's rules, a cable landing license shall expire 25 years after the in-service date for the cable. The Licensee must notify the Commission within thirty (30) days of the date the cable is placed into service. See 47 CFR § 1.767(g)(15). The in-service notification must be filed in ICFS through the "Other filings related to this application" module for file number SCL-LIC-20230718-00023.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Clear Rate Communications
Complaint Regarding
Unauthorized Change of
Subscriber's Telecommunications Carrier
Complaint No. 6927046

ORDER

Adopted: April 11, 2024

Released: April 12, 2024

By the Associate Division Chief, Consumer Policy Division, Consumer and Governmental Affairs Bureau:

1. In this Order, we consider a complaint alleging that Clear Rate Communications (Clear Rate) changed Complainant's telecommunications service provider without obtaining authorization and verification from Complainant as required by the Commission's rules. We conclude that Clear Rate's actions violated the Commission's slamming rules, and we grant Complainant's complaint.

2. Section 258 of the Communications Act of 1934, as amended (the Act), prohibits the practice of "slamming," the submission or execution of an unauthorized change in a subscriber's selection of a provider of telephone exchange service or telephone toll service. The Commission's implementing rules require, among other things, that a carrier receive individual subscriber consent before a carrier change may occur. Specifically, a carrier must: (1) obtain the subscriber's written or electronically signed authorization in a format that satisfies our rules; (2) obtain confirmation from the subscriber via a toll-free number provided exclusively for the purpose of confirming orders electronically; or (3) utilize an appropriately qualified independent third party to verify the order. The Commission has also adopted rules to limit the liability of subscribers when an unauthorized carrier change occurs, and to require carriers involved in slamming practices to compensate subscribers whose carriers were changed without authorization.

1 See Informal Complaint No. 6927046 (Mar. 29, 2024); see also 47 CFR §§ 64.1100 – 64.1190.

2 47 U.S.C. § 258(a).

3 See 47 CFR § 64.1120.

4 See id. § 64.1120(c). Section 64.1130 details the requirements for letter of agency form and content for written or electronically signed authorizations. Id. § 64.1130.

5 These rules require the unauthorized carrier to absolve the subscriber where the subscriber has not paid his or her bill. If the subscriber has not already paid charges to the unauthorized carrier, the subscriber is absolved of liability for charges imposed by the unauthorized carrier for service provided during the first 30 days after the unauthorized change. See id. §§ 64.1140, 64.1160. Any charges imposed by the unauthorized carrier on the subscriber for service provided after this 30-day period shall be paid by the subscriber to the authorized carrier at the rates the subscriber was paying to the authorized carrier at the time of the unauthorized change. Id. Where the subscriber has paid charges to the unauthorized carrier, the Commission's rules require that the unauthorized carrier pay 150 percent of those charges to the authorized carrier, and the authorized carrier shall refund or credit to the subscriber 50 percent of all charges paid by the subscriber to the unauthorized carrier. See id. §§ 64.1140, 64.1170.

3. The Commission’s slamming rules prohibit misrepresentations on sales calls to further reduce the incidence of slamming.⁶ Under the rules, upon a finding of material misrepresentation during the sales call, the consumer’s authorization to change carriers will be deemed invalid even if the carrier has some evidence of consumer authorization of a carrier switch, e.g., a third-party verification (TPV) recording. Sales misrepresentations may not be cured by a facially valid TPV.⁷ The rule provides that a consumer’s credible allegation of misrepresentation shifts the burden of proof to the carrier to provide evidence to rebut the consumer’s claim regarding misrepresentation. The Commission made clear that an accurate and complete recording of the sales call may be the carrier’s best persuasive evidence to rebut the consumer’s claim that a misrepresentation was made on the sales call.⁸

4. We received Complainant’s complaint alleging that Complainant’s telecommunications service provider had been changed from AT&T to Clear Rate without his authorization.⁹ In the complaint, Complainant stated that “[t]his company called, representing themselves as AT&T and [said] that they were updating the phone service.”¹⁰ Clear Rate “never spoke with the person whose name is on the account, but instead with my 85 year old mother who suffers from dementia. . . .”¹¹ Complainant explained that “this occurred two months ago, and they still have not responded, but have only sent us ever increasing bills. . . . [I]n this entire time, [their] service is not functioning and their hardware is not installed.”¹²

5. Pursuant to our rules, we notified Clear Rate of the complaint, directing the company to address the allegation of misrepresentation and to provide evidence to rebut the claim.¹³ Clear Rate responded, stating that Complainant’s mother agreed to and authorized the carrier switch, and that they had no way of knowing the mental capacities of the Complainant’s mother.¹⁴ Clear Rate also provided two audio recordings—the TPV recording and a recording Clear Rate characterized as a “quality assurance call.” Clear Rate did not address Complainant’s misrepresentation claim and did not provide a recording of the sales call or any other evidence related to the sales call.

6. Based on the evidence in the record, we find Complainant’s allegation of a sales call misrepresentation to be credible. We further find that Clear Rate has failed to provide persuasive evidence to rebut Complainant’s misrepresentation claim and therefore that Complainant’s authorization to change carriers is invalid. As the Commission stated in the *2018 Slamming Order*, “[w]hen a consumer’s decision to switch carriers is predicated on false information provided in a sales call, that

⁶ *Id.* § 64.1120(a)(1)(i)(A).

⁷ See *Protecting Consumers from Unauthorized Carrier Changes and Related Unauthorized Charges*, 33 FCC Rcd 5773, 5778-80, paras. 17-19 (2018) (*2018 Slamming Order*); 47 CFR § 64.1120(a)(1)(i)(A).

⁸ See *2018 Slamming Order*, 33 FCC Rcd at 5781, para. 23. The Commission also stated that a carrier is uniquely positioned via its access to sales scripts, recordings, training, and other relevant materials relating to sales calls to proffer evidence to rebut a consumer’s claims. *Id.*

⁹ See Informal Complaint No. 6927046.

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ 47 CFR § 1.719 (Commission procedure for informal complaints filed pursuant to section 258 of the Act); *id.* § 64.1150 (procedures for resolution of unauthorized changes in preferred carrier). In the notification, we directed Clear Rate to respond to the specific misrepresentation allegation and to provide any evidence to rebut it.

¹⁴ See Clear Rate Response to Informal Complaint No. 6927046 (Apr. 3, 2024); see also 47 CFR § 64.1160.

consumer's authorization to switch carriers can no longer be considered binding."¹⁵ We therefore find that Clear Rate's actions resulted in an unauthorized change in Complainant's telecommunications service provider, as defined by the rules, and we discuss Clear Rate's liability below.¹⁶

7. Clear Rate must remove all charges incurred for service provided to Complainant for the first 30 days after the alleged unauthorized change in accordance with the Commission's liability rules.¹⁷ We have determined that Complainant is entitled to absolution for the charges incurred during the first 30 days after the unauthorized change occurred and that neither the Complainant's authorized carrier nor Clear Rate may pursue any collection against Complainant for those charges.¹⁸ Any charges imposed by Clear Rate on the Complainant for service provided after this 30-day period shall be paid by the Complainant to the authorized carrier at the rates the Complainant was paying the authorized carrier at the time of the unauthorized change of their telecommunications service provider.¹⁹

8. Accordingly, IT IS ORDERED that, pursuant to section 258 of the Communications Act of 1934, as amended, 47 U.S.C. § 258, and sections 0.141, 0.361, and 1.719 of the Commission's rules, 47 CFR §§ 0.141, 0.361, 1.719, the complaint filed against Clear Rate Communications IS GRANTED.

9. IT IS FURTHER ORDERED that, pursuant to section 64.1170(d) of the Commission's rules, 47 CFR § 64.1170(d), Complainant is entitled to absolution for the charges incurred during the first 30 days after the unauthorized change occurred and that Clear Rate Communications may not pursue any collection against Complainant for those charges.

10. IT IS FURTHER ORDERED that this Order is effective upon release.

FEDERAL COMMUNICATIONS COMMISSION

Dana Bowers
Associate Division Chief
Consumer Policy Division
Consumer and Governmental Affairs Bureau

¹⁵ 2018 *Slamming Order*, 33 FCC Rcd at 5779, para. 18 (citing *Advantage Forfeiture Order*, 32 FCC Rcd 3723, 3725-30, paras. 7-13 (2017) (finding that the carrier's TPV recordings did not disprove that unlawful misrepresentations were made during the telemarketing calls and further, that questions posed during the separate TPV calls did not cure those misrepresentations)).

¹⁶ If Complainant is unsatisfied with the resolution of the complaint, Complainant may file a formal complaint with the Commission pursuant to section 1.721 of the Commission's rules, 47 CFR § 1.721. Such filing will be deemed to relate back to the filing date of Complainant's informal complaint so long as the formal complaint is filed within 45 days from the date this order is mailed or delivered electronically to Complainant. *See id.* § 1.719.

¹⁷ *See id.* § 64.1160(b).

¹⁸ *See id.* § 64.1160(d).

¹⁹ *See id.* §§ 64.1140, 64.1160.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Clear Rate Communications) Complaint No. 6843682
)
Complaint Regarding)
Unauthorized Change of)
Subscriber’s Telecommunications Carrier)

ORDER

Adopted: April 11, 2024

Released: April 12, 2024

By the Associate Division Chief, Consumer Policy Division, Consumer and Governmental Affairs Bureau:

1. In this Order, we consider a complaint alleging that Clear Rate Communications (Clear Rate) changed Complainant’s telecommunications service provider without obtaining authorization and verification from Complainant as required by the Commission’s rules.¹ We conclude that Clear Rate’s actions violated the Commission’s slamming rules, and we grant Complainant’s complaint.

2. Section 258 of the Communications Act of 1934, as amended (the Act), prohibits the practice of “slamming,” the submission or execution of an unauthorized change in a subscriber’s selection of a provider of telephone exchange service or telephone toll service.² The Commission’s implementing rules require, among other things, that a carrier receive individual subscriber consent before a carrier change may occur.³ Specifically, a carrier must: (1) obtain the subscriber’s written or electronically signed authorization in a format that satisfies our rules; (2) obtain confirmation from the subscriber via a toll-free number provided exclusively for the purpose of confirming orders electronically; or (3) utilize an appropriately qualified independent third party to verify the order.⁴ The Commission has also adopted rules to limit the liability of subscribers when an unauthorized carrier change occurs, and to require carriers involved in slamming practices to compensate subscribers whose carriers were changed without authorization.⁵

¹ See Informal Complaint No. 6843682 (Feb. 29, 2024); see also 47 CFR §§ 64.1100 – 64.1190.

² 47 U.S.C. § 258(a).

³ See 47 CFR § 64.1120.

⁴ See *id.* § 64.1120(c). Section 64.1130 details the requirements for letter of agency form and content for written or electronically signed authorizations. *Id.* § 64.1130.

⁵ These rules require the unauthorized carrier to absolve the subscriber where the subscriber has not paid his or her bill. If the subscriber has not already paid charges to the unauthorized carrier, the subscriber is absolved of liability for charges imposed by the unauthorized carrier for service provided during the first 30 days after the unauthorized change. See *id.* §§ 64.1140, 64.1160. Any charges imposed by the unauthorized carrier on the subscriber for service provided after this 30-day period shall be paid by the subscriber to the authorized carrier at the rates the subscriber was paying to the authorized carrier at the time of the unauthorized change. *Id.* Where the subscriber has paid charges to the unauthorized carrier, the Commission’s rules require that the unauthorized carrier pay 150 percent of those charges to the authorized carrier, and the authorized carrier shall refund or credit to the subscriber 50 percent of all charges paid by the subscriber to the unauthorized carrier. See *id.* §§ 64.1140, 64.1170.

3. The Commission’s slamming rules prohibit misrepresentations on sales calls to further reduce the incidence of slamming.⁶ Under the rules, upon a finding of material misrepresentation during the sales call, the consumer’s authorization to change carriers will be deemed invalid even if the carrier has some evidence of consumer authorization of a carrier switch, e.g., a third-party verification (TPV) recording. Sales misrepresentations may not be cured by a facially valid TPV.⁷ The rule provides that a consumer’s credible allegation of misrepresentation shifts the burden of proof to the carrier to provide evidence to rebut the consumer’s claim regarding misrepresentation. The Commission made clear that an accurate and complete recording of the sales call may be the carrier’s best persuasive evidence to rebut the consumer’s claim that a misrepresentation was made on the sales call.⁸

4. We received Complainant’s complaint alleging that Complainant’s telecommunications service provider had been changed from Verizon to Clear Rate without her authorization.⁹ Complainant explained that they “received a phone call from Clear Rate Communications in early January 2024. They made it sound like they were with Verizon . . . and that they had a cheaper plan for our company . . . which would save us money.”¹⁰ Complainant explained that they were under “the assumption it was a company that Verizon was affiliated with.”¹¹ Complainant stated that “[i]f I [had] know[n] it was another company, someone not affiliated with Verizon, I would not have agree[d] to the services. . . . This was a scam and unfortunately I fell for it.”¹²

5. Pursuant to our rules, we notified Clear Rate of the complaint, directing the company to address the allegation of misrepresentation and to provide evidence to rebut the claim.¹³ Clear Rate responded, stating that Complainant agreed to and authorized the carrier switch, and that the terms and conditions of service were described in detail for Complainant on the TPV call.¹⁴ Clear Rate also provided two audio recordings—the TPV recording and a recording Clear Rate characterized as a “quality assurance call.” Clear Rate did not address Complainant’s misrepresentation claim and did not provide a recording of the sales call or any other evidence related to the sales call.

6. Based on the evidence in the record, we find Complainant’s allegation of a sales call misrepresentation to be credible. We further find that Clear Rate has failed to provide persuasive evidence to rebut Complainant’s misrepresentation claim and therefore that Complainant’s authorization to change carriers is invalid. As the Commission stated in the *2018 Slamming Order*, “[w]hen a consumer’s decision to switch carriers is predicated on false information provided in a sales call, that

⁶ *Id.* § 64.1120(a)(1)(i)(A).

⁷ See *Protecting Consumers from Unauthorized Carrier Changes and Related Unauthorized Charges*, 33 FCC Rcd 5773, 5778-80, paras. 17-19 (2018) (*2018 Slamming Order*); 47 CFR § 64.1120(a)(1)(i)(A).

⁸ See *2018 Slamming Order*, 33 FCC Rcd at 5781, para. 23. The Commission also stated that a carrier is uniquely positioned via its access to sales scripts, recordings, training, and other relevant materials relating to sales calls to proffer evidence to rebut a consumer’s claims. *Id.*

⁹ See Informal Complaint No. 6843682.

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ 47 CFR § 1.719 (Commission procedure for informal complaints filed pursuant to section 258 of the Act); *id.* § 64.1150 (procedures for resolution of unauthorized changes in preferred carrier). In the notification, we directed Clear Rate to respond to the specific misrepresentation allegation and to provide any evidence to rebut it.

¹⁴ See Clear Rate Response to Informal Complaint No. 6843682 (Mar. 4, 2024); see also 47 CFR § 64.1160.

consumer's authorization to switch carriers can no longer be considered binding."¹⁵ We therefore find that Clear Rate's actions resulted in an unauthorized change in Complainant's telecommunications service provider, as defined by the rules, and we discuss Clear Rate's liability below.¹⁶

7. Clear Rate must remove all charges incurred for service provided to Complainant for the first 30 days after the alleged unauthorized change in accordance with the Commission's liability rules.¹⁷ We have determined that Complainant is entitled to absolution for the charges incurred during the first 30 days after the unauthorized change occurred and that neither the Complainant's authorized carrier nor Clear Rate may pursue any collection against Complainant for those charges.¹⁸ Any charges imposed by Clear Rate on the Complainant for service provided after this 30-day period shall be paid by the Complainant to the authorized carrier at the rates the Complainant was paying the authorized carrier at the time of the unauthorized change of their telecommunications service provider.¹⁹

8. Accordingly, IT IS ORDERED that, pursuant to section 258 of the Communications Act of 1934, as amended, 47 U.S.C. § 258, and sections 0.141, 0.361, and 1.719 of the Commission's rules, 47 CFR §§ 0.141, 0.361, 1.719, the complaint filed against Clear Rate Communications IS GRANTED.

9. IT IS FURTHER ORDERED that, pursuant to section 64.1170(d) of the Commission's rules, 47 CFR § 64.1170(d), Complainant is entitled to absolution for the charges incurred during the first 30 days after the unauthorized change occurred and that Clear Rate Communications may not pursue any collection against Complainant for those charges.

10. IT IS FURTHER ORDERED that this Order is effective upon release.

FEDERAL COMMUNICATIONS COMMISSION

Dana Bowers
Associate Division Chief
Consumer Policy Division
Consumer and Governmental Affairs Bureau

¹⁵ 2018 *Slamming Order*, 33 FCC Rcd at 5779, para. 18 (citing *Advantage Forfeiture Order*, 32 FCC Rcd 3723, 3725-30, paras. 7-13 (2017) (finding that the carrier's TPV recordings did not disprove that unlawful misrepresentations were made during the telemarketing calls and further, that questions posed during the separate TPV calls did not cure those misrepresentations)).

¹⁶ If Complainant is unsatisfied with the resolution of the complaint, Complainant may file a formal complaint with the Commission pursuant to section 1.721 of the Commission's rules, 47 CFR § 1.721. Such filing will be deemed to relate back to the filing date of Complainant's informal complaint so long as the formal complaint is filed within 45 days from the date this order is mailed or delivered electronically to Complainant. *See id.* § 1.719.

¹⁷ *See id.* § 64.1160(b).

¹⁸ *See id.* § 64.1160(d).

¹⁹ *See id.* §§ 64.1140, 64.1160.



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
45 L STREET NE
WASHINGTON D.C. 20554

News media information 202-418-0500
Internet: <http://www.fcc.gov> (or <ftp.fcc.gov>)
TTY (202) 418-2555

DA No. 24-352

Friday April 12, 2024

Report No. SAT-01815

Satellite Licensing Division and Satellite Programs and Policy Division Information

Actions Taken

The Commission, by its Space Bureau, took the following actions pursuant to delegated authority. The effective date of these actions is the release date of this Notice, except where an effective date is specified.

| | | | | |
|------------------------|---|-------|--------------------|----------------------------|
| SAT-MOD-20230201-00013 | E | S3051 | Kuiper Systems LLC | |
| Modification | | | | 04/05/2024 - |
| Grant of Authority | | | | Effective Date: 04/05/2024 |

Nature of Service: Fixed Satellite Service, Mobile Satellite Service

On April 5, 2024, the Satellite Programs and Policy Division granted, with conditions, the request of Kuiper Systems LLC for modification of its authorization for a non-geostationary satellite orbit (NGSO) fixed-satellite service (FSS) system. The Division modified the license condition regarding sharing spectrum with NGSO FSS systems authorized in prior processing rounds. Specifically, in the event coordination is not yet completed Kuiper may commence FSS operations in the 17.8-18.6 GHz and 18.8-20.2 GHz and 27.5-30 GHz bands at its own risk on a non-interference, unprotected basis after submitting a showing to the Commission demonstrating that it will protect operational systems licensed or granted U.S. market access in earlier NGSO FSS processing rounds, but prior to Commission approval of that showing.

| | | | | |
|------------------------|---|-------|--------------------------|----------------------------|
| SAT-MOD-20231219-00320 | E | S2673 | DIRECTV Enterprises, LLC | |
| Modification | | | | 04/11/2024 - 02/28/2027 |
| Grant of Authority | | | | Effective Date: 04/11/2024 |

Nature of Service: Direct Broadcast Satellite Service

On April 11, 2024, the Satellite Programs and Policy Division granted DIRECTV Enterprises LLC's request for modification of the license for its DIRECTV 5 spacecraft. DIRECTV was authorized to reorient DIRECTV 5 to restore the space station's original beam coverage over Alaska and Hawaii. DIRECTV 5 operates at the 110.1° W.L. orbital location and uses the 12.2-12.7 GHz (space-to-Earth) and 17.3-17.8 GHz (Earth-to-space) frequency bands. The following center frequencies are used for telemetry, tracking, and command: 12201.0 MHz and 12202.0 MHz (space-to-Earth), and 17301.0 MHz and 17305.0 MHz (Earth-to-space).

| | | | | |
|-----------------------------|---|-------|----------------------|----------------------------|
| SAT-STA-20240325-00063 | E | S2715 | Intelsat License LLC | |
| Special Temporary Authority | | | | |
| Grant of Authority | | | | Effective Date: 04/04/2024 |

Application listed as granted in ICFS to reflect continuing operations pursuant to section 1.62 of the Commission's rules. 47 CFR § 1.62.

SAT-STA-20240408-00076 E S3083 Intelsat License LLC

Special Temporary Authority

Grant of Authority

Effective Date: 04/10/2024

Nature of Service: Fixed Satellite Service

On April 10, 2024, the Satellite Programs and Policy Division granted, with conditions, the request of Intelsat License LLC to operate the Galaxy 34 satellite, for an additional 10 days, at the 129.0° W.L. orbital location with new seasonal coverage in the 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space) frequency bands.

For more information concerning this Notice, contact the Satellite Licensing Division and Satellite Programs and Policy Division at (202) 418-0719.



PUBLIC NOTICE

Federal Communications Commission
45 L Street NE
Washington, DC 20554

News Media Information 202-418-0500
Internet: www.fcc.gov
TTY: 888-835-5322

DA 24-353

Released: April 12, 2024

EXTENSION OF CONDITIONAL CERTIFICATION OF HAMILTON RELAY, INC. TO PROVIDE TELECOMMUNICATIONS RELAY SERVICE

CG Docket No. 03-123

By the Chief, Consumer and Governmental Affairs Bureau:

By this Public Notice, the Consumer and Governmental Affairs Bureau (Bureau) extends until December 31, 2024, the conditional certification for Hamilton Relay, Inc. (Hamilton), to provide fully automatic Internet Protocol Captioned Telephone Service (IP CTS) supported by the Interstate Telecommunications Relay Services (TRS) Fund.¹

On April 20, 2022, the Bureau granted conditional certification to Hamilton for the provision of IP CTS on a fully automatic basis for a period of two years, until April 20, 2024.² The Federal Communications Commission requires additional time to evaluate Hamilton's application for full certification.³ Therefore, we extend until December 31, 2024, Hamilton's conditional certification to provide IP CTS on a fully automatic basis. This extension is without prejudice to the Commission's final

¹ See *Telecommunications Relay Services and Speech-to-Speech Relay Services for Individuals with Hearing and Speech Disabilities*, Memorandum Opinion and Order, CG Docket No. 03-123, 37 FCC Rcd 5227 (CGB 2022) (*Hamilton ASR Certification*); *Structure and Practices of the Video Relay Service Program*, CG Docket No. 10-51, Second Report and Order and Order, 26 FCC Rcd 10898, 10914-15, para. 37 (2011) (authorizing conditional certification). IP CTS is a form of Internet-based TRS that "permits an individual who can speak but who has difficulty hearing over the telephone to use a telephone and an internet Protocol-enabled device via the internet to simultaneously listen to the other party and read captions of what the other party is saying." See 47 CFR § 64.601(a)(23) (defining IP CTS). Captions may be displayed on a specialized IP CTS device or an off-the-shelf computer, tablet, or smartphone. Internet-based TRS providers obtain certification from the Federal Communications Commission to be eligible to receive compensation from the TRS Fund. *Id.* § 64.606. With the fully automatic form of IP CTS, automatic speech recognition (ASR) technology is used to produce captions for telephone calls without the participation of a communications assistant (CA). *Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket Nos. 13-24 and 03-123, Report and Order, Declaratory Ruling, Further Notice of Proposed Rulemaking, and Notice of Inquiry, 33 FCC Rcd 5800, 5827, para. 48 (2018).

² See *Hamilton ASR Certification*.

³ See Sixth Amendment to Application of Hamilton Relay, Inc. for Certification as a Provider of Internet Protocol Captioned Telephone Services, CG Docket Nos. 10-51 and 03-123 (filed July 9, 2021) (Sixth Amendment) (seeking permission to provide fully automatic IP CTS), <https://www.fcc.gov/ecfs/document/1070942156998/1> (redacted); Seventh Amendment to Application of Hamilton Relay, Inc. for Certification as a Provider of Internet Protocol Captioned Telephone Services, CG Docket Nos. 10-51 and 03-123 (filed Mar. 24, 2022), <https://www.fcc.gov/ecfs/document/103250348902238/1>; Eighth Amendment to Application of Hamilton Relay, Inc. for Certification as a Provider of Internet Protocol Captioned Telephone Services, CG Docket Nos. 10-51 and 03-123 (filed Jan. 13, 2023), <https://www.fcc.gov/ecfs/document/10113285203338/1> (redacted).

determination on the full certification application. The extension is effective upon release of this Public Notice.

To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at 202-418-0530 (voice).

For further information regarding this item, please contact Joshua Mendelsohn, Disability Rights Office, Consumer and Governmental Affairs Bureau, at 202-559-7304 or by e-mail to Joshua.Mendelsohn@fcc.gov.

- FCC -



PUBLIC NOTICE

Federal Communications Commission
45 L Street, NE
Washington, D.C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>

DA 24-354
Released: April 12, 2024

COMMENTS INVITED ON SECTION 214 APPLICATION(S) TO DISCONTINUE DOMESTIC NON-DOMINANT CARRIER TELECOMMUNICATIONS AND/OR INTERCONNECTED VOIP SERVICES

WC Docket No(s). 24-91

Comments Due: April 29, 2024

Unless otherwise specified, the following procedures and dates apply to the application(s) (the Section 214 Discontinuance Application(s)) listed in the Appendix.

The Wireline Competition Bureau (Bureau), upon initial review, has found the Section 214 Discontinuance Application(s) listed herein to be acceptable for filing and subject to the procedures set forth in Section 63.71 of the Commission's rules.¹ The application(s) request authority, under section 214 of the Communications Act of 1934, as amended,² and section 63.71 of the Commission's rules,³ to discontinue, reduce, or impair certain domestic telecommunications service(s) (Affected Service(s)) in specified geographic areas (Service Area(s)) as applicable and as fully described in each application.

In accordance with section 63.71(f) of the Commission's rules, the Section 214 Discontinuance Application(s) listed in the Appendix will be deemed granted automatically on **May 13, 2024**, the 31st day after the release date of this public notice, unless the Commission notifies any applicant(s) that their grant will not be automatically effective.⁴ We note that the date on which an application for Commission authorization is deemed granted may be different from the date on which applicants are authorized to discontinue, reduce, or impair service ("Authorized Date"). Any applicant whose application has been deemed granted may discontinue, reduce or impair their Affected Service(s) in their Service Area(s) on or after the authorized date(s) specified in the Appendix, in accordance with their filed representations. Accordingly, pursuant to section 63.71(f), and the terms outlined in each application, absent further Commission action, each applicant may discontinue, reduce or impair the Affected Service(s) in the Service Area(s) described in their application on or after the authorized discontinuance date(s) listed in the Appendix for that application. For purposes of computation of time when filing a petition for reconsideration, application for review, or petition for judicial review of the Commission's decision(s), the date of "public notice" shall be the later of the auto grant date stated above in this Public Notice, or

¹ 47 CFR § 63.71.

² 47 U.S.C. § 214.

³ 47 CFR § 63.71.

⁴ See 47 CFR § 63.71(f) (stating, in relevant part, that an application filed by a non-dominant carrier "shall be automatically granted on the 31st day... unless the Commission has notified the applicant that the grant will not be automatically effective.").

the release date(s) of any further public notice(s) or order(s) announcing final Commission action, as applicable. Should no petitions for reconsideration, applications for review, or petitions for judicial review be timely filed, the proceeding(s) listed in this Public Notice shall be terminated, and the docket(s) will be closed.

Comments objecting to any of the applications listed in the Appendix must be filed with the Commission on or before **April 29, 2024**.⁵ Comments should refer to the specific WC Docket No. and Comp. Pol. File No. listed in the Appendix for the particular Section 214 Discontinuance Application that the commenter intends to address. Comments should include specific information about the impact of the proposed discontinuance on the commenter, including any inability to acquire reasonable substitute service. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.⁶ Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs>. Filers should follow the instructions provided on the Web site for submitting comments. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket number.

Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit one additional copy for each additional docket or rulemaking number associated with the proceeding in which they choose to file comments. Filings can be sent by commercial overnight courier or by first-class or overnight U.S. Postal Service mail.⁷ All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, D.C. 20554.

Copies of the comments may also be emailed to the Competition Policy Division, Wireline Competition Bureau, Federal Communications Commission, using the contact information listed in the Appendix for the appropriate Section 214 Application. In addition, comments should be served upon the Applicant(s).

These proceedings are considered "permit but disclose" proceedings for purposes of the Commission's *ex parte* rules.⁸ Participants should familiarize themselves with the Commission's *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations

⁵ Comments are normally due 15 days after the Commission releases public notice of the proposed discontinuance. 47 CFR § 63.71(a). For purposes of computation of time, if the comment deadline falls on a weekend or officially recognized Federal legal holiday, however, comments will be due on the next business day. See 47 CFR § 1.4(e) and (j).

⁶ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

⁷ Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Filing*, Public Notice, 35 FCC Rcd 2788 (OMD 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

⁸ 47 CFR § 1.1200 *et seq.*

are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b).

People with Disabilities: We ask that requests for accommodations be made as soon as possible in order to allow the agency to satisfy such requests whenever possible. Send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418-0530.

For further information, please see the contact(s) for the specific discontinuance proceeding you are interested in as listed in the Appendix. For further information on procedures regarding section 214 please visit <https://www.fcc.gov/encyclopedia/domestic-section-214-discontinuance-service>.

– FCC –

Appendix

1) Applicant(s): CenturyLink Communications, LLC (CenturyLink)

WC Docket No. 24-91, Comp. Pol. File No. 1902

Link – [https://www.fcc.gov/ecfs/search/search-filings/results?q=\(proceedings.name:\(%2224-91*%22\)\)](https://www.fcc.gov/ecfs/search/search-filings/results?q=(proceedings.name:(%2224-91*%22)))

Affected Service(s) – Digital Home Phone and Simple VoIP service

Service Area(s) – Alabama, Arkansas, Arizona, Colorado, Florida, Iowa, Idaho, Indiana, Kansas, Kentucky, Michigan, Minnesota, Missouri, Mississippi, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, Wisconsin and Wyoming.

Authorized Date(s) – on or after May 15, 2024

Contact(s) – Kimberly Jackson, (202) 418-7393 (voice), Kimberly.Jackson@fcc.gov, of the Competition Policy Division, Wireline Competition Bureau

Note: On April 12, 2024, CenturyLink filed a supplemental letter to indicate that corrected notices were mailed to affected customers on April 12, 2024.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Inquiry Concerning the Deployment of Advanced) GN Docket No. 22-270
Telecommunications Capability to All Americans)
in a Reasonable and Timely Fashion)
)

2024 SECTION 706 REPORT

Adopted: March 14, 2024

Released: March 18, 2024

By the Commission: Chairwoman Rosenworcel and Commissioners Starks and Gomez issuing separate statements; Commissioners Carr and Simington dissenting and issuing separate statements.

TABLE OF CONTENTS

I. INTRODUCTION 1
II. STATUTORY STANDARD FOR THE SECTION 706 INQUIRY 5
III. EVALUATION OF ADVANCED TELECOMMUNICATIONS CAPABILITY
UNIVERSAL SERVICE GOALS 16
A. Physical Deployment 17
1. Fixed Broadband Service 22
2. Mobile Broadband Service 71
3. Fixed and Mobile Broadband Data 85
B. Affordability 89
C. Adoption 105
D. Availability 115
E. Equitable Access 124
F. School and Classroom Access 130
IV. COMMISSION ACTIONS ALREADY TAKEN TO PROMOTE UNIVERSAL SERVICE
GOALS FOR ADVANCED TELECOMMUNICATIONS CAPABILITY 136
A. Measuring Broadband Deployment and Policy Development and Coordination 136
B. Removing Barriers to and Encouraging Broadband Investment 151
C. Improving Access to Spectrum 154
D. Supporting Affordability, Adoption, and Reasonable Access 180
E. Providing High Cost Universal Service Support 197
F. Facilitating Access For Schools, Libraries, and Health Care 211
V. SECTION 706 DETERMINATION 222
VI. ORDERING CLAUSE 227
APPENDIX A - POPULATION ALLOCATION METHODOLOGY
APPENDIX B - SUPPLEMENTAL FIGURES

I. INTRODUCTION

1. Access to affordable, reliable broadband is essential to full participation in modern life. Consumers rely on both their fixed and mobile connections to work, learn, access health care, and connect with each other. Today, we issue this Report pursuant to our obligation under section 706 of the Telecommunications Act of 1996, concluding our inquiry into whether “advanced telecommunications

capability is being deployed to all Americans in a reasonable and timely fashion.”¹ We find that more work remains to ensure that all Americans have access to advanced telecommunications capability.

2. Consumers’ use of broadband service continues to evolve, and so must our standards for evaluating broadband deployment and availability, the quality of our available data, and the framework that we use to make our finding under section 706. Congress, in the Infrastructure Investment and Jobs Act (Infrastructure Act), included the largest ever federal investment in high-speed broadband as well as a number of directives focused on the universal service goals of section 706—universal deployment, affordability, adoption, availability, and equitable access to broadband throughout the United States.² In this first Report issued following the enactment of the Infrastructure Act, we examine these universal service goals as part of our inquiry. With respect to physical deployment, we adopt a new, long-overdue, benchmark for defining advanced telecommunications capability for fixed broadband of 100 megabits per second (Mbps) download speed paired with 20 Mbps upload speed. We also establish a long-term fixed broadband speed goal of 1,000 Mbps, or 1 gigabit per second (Gbps), download speed paired with 500 Mbps upload speed. While we continue to evaluate service availability of mobile broadband without adopting a benchmark, for the first time we assess 5G-NR mobile coverage data for speeds of at least 35/3 Mbps. We also update our short-term goal for school and classroom broadband access to 1 Gbps per 1,000 students and staff.

3. This Report also represents an important milestone with regard to the data that we use for our inquiry. For the first time, we use data from the Commission’s Broadband Data Collection (BDC). The Commission’s Section 706 Reports have for many years relied primarily on the FCC Form 477 deployment data to evaluate consumers’ broadband options for fixed and mobile services.³ The BDC data, unavailable for past section 706 inquiries, represent significant improvements over FCC Form 477 data, through the use of more precise location-by-location fixed data, mobile data based on standardized parameters, and the Commission’s ability to improve the data through public challenge processes and conducting verifications and audits of provider-reported data.

4. Based on our evaluation of the data, we find that our universal service goals for section 706 have not been met, and we therefore conclude that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion. Most significantly, at present,

¹ 47 U.S.C. § 1302(b). For simplicity in past inquiries, the Commission has sometimes used the term “broadband” to refer to “advanced telecommunications capability.” However, “advanced telecommunications capability” is a statutory term with a definition that is more limited than the term “broadband.” See 47 U.S.C. § 1302(d)(1) (“The term ‘advanced telecommunications capability’ is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”). As this definition makes clear, while all services providing advanced telecommunications capability are “broadband,” not all broadband services provide advanced telecommunications capability. Thus, in this Report, we do not equate the term “broadband” with the statutory term “advanced telecommunications capability,” but we do necessarily consider the availability of various broadband services that contribute to advanced telecommunications capability in our analysis under the statute. See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 15-191, 2016 Broadband Progress Report, 31 FCC Rcd 699, 700 n.1 (2016) (*2016 Report*).

² Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021) (Infrastructure Act).

³ See, e.g., *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 20-269, *Fourteenth Broadband Deployment Report*, 36 FCC Rcd 836, 847-48, para. 21 (2021) (*2021 Report*); *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 17-199, 2018 Broadband Deployment Report, 33 FCC Rcd 1660, 1677, para. 43 (2018) (*2018 Report*); *2016 Report*, 31 FCC Rcd at 729, para. 73.

100/20 Mbps terrestrial fixed broadband service⁴ has not been physically deployed to approximately 7% of Americans. Rural areas and Tribal lands significantly trail more urban areas, with approximately 28% of people living in rural areas and approximately 23% of people living on Tribal lands lacking access to 100/20 Mbps fixed broadband services.⁵ While we expect the Broadband Equity, Access, and Deployment (BEAD) Program and other federal and state programs will narrow these divides in the coming years, at this time, we find that these physical deployment shortcomings are sufficient to warrant a negative finding under section 706 before we even begin to consider our other universal service goals, for which we hope to have more comprehensive data available in future inquiries.

II. STATUTORY STANDARD FOR THE SECTION 706 INQUIRY

5. Section 706 requires the Commission to annually conduct an inquiry “concerning the availability of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms)” as part of an effort to “determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion.”⁶ If that determination is negative, the Commission “shall take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.”⁷ As proposed in the *Notice*, we adopt universal deployment, affordability, adoption, availability, and equitable access to broadband throughout the United States as our goals for conducting our section 706 inquiry.⁸ We find that these universal service goals, which are not limited to the narrow question of physical deployment of service, are consistent with those adopted in the *Report on the Future of the Universal Service Fund (Future of USF Report)*, and accurate indicators of whether advanced telecommunications capability is universally available.⁹

6. As we observed in the *Notice*, for the first time since enacting section 706, Congress, in the Infrastructure Act, provided additional statutory text regarding the meaning of the provision.¹⁰ Specifically, Congress describes section 706 as setting out “the statutorily mandated goals of universal service for advanced telecommunications capability.”¹¹ Congress’s description of section 706 is consistent with the approach the Commission has historically undertaken as recently as in 2016, when it stated that “the standard for success is universal availability of advanced telecommunication capability.”¹²

⁴ When this Report presents broadband speed figures, both download and upload speeds are used. In the case of 100/20 Mbps, for example, we refer to broadband service that has a download speed of 100 Mbps and an upload speed of 20 Mbps.

⁵ See *infra* Fig. 1.

⁶ 47 U.S.C. § 1302(b).

⁷ *Id.*

⁸ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 22-270, *Notice of Inquiry*, FCC 23-89, at 3-4, paras. 5-7 (Nov. 1, 2023) (*Notice*).

⁹ *Report on the Future of the Universal Service Fund*, 37 FCC Rcd 10041, 10046, para. 11 (2022) (*Future of USF Report*). In the *Future of USF Report*, the Commission adopted the universal service goals of universal deployment, affordability, adoption, availability, and equitable access to broadband throughout the United States as the Commission’s universal service goals for broadband. The Commission defined these goals in order to “improv[e] our effectiveness in achieving the universal goals for broadband.” *Id.* (emphasis added).

¹⁰ *Notice* at 3, para. 6.

¹¹ Infrastructure Act, div. F, tit. I, § 60104(a)(2), 135 Stat. at 1205.

¹² *2016 Report*, 31 FCC Rcd at 751, para. 124 (citing *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, 2015 Broadband Progress Report and Notice of Inquiry On Immediate Action to (continued....)

We therefore believe the Infrastructure Act supports the view that the Commission must determine whether advanced telecommunications capability is available universally throughout the country, or, in the words of the statute, “to all Americans.”¹³ While we agree with TechFreedom that the Infrastructure Act did not amend section 706,¹⁴ we find that the Commission cannot ignore the Infrastructure Act’s clear description of section 706 as containing “statutorily mandated goals of universal service.”¹⁵

7. As the Commission has previously recognized, “[t]here is arguably a tension between the directive in section 706 to make broadband available to all Americans and the directive to consider whether service is being deployed in a reasonable and timely fashion.”¹⁶ We disagree, however, with certain commenters that argue that our approach ignores the “reasonable and timely” statutory language.¹⁷ We find that statutory phrase must be interpreted in the underlying factual context of the Commission’s inquiry. For this inquiry, that context includes Congress’s recent enactment of the Infrastructure Act, in which Congress made a historic federal investment in an effort to effectuate what it described as section 706’s “statutorily mandated goal of universal service for advanced telecommunications capability.”¹⁸ We

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Accelerate Deployment, 30 FCC Rcd 1375, 1455, para. 140 (2015 Report); *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, Eighth Broadband Progress Report, 27 FCC Rcd 10342, 10403, para. 138; *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 10-159, Seventh Broadband Progress Report and Order on Reconsideration, 26 FCC Rcd 8008, 8033, para. 48 (2011) (2011 Report); *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act; A National Broadband Plan for our Future*, GN Docket Nos. 09-137, 09-51, Sixth Broadband Deployment Report, 25 FCC Rcd 9556 at 9574, para. 28 (2010) (2010 Report)).

¹³ 47 U.S.C. § 1302(b) (emphasis added).

¹⁴ See, e.g., TechFreedom Comments at 6. We also disagree with TechFreedom’s contention that the *Notice* reversed the Commission finding in the *Restoring Internet Freedom Order* that section 706 is hortatory. See *id.* at 4-5. The Commission is currently considering that question in a separate rulemaking, *Safeguarding and Securing the Open Internet*, WC Docket No. 23-320, Notice of Proposed Rulemaking, FCC 23-83 (Oct. 20, 2023) (2023 Open Internet NPRM), but in any event, the *Notice* merely sought comment on how the Commission should interpret section 706 for the purposes of carrying out section 706(b)’s annual reporting requirement.

¹⁵ Infrastructure Act, div. F, tit. I, § 60104(a)(2), 135 Stat. at 1205.

¹⁶ 2015 Report, 30 FCC Rcd at 1452, para. 133 (emphasis in original). We acknowledge that this standard differs from that used by the Commission in for its Reports in 2018-21. See 2021 Report, 36 FCC Rcd at 838-39, paras. 7-9; *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 19-285, 2020 Broadband Deployment Report, 35 FCC Rcd 8986, 8989-90, paras. 7-10 (2020) (2020 Report); *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 18-238, 2019 Broadband Progress Report, 34 FCC Rcd 3857, 3859-60, paras. 8-9 (2019) (2019 Report); 2018 Report, 33 FCC Rcd at 1663-64, paras. 10-13.

¹⁷ See, e.g., ACA Connects Comments at 3-4 (“reasonable and timely”); NCTA–The Internet & Television Association (NCTA) Comments at 7 (“reasonable and timely”); CTIA Comments at 5-6 (“is being”); Free State Foundation at 21 (“is being”).

¹⁸ Infrastructure Act, div. F, tit. I, § 60102(b)(2), 135 Stat. at 1184 (authorizing \$42.45 billion of appropriations for the BEAD program). On June 26, 2023, the BEAD Program allocations for all 50 states and the U.S. Territories were announced. National Telecommunications and Information Administration, U.S. Department of Commerce, *Biden-Harris Administration Announces State Allocations for \$42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda* (June 26, 2023), <https://www.ntia.gov/pressrelease/2023/biden-harris->

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therefore find that for deployment to occur in a “reasonable and timely fashion,” it must occur in rapid fashion so as to not leave large groups of Americans without access to broadband.¹⁹

8. We also disagree with TechFreedom’s argument that because section 706 has both a “temporal component (whether broadband is being deployed in a ‘reasonable and timely basis’)” and supposedly “self-limiting component (the Commission may use only those ‘measures that promote competition’ and those ‘methods that remove barriers to infrastructure investment’),” that “[t]he current proceeding is essentially the antithesis of this statutory mandate.”²⁰ We believe that the Commission should remain vigilant of enhanced measures and methods to accelerate broadband deployment even while previously enacted measures are still unfolding (for example, BEAD Program funding). For this reason, we disagree that our approach is inconsistent with our statutory mandate under section 706.

9. For similar reasons, we disagree with commenters that suggest that we continue to take an incremental approach to measuring broadband deployment progress.²¹ We find that such commenters place undue significance on the tense of certain words in section 706—namely “is being” in the context of the section 706 deployment statement—and too little significance on the words “*all Americans*,” which were clearly Congress’s focus in enacting the Infrastructure Act. We find the universal availability of broadband to all Americans—informed by incorporating the universal service goals defined in the *Future of USF Report*—to be the relevant goal for determining what constitutes the reasonable and timely deployment of broadband in the United States.

10. In addition, we find, consistent with the *Notice*, that the Infrastructure Act’s language referring to section 706 as embodying “the statutorily mandated *goals* of universal service for advanced telecommunications capability,”²² is best read to mean that the Commission’s inquiry must include an examination of multiple universal service goals and not be limited to the narrow question of physical deployment of service. While Congress did not define the terms “deployment” and “availability” as used in section 706, Congress stated that the Commission must assess the “availability” of advanced telecommunications capability, and it then directed that specific findings be made regarding “deployment.”²³ Section 706 does not equate these two terms, and we find that in order to give meaning to both terms we have discretion in assessing “availability” to consider factors other than solely the state of “deployment.”²⁴ The legislative history of section 706 further supports the view that Congress expects us to examine more than physical availability,²⁵ and explicitly identifies affordability in describing the goals of section 706.²⁶

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[administration-announces-state-allocations-4245-billion-high-speed](#); Infrastructure Act, div. F, tit. I, § 60104(a)(2), 135 Stat. at 1205.

¹⁹ 47 U.S.C. § 1302(b) (emphasis added).

²⁰ See TechFreedom Comments at 2 (internal citations omitted in original).

²¹ See e.g., ADTRAN Comments at 1; CTIA Comments at 22; Free State Foundation Comments at 21; NCTA Comments at 5-7; NCTA Reply at 2.

²² Infrastructure Act, div. F, tit. I, § 60104(a)(2), 135 Stat. at 1205 (emphasis added).

²³ 47 U.S.C. § 1302(b).

²⁴ See, e.g., *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, Eighth Broadband Progress Report, 27 FCC Rcd 10342, 10363, para. 27 (2012) (observing that these terms are broader than physical deployment); *2011 Report*, 26 FCC Rcd at 8022-23, paras. 18-20 (providing a legal analysis that, under section 706, “broadband ‘deployment’ and ‘availability’ are broader than physical deployment.”).

²⁵ For example, the Senate Report explained that the Commission “shall include an assessment . . . of the availability, at reasonable cost, of equipment needed to deliver advanced broadband capability.” S. Rep. No. 104-23, at 50 (1995) (Senate Report); see also *2011 Report*, 26 FCC Rcd at 8023, para. 19.

11. Consistent with this Congressional direction, the Commission, in the *Future of USF Report* issued pursuant to the requirements of the Infrastructure Act, determined the broadband universal service goals of section 706 to be “universal deployment, affordability, adoption, availability, and equitable access to broadband throughout the United States.”²⁷ While broadband deployment is a necessary predicate to its availability, we agree with certain commenters that examination of only broadband deployment is insufficient and that our section 706 inquiry must be broadened to include an examination of additional goals.²⁸

12. We thus disagree with commenters that argue that if Congress had intended for provisions of the Infrastructure Act to influence our section 706 inquiry, it would have directly amended section 706.²⁹ A later-enacted statute may inform interpretation of an earlier statute, even if the latter statute does not amend the former.³⁰ We therefore use the Infrastructure Act’s language to advise our interpretation of section 706, particularly when, as here, the Infrastructure Act explicitly encourages the Commission to employ such an expansive interpretation of the Commission’s universal service goals for broadband.³¹ Further, we disagree with commenters that assert that our inquiry should be limited to an analysis of deployment data and the delineated demographic information in section 706(c).³² We also disagree with CTIA that the reporting requirements associated with our Universal Service Fund (USF) programs render our evaluation of the other universal service goals in this Report unnecessary.³³ Consistent with section 706, our evaluation in this Report is intended to provide information that goes beyond any USF program-specific reporting requirements.

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²⁶ The Senate Report states that the goal of section 706 is “to promote and encourage advanced telecommunications networks, capable of enabling users to originate and receive *affordable*, high-quality voice, data, image, graphics, and video telecommunications services.” Senate Report at 50 (1995) (emphasis added).

²⁷ *Future of USF Report*, 37 FCC Rcd at 10046, para. 12.

²⁸ See e.g., Benton Institute for Broadband & Society (Benton Institute) Comments at 5-8, Appx. A, at 2; Next Century Cities Comments; National Digital Inclusion Alliance (NDIA) Reply at 3-4; National Rural Electric Cooperative Association (NRECA) Comments at 3; Open Technology Institute at New America (OTI) Comments at 9-10; WTA – Advocates for Rural Broadband (WTA) Comments at 12-18.

²⁹ See, e.g., CTIA Comments at 21; Free State Foundation Comments at 7; NCTA Comments at 8; TechFreedom Comments at 8-9.

³⁰ See, e.g., *Food & Drug Admin. v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000); *United States v. Estate of Romani*, 523 U.S. 617, 530-31 (1998) (specifically with respect to a later statute not amending an earlier-enacted statute).

³¹ The Infrastructure Act itself explicitly instructs the Commission to “*not in any way reduce the congressional mandate to achieve the universal service goals for broadband.*” Infrastructure Act, div. F, tit. I, § 60104(c)(3)(A), 135 Stat. at 1206 (emphasis added). See also *id.* at (c)(3)(B) (stating that the Commission “may provide recommendations for Congress to *expand* the universal service goals for broadband.”) (emphasis added).

³² TechFreedom Comments at 7-9 (referencing 47 U.S.C. § 1302(c)); CTIA Reply at 3-5.

³³ CTIA Comments at 22; CTIA Reply at 2-3. We also disagree with CTIA’s arguments that the potential difficulty in collecting and evaluating data for purposes of non-physical deployment goals, as well as the Infrastructure Act’s lack of provision for such collections despite providing for other collections should limit the scope of our inquiry. CTIA Reply at 6; CTIA Comments at 23. To begin, based on information currently available to us, at present, we do not believe that such a collection would be unreasonably difficult or burdensome. Second, and more importantly, the Infrastructure Act could not have provided for the subject collections because it preceded the *Future of USF Report* in which we defined the universal service goals and therefore could not have anticipated what the collections would be. For the same reasons, we disagree with NCTA’s assertions that the complexity of evaluating affordability prevents us from including the matter in our section 706 evaluation. See Letter From Steven F. Morris, Vice President & Deputy General Counsel, NCTA, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 22-270, 2-3 (filed Mar. 1, 2024) (NCTA *Ex Parte*).

13. We observe that there is substantial support in the record for including an examination of the universal service goals of affordability, adoption, and equitable access, rather than limiting our inquiry to the narrow question of physical deployment of broadband.³⁴ With respect to affordability, many commenters agree that “[t]o truly close the connectivity gap and ensure that all Americans have access to advanced telecommunications capability, broadband services must be affordable.”³⁵ As the Benton Institute states, “[c]onsumer behavior is part of the picture: we cannot reach our universal broadband goals without widespread adoption and we cannot achieve universal broadband adoption if service is not affordable.”³⁶ We find that broadband affordability is critical to our assessment of its availability and agree with commenters, such as the Wireless Infrastructure Association (WIA), which states that “[f]or many Americans on the wrong side of the digital divide the biggest barrier is not the availability of service but the lack of resources to connect.”³⁷ We also agree with Open Technology Institute at New America’s (OTI’s) statement that “if the cost of broadband service is higher than millions of people can afford, service cannot be said to be available.”³⁸

14. The record also supports considering information relating to adoption as relevant to the section 706 inquiry.³⁹ As we discuss below, we do not require 100% adoption for our universal service goal relating to adoption to be met – Americans are free to make a voluntary choice not to subscribe to broadband.⁴⁰ We do, however, believe that certain barriers to adoption can effectively evidence a lack of availability. Commenters that oppose including the universal service goal of adoption in our section 706 analysis present what they consider to be individual barriers to adoption that they consider irrelevant to our section 706 analysis.⁴¹ While there are theoretically barriers to adoption that may not be relevant to our inquiry, this does not necessarily lead to the conclusion that all potential barriers to adoption are not germane.⁴² Further, low adoption rates in areas where broadband is technically deployed and available, for example, may evidence that other factors are in play that make it effectively unavailable for some

³⁴ See e.g., OTI Comments at 9-11; WTA Comments at 12-18; Benton Institute Comments at 5-8; Next Century Cities Comments; NDIA Reply at 4.

³⁵ Notice at 22, para. 54. See e.g., NDIA Reply at 4; NRECA Comments at 9; OTI Comments at 9-10 (“Broadband adoption and availability are directly affected by affordability and cost of service.”); Wireless Infrastructure Association (WIA) Comments at 6-7 (“Indeed, while not incorporating adoption into the section 706 mandate, Congress considered this in the [BEAD] program by requiring states to address affordability in their plans for broadband deployment; expressly using participation in the ACP program as evidence of an affordable offering.”).

³⁶ See Benton Institute Comments, Appx. A, at 1.

³⁷ See WIA Comments at 6-7; see also OTI Comments at 9.

³⁸ OTI Comments at 9.

³⁹ Benton Institute Comments at 5 (stating, in part, “we cannot reach our universal broadband goals without widespread adoption...”); Next Century Cities Comments at 8 (stating, in part, that “the gathering and sharing broadband adoption data is similarly critical for meeting the Commission’s universal service goals,” and that “[c]ollecting and disseminating broadband pricing and adoption data will help other agencies, states, and communities target those households that need broadband support the most.”).

⁴⁰ See Section III.C, *infra*.

⁴¹ See, e.g., USTelecom-The Broadband Association (USTelecom) Comments at 7 (lack of access to devices, or lack of digital skills). *But see* Next Century Cities Comments at 7 (also giving alternative reasons that people may fail to adopt broadband even when available, such as access to devices and digital skills training, but nonetheless supporting our inclusion of the universal service goal of adoption in the section 706 inquiry).

⁴² Indeed, statistically lower rates of adoption in areas of the country where broadband is currently deployed may be an indicator that broadband is unaffordable in those areas, that there is insufficient competition, or some other reason altogether. See Benton Institute Comments at 6-7.

portion of the population.⁴³

15. We also conclude that in addition to affordability and adoption, our section 706 inquiry into the availability of broadband to “all Americans” must include an analysis of the universal goal of equitable access, as identified in the *Future of USF Report*.⁴⁴ Commenters in the record support our incorporation of equitable access into the Commission’s section 706 inquiry,⁴⁵ including the Benton Institute, which appends a survey of recent research on the topic.⁴⁶ We agree with commenters, such as OTI, that suggest that our section 706 inquiry must incorporate markers of inclusive and equitable access into the analysis to accomplish our mission of ensuring that broadband is being deployed to all Americans in a reasonable and timely fashion as the statute requires.⁴⁷ This view is further reinforced by the Commission’s work to implement section 60506 of the Infrastructure Act, directing us to take action to prevent and eliminate digital discrimination of access.⁴⁸ We note that the record contained objections to including analysis of equitable access as a universal service goal in our section 706 inquiry by commenters that found it inappropriate to include because the section 706 inquiry should focus strictly on deployment,⁴⁹ and others that, among other things, stated that the Commission was already pursuing this topic in other proceedings.⁵⁰ While true that the Commission has adopted rules to promote equitable access to broadband as part of our effort to combat digital discrimination of access as mandated by section 60506 of the Infrastructure Act,⁵¹ the Commission’s other concurrent efforts to address digital discrimination of access should not act as a bar to the Commission evaluating equitable access in its section 706 inquiry. We therefore conclude that the defined universal service goal of equitable access, in addition to affordability and adoption, is an integral part of our analysis to examine whether broadband is

⁴³ See, e.g., OTI Comments at 9 (suggesting that “the Commission could compare and contrast data revealed in its National Broadband Map with other federal data, including maps of high-income and low-income areas, to see whether there are differences in adoption for higher speed services between higher income and lower income areas.”).

⁴⁴ *Future of USF Report*, 37 FCC Rcd at 10046, para. 12. In the *Future of USF Report*, the Commission explained the goal of equitable access with respect to its work to prevent and eliminate digital discrimination, referencing the pertinent provision of the Infrastructure Act. *Id.* at 10049, para. 20. We describe this goal in greater detail in Section III.E, *infra*.

⁴⁵ See e.g., OTI Comments at 8-11 (stating at 11 that, “[f]or the Commission to accomplish its mission of ensuring that broadband is being deployed to all Americans in a reasonable and timely fashion as the statute requires, it must [*inter alia*] incorporate affordability and markers of inclusive and equitable access into its analysis.”); See Benton Institute Comments at 6 (noting that universal broadband cannot be achieved without *inter alia* equitable access and observing that “[w]hether service offerings are affordable and how adoption of them unfolds along lines of income, race, ethnicity, and geography are also important metrics.”); NDIA Reply at 4.

⁴⁶ See Benton Institute Comments at Appx. A., *Are We There Yet? Affordability, Adoption, Equity and the U.S.’s Universal Broadband Goals*, John B. Horrigan, PhD.

⁴⁷ See, e.g., OTI Comments at 8-11; Benton Institute Comments at 6; NDIA Reply at 4.

⁴⁸ Infrastructure Act, div. F, tit. V, § 60506(b), 135 Stat. at 1246 (codified at 47 U.S.C. § 1754(b)) (stating that not later than two years after November 15, 2021, “the Commission shall adopt final rules to facilitate equal access to broadband internet access service, taking into account issues of technical and economic feasibility presented by that objective, including—(1) preventing digital discrimination of access based on income level, race, ethnicity, color, religion, or national origin; and (2) identifying necessary steps for the Commission to take to eliminate discrimination described in paragraph (1)”); see also *Digital Discrimination Report and Order*.

⁴⁹ See e.g., ACA Connects Comments at 7; ADTRAN Comments at 9; CTIA Comments at 2-3.

⁵⁰ See e.g., USTelecom Comments at 7 (“While equitable access to broadband is undoubtedly an important issue, Congress did not authorize examination of this issue as part of the Section 706 inquiry. Moreover, Congress has already charged the Commission with adopting rules to “facilitate equal access to broadband” under section 60506 of the Infrastructure Act.”).

⁵¹ Infrastructure Act, div. F, tit. V § 60506, 135 Stat. at 1246; see also *Digital Discrimination Report and Order*.

available pursuant to our section 706 inquiry.⁵²

III. EVALUATION OF ADVANCED TELECOMMUNICATIONS CAPABILITY UNIVERSAL SERVICE GOALS

16. Having concluded that our section 706 evaluation framework will be based on the goals of universal deployment, affordability, adoption, availability, and equitable access to broadband throughout the United States, we turn to evaluating and measuring these goals. We begin with physical deployment and we then turn to our other universal service goals.

A. Physical Deployment

17. Today, we take a fresh, multifaceted approach to determining what constitutes “advanced telecommunications capability” in order to evaluate its availability to all Americans.⁵³ Advanced telecommunications capability is defined by section 706 as “high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”⁵⁴ What constitutes “high-speed” and “high-quality” will necessarily be an evolving standard, requiring regular re-examination and re-evaluation by the Commission in its annual inquiry.⁵⁵

18. As in past reports, we continue to find that both fixed and mobile services can provide “advanced telecommunications capability” under section 706.⁵⁶ The language of the statute defines advanced telecommunications capability “without regard to any transmission media or technology.”⁵⁷ Because both services are “high-speed, switched, broadband telecommunications capability that enable users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology,”⁵⁸ they both meet the section 706 definition. As observed in prior reports, however, the salient differences between the two service types are not found in their technological differences, but instead in the distinct capabilities that they provide to consumers.⁵⁹ Based on the separate use cases for fixed and mobile broadband as well as evidence that consumers tend to subscribe to both services when they can, we find that fixed and mobile broadband services are not full substitutes.⁶⁰ Both services are

⁵² As we discuss further below, *see infra*, Section III.E, because we have just begun the process of implementing our digital discrimination of access rules, and the standards and metrics for determining compliance with those rules will be highly context specific, we limit our discussion of equitable access in this Report solely to presenting the demographic analysis required by section 706(c). 47 U.S.C. § 1302(c).

⁵³ In the *Notice*, the Commission proposed to take a fresh look at the standards that we use to determine what constitutes “advanced telecommunications capability.” *Notice*, FCC 23-89, at 4, para. 8.

⁵⁴ 47 U.S.C. § 1302(d)(1).

⁵⁵ As the Commission has stated in the past, we believe this approach best reflects Congress’s intent in adopting section 706. *2015 Report*, 30 FCC Rcd at 1390-91, paras. 20-21.

⁵⁶ *See 2021 Report*, 36 FCC Rcd at 840-41, para. 10; *see also 2016 Report*, 31 FCC Rcd at 699-719, paras. 1-44.

⁵⁷ 47 U.S.C. § 1302(d)(1); *see also 2016 Report*, 31 FCC Rcd at 718, para. 43.

⁵⁸ 47 U.S.C. § 1302(d)(1).

⁵⁹ *Id.*; *2016 Report*, 31 FCC Rcd at 718, para. 43 (“Although fixed and mobile broadband may use different network technologies, the salient differences between the two service types are found not in their technological differences, but in the distinct capabilities that they provide consumers. Nothing in the language of section 706 prevents the Commission from considering these features, indeed, they are of particular importance to our inquiry insofar as they affect consumer access to ‘high-quality’ and ‘advanced’ telecommunications services.”); *see also* NCTA Comments at 14-15.

⁶⁰ If the demand for a second good increases when the price of a first good increases, then the two goods are substitutes. If the demand for a second good increases when the price of the first good decreases, then the two goods are complements. Hal R. Varian, *Intermediate Microeconomics: A Modern Approach* 111-12 (9th ed. 2014) (W. W. Norton & Company, 2014).

necessary to ensure that all Americans have access to advanced telecommunications capability.⁶¹ Accordingly, we find that consumers have advanced telecommunications capability only to the extent that they have access to both fixed *and* mobile broadband service.⁶² Consistent with this finding, we undertake a holistic analysis, as discussed below, of whether advanced telecommunications capability is available to all Americans⁶³ and as part of that analysis, we assess where both fixed and mobile advanced telecommunications capability are deployed.⁶⁴

19. The clear majority of comments in the record support the conclusion that fixed and mobile broadband services are complementary,⁶⁵ and not full substitutes.⁶⁶ Fixed advanced telecommunications capability services are used at a given location to connect all of the devices at that location to the Internet, allowing many of those devices to be used at the same time.⁶⁷ Fixed advanced telecommunications capability services typically offer higher speeds,⁶⁸ higher usage allowances,⁶⁹ and more reliable service quality.⁷⁰ Fixed advanced telecommunications capability services best enable applications that require these faster speeds and better reliability, such as remote learning,⁷¹ telehealth,⁷² telework and in-depth research,⁷³ smart home devices,⁷⁴ larger transfers of data,⁷⁵ and larger screens.⁷⁶

⁶¹ See *2021 Report*, 36 FCC Rcd at 840-41, para. 10; *2020 Report*, 35 FCC Rcd at 8990-91, paras. 11-12; *2019 Report*, 34 FCC Rcd at 3860-61, para. 11; *2016 Report*, 31 FCC Rcd at 699-719, paras. 1-44.

⁶² *2016 Report*, 31 FCC Rcd at 706-707, para. 17 (making the same finding); see also *2021 Report*, 36 FCC Rcd at 840, para. 10 (concluding that mobile and fixed are not full substitutes). NCTA states that the Commission should conclude that advanced telecommunications capability is present if either mobile *or* fixed are available. See NCTA Comments at 14. But, as Americans need both for the full range of advanced telecommunications capability, we reject that approach.

⁶³ *2016 Report*, 31 FCC Rcd at 705, 707, 721, paras. 14, 19, 49.

⁶⁴ See *id.* at 721, para. 49. While we focus the main analysis on where 100/20 Mbps fixed service and 35/3 Mbps outdoor stationary mobile service are both available, we also analyze where they are each available and assess other mobile advanced telecommunications capability data for a complete analysis. See NCTA Comments at 14-15 (“the appropriate choice is for the Commission to continue to evaluate these services separately and together for the time being”); NRECA Comments at 7-8.

⁶⁵ See CTIA Comments at 20; INCOMPAS Comments at 8-9; Mississippi Center for Justice (Miss. Center for Justice) Reply at 2 (noting that low-income communities rely on mobile advanced telecommunications capability where fixed advanced telecommunications capability is not available); NRECA Comments at 7-8; NTCA – The Rural Broadband Association (NTCA) Comments at 9-10; OTI Comments at 6; WTA Comments at 15.

⁶⁶ As explained in the following paragraph, only Free State Foundation argues that mobile and fixed can serve as full substitutes “for a significant portion of the user base.” Free State Foundation Comments at 19.

⁶⁷ Benton Institute Comments at 2 (“As of 2021, the average U.S. household had a total of 25 connected devices, across 14 different categories (up from 11 in 2019), including laptops, tablets, and smartphones; video streaming devices and smart TVs; wireless headphones and earbuds; gaming consoles and smart home devices; and fitness trackers and connected exercise machines.”); OTI Comments at 8; WTA Comments at 15.

⁶⁸ INCOMPAS Comments at 9; OTI Comments at 7.

⁶⁹ INCOMPAS Comments at 9; NTCA Comments (noting that some mobile advanced telecommunications capability now have unlimited usage allowances but limit data usage for sufficient capacity to all subscribers, much more than for fixed advanced telecommunications capability); OTI Comments at 7-8

⁷⁰ OTI Comments at 7.

⁷¹ Miss. Center for Justice Reply at 2; NTCA Comments at 9-10, NTCA Reply at 6; OTI Comments at 9; NDIA Reply at 3-4.

⁷² OTI Comments at 9.

⁷³ NDIA Reply 3-4; OTI Comments at 9.

Mobile advanced telecommunications capability services allow consumers to access advanced telecommunications capability on the go.⁷⁷ Although speeds, service quality, and usage allowances tend to be lower for mobile than for fixed services,⁷⁸ mobile broadband services offer consumers the ability to stay connected outside of their homes, including in emergency situations⁷⁹—such as sending video or other documentation of crimes and weather events⁸⁰—ubiquitous access to health information,⁸¹ engagement in commerce,⁸² and as a stopgap when fixed advanced telecommunications capability services are not available.⁸³ Capable mobile devices can also run over mobile networks, such as health monitors,⁸⁴ Internet-connected outdoor cameras,⁸⁵ and smart wearables.⁸⁶ Having access to both mobile and fixed advanced telecommunications capability services in an area is important for communities not to fall behind.⁸⁷

20. The fact that consumers tend to subscribe to both fixed and mobile broadband if they can also highlights that the two advanced telecommunications capability services are not substitutes for one another in many use cases.⁸⁸ Based on 2022 estimates from the U.S. Census Bureau’s American Community Survey (ACS), approximately 91% of households in the United States paid for at least one type of Internet service subscription.⁸⁹ Among households that paid for an Internet subscription,

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⁷⁴ Benton Institute Comments at 2; *see also* Angela Moscaritolo, *The Best Smart Home Devices for 2024*, PC Mag (June 30, 2023), <https://www.pcmag.com/picks/the-best-smart-home-devices>; NYT, *Smart Home Devices*, <https://www.nytimes.com/wirecutter/home-garden/smart-home/> (last visited Jan. 12, 2024).

⁷⁵ WTA Comments at 15.

⁷⁶ *Id.*

⁷⁷ NDIA Reply at 3-4; NRECA Comments at 7-8; WTA Comments at 15.

⁷⁸ *See, e.g.*, INCOMPAS Comments at 9; NDIA Reply at 3-4; OTI Comments at 7, 9.

⁷⁹ Miss. Center for Justice Reply at 2 (noting that “mobile broadband service[s] assist communities experiencing disaster”).

⁸⁰ *See id.*

⁸¹ *See id.* at 3.

⁸² Miss. Center for Justice Reply at 3 (noting that mobile advanced telecommunications capability is needed where “residents cannot access necessary telehealth, food, banking, and other resources if fixed broadband is unavailable or too expensive.”); *see also* Michelle Faverio & Monica Anderson, *For Shopping, Phones are Common*, Pew Research Center (Nov. 21, 2022), <https://www.pewresearch.org/short-reads/2022/11/21/for-shopping-phones-are-common-and-influencers-have-become-a-factor-especially-for-young-adults/>.

⁸³ *See* Miss. Center for Justice Reply at 2 (noting usage of mobile hotspots for schooling), 3-4.

⁸⁴ *See, e.g.*, Philips, *Philips Mobile Cardiac Telemetry—MCOT*, <https://www.myheartmonitor.com/device/mcot-patch/> (sending ECG data via a wireless connection); *see also* 2016 Report, 31 FCC Rcd at 708, para. 20.

⁸⁵ *See, e.g.*, Alfred Camera, *Blog, Security On Your 4G Data Plan? Best Cellular Security Cameras & More*, <https://alfred.camera/blog/cellular-security-camera/>.

⁸⁶ *See* Alfredo J. Perez & Sherali Zeadally, *Recent Advances in Wearable Sensing Technologies*, *Sensors* (Oct. 14, 2021), available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8541055/pdf/sensors-21-06828.pdf>.

⁸⁷ Miss. Center for Justice Reply at 2; NRECA Comments at 7-8; NTCA Comments at 9-10.

⁸⁸ INCOMPAS Comments at 9; NCTA Comments at 14-15; NRECA Comments at 7-8; OTI Comments at 6.

⁸⁹ Estimates based on the ACS 1-Year Estimates—Public Use Microdata Sample for year 2022. U.S. Census Bureau, *American Community Survey, American Community Survey Data*, <https://www.census.gov/programs-surveys/acs/data.html> (last visited Jan. 9, 2024) (American Community Survey 2022 Microdata). The ACS asks participants who indicate that they gain access to the Internet at their “house, apartment, or mobile home” by “paying a cell phone company or Internet service provider” whether they, “or a member of [their] household have access to the Internet using” a “broadband (high speed) Internet service such as cable, fiber optic, or DSL service

(continued...)

approximately 13% relied on a mobile data plan as their only means of access and approximately 6% relied on fixed broadband as their only means of access; the remaining 81% of households subscribed to both services.⁹⁰ Pew Research similarly found that 85% of consumers own a smartphone, that 77% have home broadband, and that only 15% of U.S. adults are “smartphone-only” Internet users, indicating the majority of Americans subscribe to both fixed and mobile advanced telecommunications capability services at the same time.⁹¹ The decision of households to subscribe to both services may be driven by differences in quality and other plan characteristics.⁹² Free State Foundation is the sole commenter that argues that fixed and mobile are full substitutes for some groups, pointing to the Pew Research study and contending that for a “significant portion of the user base, mobile broadband offerings, both 4G LTE and 5G, can serve as full substitutes for a home Internet connection.”⁹³ However, we find that while some groups do not incur the additional expense of subscribing to both services—including younger consumers and lower income groups⁹⁴—the evidence clearly shows that the vast majority of Americans subscribe to both services at the same time.

21. The significant and distinct use cases for fixed and mobile advanced telecommunications capability service, as well as the evidence on how these services are used, demonstrate that consumers and businesses “expect to have both types of networks available to them because the experience of using these services can be distinctly different.”⁹⁵ The pandemic has only served to underscore that need.⁹⁶ Because consumers continue to rely on both types of technologies for different use cases,⁹⁷ we find that access to both fixed and mobile broadband services are necessary for Americans to have access to

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installed in [the] household,” “cellular data plan for a smartphone or other mobile device,” or other means, including satellite or dial-up Internet. See U.S. Census Bureau, American Community Survey, *Why We Ask Questions About Computer and Internet Use*, <https://www.census.gov/acs/www/about/why-we-ask-each-question/computer/> (last visited Jan. 9, 2024). The survey question does not ask about the speed of service to which respondents subscribe and, therefore answers do not necessarily correspond with the Commission’s past or current benchmarks for advanced telecommunications capability. We note that an additional 3.2 million households (more than 2%) connected to the Internet without a paid subscription.

⁹⁰ American Community Survey (ACS) 2022 Microdata.

⁹¹ Andrew Perrin, Pew Research Center, *Mobile Technology and Home Broadband 2021* at 3-5, 7 (Jun. 2021) (Pew Research 2021), https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2021/06/PI_2021.06.03_Mobile-Broadband_FINAL.pdf; see also CTIA Comments at 12 (“Some 15 percent of Americans only use wireless as their broadband connection, including nearly 30 percent of adults under 30”), citing *id.* CTIA observes that, for voice, most U.S. adults are wireless-only, which they argue indicates that wireless and wireline are substitutes for voice service. CTIA Comments at 12 n.49.

⁹² See *Communications Marketplace Report*, GN Docket No. 22-203, 2022 Communications Marketplace Report, 37 FCC Rcd 15514, 15628, para. 157 (2022) (*2022 Communications Marketplace Report*).

⁹³ Free State Foundation at 19; see also NCTA Comments at 14-15 (noting that 12% of people rely solely on mobile service).

⁹⁴ See Pew Research 2021 at 5 (showing lower income groups with lower subscription levels); Miss. Center for Justice Reply at 2; NCTA Comments at 14-15; NRECA Comments at 7-8; OTI Comments at 6.

⁹⁵ INCOMPAS Comments at 8-9.

⁹⁶ See ADTRAN Comments at i; Benton Institute Comments at 1-2; Computer & Communications Industry Association (CCIA) Comments at 1; CTIA Comments at 10-11; NCC Comments at 2-3; NRECA Comments at 5-6; NTCA Comments at 7-8; OTI Comments at 5-6, 9; Tech Freedom Comments at 13-14; Dr. William H. Hawkins (Hawkins) Comments at 1-2; WTA Comments at 10-11; Miss. Center for Justice Reply at 2 (“In order to continue conducting classes during a pandemic, schools provided mobile hotpots to families without fixed broadband access. Other families used their cell phones to conduct virtual learning”); NCTA Reply at 3-4.

⁹⁷ See NTCA Reply at 6.

advanced telecommunications capability.⁹⁸

1. Fixed Broadband Service

a. Speed Benchmark

22. We increase the fixed broadband speed benchmark from 25/3 Mbps to 100/20 Mbps based on the current state of broadband needs, usage, and deployment. We also adopt a long-term goal of 1,000 Mbps, or 1 gigabit per second (Gbps), download speed paired with 500 Mbps upload speed.⁹⁹ The speed benchmark for determining whether broadband service constitutes advanced telecommunications capability is indisputably an evolving standard, which the Commission has previously raised on two separate occasions.¹⁰⁰ Based on our evaluation of available data, we can no longer conclude that broadband at speeds of 25/3 Mbps—the fixed benchmark established in 2015 and relied on in the last seven reports—supports “advanced” functions.¹⁰¹ We find that having “advanced telecommunications capability” for fixed broadband service requires access to download speeds of at least 100 Mbps and upload speeds of at least 20 Mbps.¹⁰² The record overwhelmingly supports increasing the fixed speed benchmark in this manner.¹⁰³

23. We base our conclusion that 100/20 Mbps is the appropriate fixed speed benchmark on several considerations. Section 706 defines “advanced telecommunications capability” as, without regard to transmission media, “high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”¹⁰⁴ As the Commission has done in the past when determining the speed benchmark,¹⁰⁵ we interpret terms in the definition, such as “advanced,” “high-speed,” and “high-quality”—terms Congress

⁹⁸ 2016 Report, 31 FCC Rcd at 706-07, para. 17.

⁹⁹ In the Notice, we discussed service quality both in the context of the universal service goals of physical deployment and availability. Notice, FCC 23-89, at 12-13, 26, paras. 27-29, 62. In this Report, we discuss service quality exclusively with respect to our goal of availability. See Section III.D, *infra*.

¹⁰⁰ 2010 Report, 25 FCC Rcd at 9563, para. 11 (raising the benchmark to 4/1 Mbps); 2015 Report, 30 FCC Rcd at 1393, para. 26 (raising the benchmark to 25/3 Mbps). For reports in which the Commission considered increasing the benchmark, but elected not to do so, see, e.g., 2021 Report, 36 FCC Rcd at 837, 841-43, paras. 2, 12-14; 2016 Report, 31 FCC Rcd at 721-23, paras. 49-55.

¹⁰¹ In the 2015 Report, the Commission updated this speed benchmark from 4 Mbps download and 1 Mbps upload. 2015 Report, 30 FCC Rcd at 1377, para. 3. See also 2016 Report, 31 FCC Rcd at 707, para. 19.

¹⁰² We decline to adopt Environmental Health Trust’s request that we not set or increase fixed or mobile wireless speed benchmarks, speed goals, or deployment goals until the federal government has determined safe levels of radiofrequency radiation exposure from wireless technology, especially from cell towers and transmission infrastructure, for humans, wildlife, and the environment. Environmental Health Trust Comments at 1. We have a statutory reporting obligation to fulfill under section 706 and this proceeding is ill-suited to examine the issues that Environmental Health Trust raises, which are not directly relevant to the Commission’s section 706 reporting obligation.

¹⁰³ See, e.g., ACAM Coalition Comments at 1-2; ADTRAN Comments at 9-10; Benton Institute Comments at 1-5; CCIA Comments at 1-2; Letter From Dinni Jain, CEO, Google Fiber, et al., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 22-270, 1 (filed Dec. 11, 2023) (Google Fiber et al. *Ex Parte*); Next Century Cities Comments at 3-4; NRECA Comments at 3-7; NTCA Comments at 3-4; Letter From Stephanie Weiner, Chief Counsel, NTIA, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 22-270, 1-2 (filed Dec. 26, 2023) (NTIA *Ex Parte*); New York Public Service Commission (New York PSC) Comments at 1-2; OTI Comments at 5-6; USTelecom Comments at 2-3; WISPA – Broadband Without Boundaries (WISPA) Comments at 3; WTA Comments.

¹⁰⁴ 47 U.S.C. § 1302(d)(1).

¹⁰⁵ 2015 Report, 30 FCC Rcd at 1394, para. 27. Factors are evaluated systematically in the 2015 Report. 2015 Report, 30 FCC Rcd at 1392-1403, paras. 24-44.

left to the Commission to define—by examining trends in providers’ speed offerings (that is, what they are deploying to American households), what speeds are required to use various common applications, and data regarding what speeds consumers are adopting when they have the option to purchase various speeds. We believe that looking at these factors, along with other relevant programs and recent Congressional action, remains helpful to evaluate the benchmark.¹⁰⁶

24. We find substantial commenter support for the 100/20 Mbps standard generally,¹⁰⁷ and for taking into consideration Congress’s judgment that areas receiving broadband speeds of less than 100/20 Mbps are not adequately served with high enough speeds.¹⁰⁸ Commenters also point to programs and initiatives at the federal, state, local, and Tribal levels that require speeds at or above 100/20 Mbps.¹⁰⁹ Notably, the National Telecommunications and Information Administration (NTIA) points to Congress’s action in passing the Infrastructure Act and the creation of the BEAD program as supporting a 100/20 Mbps benchmark.¹¹⁰ We agree that considering Congress’s action and examining other federal and state programs are important for this inquiry.

25. We agree with commenters such as the New York State Public Service Commission that noted the current benchmark of 25/3 Mbps is not aligned with typical consumer needs.¹¹¹ As discussed below, the speeds marketed by many Internet service providers (ISPs) generally substantially exceed 25/3 Mbps. Deployment of infrastructure of at least 100/20 Mbps is widespread, consumers are adopting higher speeds where they are available, and the requirements for high-quality applications necessitating higher speeds have dramatically increased since we last updated the benchmark and appear to trend towards requiring more bandwidth over time. These factors all support raising the benchmark to 100/20 Mbps.

¹⁰⁶ We also note commenter support for the notion of looking that these factors. For example, CTIA notes that examining actual broadband use and needs of consumers is valuable information to assist in determining a benchmark speed, and by considering these factors transparently it allows the public to better understand the Commission’s decision making. CTIA Reply at 10.

¹⁰⁷ See ACA Connects Comments at 3-4, 8; ACAM Coalition Comments at 1-2, 4; ADTRAN Comments at 8-9; Benton Institute Comments at 1-5; CTIA Comments at 15-16; Fiber Broadband Association (FBA) Comments at 3 (supports a benchmark faster than 100/20 Mbps); NDIA Reply at 2 (noting that higher, symmetrical speeds are required); Nebraska Public Service Commission (Nebraska PSC) Reply at 2 (supports a benchmark faster than 100/20 Mbps); New York PSC, 1-2; Next Century Cities Comments at 3-4; NRECA Comments at 4; NTCA Comments at 3, 6-7, 13; OTI Comments at 3, 5-6; Dave Taht & Members and supporters of the Bufferbloat.net community (Taht/Bufferbloat) Comments 9-12 (referencing improved upload speeds to 20 Mbps as necessary and a potential download to upload ratio of at least 5:1); USTelecom Comments at 2-3, 8; Vantage Point Solutions (Vantage Point) Comments at 5; WIA Reply at 3; WISPA Reply at 2; WTA Comments at 2.

¹⁰⁸ CTIA Comments at 4, 14-15; WTA Comments at 2; ADTRAN Comments at 9; ACAM Coalition Comments at 3; OTI Comments at 5; WISPA Comments at 2-3.

¹⁰⁹ See, e.g., ACAM Coalition Comments at 2-3 (BEAD and Enhanced A-CAM); New York PSC, 2 (BEAD); Next Century Cities Comments at 3-4 (BEAD); NRECA Comments at 5-6 (noting the importance of Congress and federal agencies establishing high-speed standards, including the Treasury Department’s Coronavirus State and Local Fiscal Recovery Funds establishing a standard of reliable 100/100 Mbps and the Department of Agriculture’s ReConnect program requiring applicants deploy symmetrical 100 Mbps); NTCA Comments at 1, 3 (BEAD); WTA Comments at ii, 2, 7, 17 (BEAD). NRECA highlights the Department of the Treasury’s rationale in adopting a standard of 100/100 Mbps: a lower threshold would lower near-term cost to build but would, in the near-term, become obsolete and no longer meet household needs. NRECA Comments at 5-6 (citing Department of the Treasury, Coronavirus State and Local Fiscal Recovery Funds, Final Rule, 87 Fed. Reg. 4338, 4443 (Jan. 22, 2022), available at <https://www.govinfo.gov/content/pkg/FR-2022-01-27/pdf/2022-00292.pdf>).

¹¹⁰ NTIA *Ex Parte* at 1-2.

¹¹¹ See, e.g., New York PSC Comments at 1 (“[U]se of the current 25/3 Mbps benchmark – a standard that has not been updated since 2015 – is simply out of step with a typical customer’s broadband needs.”).

26. *Federal and State Programs Require Broadband Speeds at or Above 100/20 Mbps.* Congress’s passage of the Infrastructure Act, which provides funding for broadband only when such service providers offer broadband service at speeds of at least 100/20 Mbps provides strong support for the Commission to update its fixed speed benchmark.¹¹² Specifically, the Infrastructure Act directed NTIA to establish the BEAD Program, through which NTIA allocated \$42.45 billion to states for grants “to bridge the digital divide.”¹¹³ Broadband networks funded by the BEAD Program must provide download speeds of at least 100 Mbps and upload speeds of at least 20 Mbps.¹¹⁴ Any areas that do not meet these specific speed requirements are considered underserved.¹¹⁵ We find that Congress’s determination that areas receiving broadband speeds of less than 100/20 Mbps are not adequately served necessitates that the Commission raise its fixed speed benchmark accordingly. A diverse group of commenters agree.¹¹⁶

27. In raising our fixed speed benchmark, we also account for the standards established by states and other federal agencies. Numerous programs set broadband speed targets of at least 100 Mbps.¹¹⁷ Many states have developed broadband deployment programs requiring funded projects to deliver speeds at or exceeding this threshold benchmark.¹¹⁸ At least one state has set 100 Mbps as a goal

¹¹² Infrastructure Act, div. F, tit. I, § 60102(b)(1), (f)(1), (h)(4)(A)(i)(I), 135 Stat. at 1199; *Notice*, FCC 23-89, at 5, para. 11.

¹¹³ Infrastructure Act, div. F, tit. I, § 60102(b)(1), 135 Stat. at 1184. On June 26, 2023, the BEAD Program allocations for all 50 states and the U.S. Territories were announced. National Telecommunications and Information Administration, U.S. Department of Commerce, *Biden-Harris Administration Announces State Allocations for \$42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda* (June 26, 2023), <https://www.ntia.gov/press-release/2023/biden-harris-administration-announces-state-allocations-4245-billion-high-speed>. NTIA points to the Congressional action through the Infrastructure Act and the BEAD program generally as support for raising the benchmark to 100/20 Mbps. *NTIA Ex Parte* at 1-2.

¹¹⁴ *Notice*, FCC 23-89, at 7-8, para. 15.

¹¹⁵ Infrastructure Act, div. F, tit. I, § 60102(a)(1)(C)(ii), 135 Stat. at 1182-83. *See also* National Telecommunications and Information Administration, Broadband Equity, Access, and Deployment Program Notice of Funding Opportunity 16 (2022), <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf> (NTIA BEAD NOFO) (specifying that locations are “underserved” if they do not meet download/upload speeds of at least 100/20 Mbps and have a latency above 100 milliseconds, and that locations are “unserved” if they do not meet download/upload speeds of at least 25/3 Mbps).

¹¹⁶ ACAM Coalition Comments at 2-3; ADTRAN Comments at 9; CTIA Comments at 4, 14-15; Google Fiber et al. *Ex Parte* at 1; New York PSC Comments at 2; Next Century Cities Comments at 3-4; NTCA Comments at 1, 3; NTIA *Ex Parte* at 1-2; OTI Comments at 5; WISPA Comments at 2-3; WTA Comments at 2.

¹¹⁷ *Notice*, FCC 23-89, at 7-8, para. 15.

¹¹⁸ *See, e.g.*, Iowa Department of Management, Empower Rural Iowa Broadband Grant Program Notice of Funding Availability at 4 (2023), https://ocio.iowa.gov/sites/default/files/exhibit_a_-_notice_of_funding_availability_-_nofa_008.pdf (Iowa Program) (offering definitions only for 100/100 Mbps and 100/20 Mbps broadband in grant funding notice); Maine Connectivity Authority, Broadband Service Triennial Strategic Plan 2022-24 (2022), https://www.maine.gov/connectme/sites/maine.gov.connectme/files/inline-files/Plan_Triennial_2022.pdf (declaring 25 Mbps/3 Mbps insufficient and “designat[ing] broadband service as 100/100 mbps”); Maryland Department of Housing and Community Development, Connect Maryland: FY23 Network Infrastructure Grant Program: Request for Applications at 6 (2022), <https://dhcd.maryland.gov/Broadband/Documents/FY23NIGP/ApplicationPackage.pdf> (Maryland Program) (defining “broadband service” as providing “the minimum data rate of one hundred (100) megabits per second downstream and twenty (20) megabit per second upstream”); Michigan Department of Labor and Economic Opportunity, Realizing Opportunities with Broadband Infrastructure Networks (ROBIN) Grant Program Guidance at 2 (2023), https://www.michigan.gov/leo/-/media/Project/Websites/leo/Documents/MIHI/ROBIN/ROBIN_Program_Guidance.pdf (Michigan Program) (defining “broadband service” as supporting “a symmetrical rate of at least 100 megabits per second downstream and upstream”); Miss. Code Ann. § 77-19-3(b) (defining “broadband service” as mass-market retail service at speeds of at least 100/20 Mbps); North Dakota Legislative Branch, 2018-2019 Annual Report, Appendix at 8

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for all state programs and at least one other has made 100 Mbps an official standard for multiple state programs.¹¹⁹ With regard to federal programs other than BEAD, the U.S. Department of Agriculture's Rural Utilities Service (RUS) provides broadband loans with a set of minimum speed requirements, which vary based on the duration of the project. For 5-10 year award terms, which are comparable to the term of support for many high-cost Universal Service Fund broadband programs,¹²⁰ the RUS requires awardees to provide service at a minimum speed of 100/12 Mbps.¹²¹ In addition, the U.S. Department of Treasury, as part of its implementation of the American Rescue Plan Act's (ARPA's) provisions relating to broadband infrastructure funding,¹²² has adopted a requirement that projects be designed to deliver service that reliably meets or exceeds 100/100 Mbps.¹²³ We also note the 2021 recommendation of the Commission's Task Force for Reviewing the Connectivity and Technology Needs of Agriculture in the United States (Precision Agriculture Connectivity Task Force) to increase the Commission's benchmark speed to 100/20 Mbps, on the grounds that 25/3 Mbps is insufficient to enable innovation and utilization of precision agriculture and for transferring large amounts of data from field or farm to the cloud for storage.¹²⁴

28. The Commission's high-cost USF policies also strongly support raising the benchmark to at least 100/20 Mbps. As explained in the *Notice*, the Commission has, in recent years, awarded high-cost universal service support almost exclusively to projects with broadband service at speeds of 100/20 Mbps or faster.¹²⁵ All recipients of the Bringing Together Puerto Rico Stage 2 fixed support program, for example, are required to provide service at a minimum speed of 100/20 Mbps, with service obligations at

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_____ (2019), https://www.legis.nd.gov/files/committees/66-2019/21_5124_03000appendixj.pdf (noting that their objective is statewide Gigabit connectivity and that "more than 75% of North Dakotans already have access to Gigabit broadband delivered in more than 325 communities"); Washington State Department of Commerce, *CERB Rural Broadband Program*, <https://www.commerce.wa.gov/building-infrastructure/community-economic-revitalization-board/rural-broadband/> (last visited Jan. 18, 2024) (Washington Program) (setting speed benchmarks for broadband provided via cable modem, powerlines, and microwave at 100/20 Mbps, 100/100 Mbps, and 100/20 Mbps, respectively).

¹¹⁹ California Broadband Council, *Broadband Action Plan 2020* at 20 (2020), <https://broadbandcouncil.ca.gov/wp-content/uploads/sites/68/2020/12/BB4All-Action-Plan-Final-Draft-v26.pdf> (setting 100 Mbps as a goal); Neb. Rev. Stat. §§ 86-135(1), 86-324(1), 86-5, 109, 86-1302(11).

¹²⁰ See, e.g., 47 CFR § 54.309(a)(2)(ii) (10-year term for CAF Phase II Auction Support); 47 CFR § 54.802(b) (10-year term for RDOF); 47 CFR § 54.1504(a) (10-year term for Stage 2 fixed support under the Bringing Together Puerto Rico and Connect USVI Funds).

¹²¹ See Department of Agriculture, *Rural Broadband Loans, Loan/Grant Combinations, and Loan Guarantees*, 85 Fed. Reg. 14393, 14396 (Mar. 12, 2020) (noting that the RUS's broadband lending speed benchmark is currently set at 25/3 Mbps); 7 CFR § 1738.55(a)(2) (requiring projects with an award term of 5-10 years to provide service at a benchmark of "four times the broadband lending speed," which equates to a benchmark of 100 Mbps in download speed for such loans).

¹²² American Rescue Plan Act of 2021 (ARPA), Pub. L. No. 117-2, tit. IX, § 9901(c)(1)(D), 135 Stat. 4, 226 (codified at 42 U.S.C. § 802(c)(1)(D)) (ARPA).

¹²³ See 31 CFR § 35.6(e)(2)(i)(B)(2) (if providing an upload speed of 100 Mbps "is not practicable, because of the excessive cost of the project or geography or topography of the area to be served by the project," recipients are permitted to deploy service at an upload speed of 20 Mbps, so long as the upload speed is scalable to 100 Mbps).

¹²⁴ Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States, *Report of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States* at 6 (2021), <https://www.fcc.gov/sites/default/files/precision-ag-report-11102021.pdf>; see also Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States, *Report adopted as of November 6, 2023*, 5 (2023), <https://www.fcc.gov/sites/default/files/2024-Report-PrecisionAg-Task-Force-without-Signatures.pdf>.

¹²⁵ *Notice*, FCC 23-89, at 6, para. 14.

some locations as high as 1 Gbps/500 Mbps.¹²⁶ In addition, 1 Gbps/500 Mbps service will have to be deployed to all locations subject to Connect USVI Stage 2 fixed support in the U.S. Virgin Islands.¹²⁷ Authorized Rural Digital Opportunity Fund (RDOF) auction winners are required to provide 1 Gbps/500 Mbps service to over 97% of locations being funded.¹²⁸ We believe the wide variety of federal and state programs setting standards at or above 100/20 Mbps is compelling evidence that the benchmark should be raised at least to this level. Multiple commenters state that support raising the benchmark speed also reference federal, state, and local programs in support of their arguments.¹²⁹ As Vantage Point puts it, by adopting 100/20 Mbps, we are “formally recognizing the de facto minimum standard broadband speed in the country.”¹³⁰

29. *Consumer Use Trends Support a Faster Benchmark.* The COVID-19 pandemic forced families to adapt to working, learning, receiving healthcare, and interacting with the outside world simultaneously using multiple devices on the same household connection. These changes resulted in increased demands for faster broadband services and more bandwidth. We find that many of the adaptations Americans made during the COVID-19 pandemic are here to stay—for example, more widespread teleworking and continued expansion of telehealth.¹³¹ Indeed, almost 68% of households have

¹²⁶ See *Wireline Competition Bureau Authorizes Stage 2 Support for Puerto Rico Telephone Company and Liberty Communications of Puerto Rico*, WC Docket Nos. 18-143 and 10-90, Public Notice, 36 FCC Rcd 9914 (WCB 2021) (*Bringing Together Puerto Rico Winning Applicant Announcement*) (identifying Puerto Rico Telephone Co., Inc. (PRTC) and Liberty Communications of Puerto Rico (Liberty) as the winning applicants); PRTC Uniendo a Puerto Rico Fund Stage 2 Fixed Support Application Form, WC Docket Nos. 18-143 and 10-90, Initial Overview at 1 (filed June 22, 2021) (*PRTC Network Description*); Liberty Uniendo a Puerto Rico Fund Stage 2 Fixed Support Application Form, WC Docket Nos. 18-143 and 10-90, Initial Overview at 4 (filed June 22, 2021) (*Liberty Network Description*). We refer to the *Bringing Together Puerto Rico Winning Applicant Announcement*, *PRTC Network Description*, and *Liberty Network Description* together as the *Bringing Together Puerto Rico Broadband Speed Requirements*.

¹²⁷ See *Connect USVI Fund Stage 2 Support Authorized for Broadband VI*, WC Docket Nos. 18-143 and 10-90, Public Notice, 36 FCC Rcd 9405 (WCB 2021) (*USVI Fund Winning Applicant Announcement*) (identifying Broadband VI as the winning applicant); Broadband VI Uniendo a Puerto Rico Fund Connect USVI Fund Stage 2 Fixed Support Application Form, WC Dockets Nos. 18-143 and WC 10-90, Initial Overview at 1 (filed June 11, 2021) (together with the *USVI Fund Winning Applicant Announcement*, the *USVI Fund Broadband Speed Requirements*).

¹²⁸ See FCC, *Auction 904: Rural Digital Opportunity Fund*, <https://www.fcc.gov/auction/904> (Results webpage tab, Authorized Auction 904 Long-Form Applicant Spreadsheet (updated 1/13/2023), Performance Tier and Latency Tab).

¹²⁹ See, e.g., ACA Connects Comments at 4; ACAM Coalition Comments at 2-3; Next Century Cities Comments at 3-4; New York PSC Comments at 2; NRECA Comments at 5-6; NTCA Comments at 1, 3; WTA Comments at ii, 2, 7, 17. WTA does, however, observe that Enhanced A-CAM does not require complete build-out of 100/20 Mbps until 2028, which may serve as a “complication” with this benchmark. WTA Comments at 7. For the reasons discussed in Section II, *supra*, we believe that the standard for our section 706 evaluation should be universal deployment and that we should strive for full deployment at our speed benchmark threshold, regardless of specific programmatic obligations.

¹³⁰ Vantage Point Comments at 5. We note Benton Institute’s request that we “adopt a methodology to continually set the threshold to mirror market realities.” Benton Institute Comments at 3. We believe the forgoing analysis does so and intend to continue to use such an analysis in future inquiries.

¹³¹ See, e.g., U.S. Bureau of Labor Statistics, U.S. Business Response Summary (Mar. 22, 2023), https://www.bls.gov/news.release/brs1_nr0.htm (*Bureau of Labor Statistics 3Q2022 Survey*); MGMA Staff Members, *Telehealth utilization and patient demand in 2023: Best guesses and best practices* (Nov. 3, 2022), <https://www.mgma.com/data/data-stories/telehealth-utilization-and-patient-demand-in-2023> (*MGMA Telehealth Survey*). The vintage of the data referenced throughout our discussion of current uses, including usage statistics, many cited in the Notice, directly contradicts TechFreedom’s claims that the above-referenced data solely relate to the era of COVID lockdowns. See TechFreedom Comments at 13-14.

subscribed to services meeting a 100 Mbps download speed threshold where it is available. The number of American households subscribing to services meeting a 100 Mbps download speed threshold increased from approximately 57.4 million in December 2018 to approximately 89.4 million in December 2022.¹³² As of December 2022, the mean download speed for all residential fixed broadband subscriptions was 439 Mbps while the median residential download speed was 300 Mbps, and nearly 79% of all residential subscriptions had a download speed of at least 100 Mbps.¹³³

30. Consumers are not only subscribing to faster speeds, but also using more bandwidth.¹³⁴ According to OpenVault, average U.S. household bandwidth consumption increased by approximately 86% between the end of 2019 and the end of 2023.¹³⁵ OpenVault has previously observed that such a dramatic increase in bandwidth consumption “confirms the linkage between significant growth trajectories in both bandwidth consumption and faster speed adoption.”¹³⁶ In addition, many ISPs upgraded the speed provided to customers to accommodate their consumers’ need for higher bandwidth services.¹³⁷

31. Telehealth has become an established method of providing and receiving healthcare,¹³⁸ with one poll of medical group leaders finding that 72% of medical groups expect patient demand for telehealth to stay the same or increase in 2023.¹³⁹ With regard to telework, a Bureau of Labor Statistics

¹³² Based upon staff evaluation of FCC Form 477 subscription data as of December 31, 2018 and December 31, 2022.

¹³³ Based upon staff evaluation of FCC Form 477 subscription data as of December 31, 2022.

¹³⁴ NTIA points out that current and anticipated user needs demonstrate the necessity of a 100/20 Mbps benchmark. NTIA *Ex Parte* at 1-2.

¹³⁵ See OpenVault, Broadband Insights Report (OVBI) 4Q23, at 4 (2024), <https://openvault.com/resources/ovbi/> (*OpenVault 4Q2023 Report*).

¹³⁶ OpenVault, Broadband Insights Report (OVBI) 4Q21, at 2 (2021), <https://openvault.com/resources/ovbi/>.

¹³⁷ See, e.g., Charter Launches Spectrum One, Offering Customers Unrivaled Connectivity and Value (Oct. 31, 2022), <https://corporate.charter.com/newsroom/charter-launches-spectrum-one> (announcing the launch of Spectrum One for new and existing subscribers across all its markets with starting speeds of 300 Mbps); Comcast Boosting Speeds for more than 20 Million Xfinity Internet Customers Across the Country (Oct. 17, 2022), <https://corporate.comcast.com/press/releases/faster-internet-speeds-xfinity-customers-2022> (announcing upgraded speeds at all plan levels for customers in Xfinity’s Northeast, Central, and West divisions); Eli Blumenthal, AT&T is boosting the speeds of its Fiber home internet plans for new and existing users, CNET (Apr. 28, 2021), <https://www.cnet.com/home/internet/at-t-is-boosting-the-speeds-of-its-fiber-home-internet-plans-for-new-and-existing-users/>; Spectrum Continues to Double Internet Starting Speed to 200 Mbps (Mar. 3, 2021), <https://corporate.charter.com/newsroom/spectrum-doubles-spectrum-internet-starting-speed-to-200-mbps-in-17-additional-markets>.

¹³⁸ As the Commission has previously recognized, “[t]he success of these solutions, however, relies on broadband connectivity—i.e., access to broadband to enable virtual care and other digital solutions—and broadband service providers offering Internet service at adequate speed and at an affordable price.” *Broadband Connectivity and Maternal Health—Implementation of the Data Mapping to Save Moms’ Lives Act*, GN Docket No. 23-309, Notice of Inquiry, FCC 23-85, at para. 7 (Oct. 20, 2023); see also Connect2HealthFCC Task Force, *Broadband Connectivity: A “Super” Determinant of Health*, Staff Research Monograph, FCC, GN Docket No. 16-46, at 12 (May 23, 2019), <https://www.fcc.gov/ecfs/document/109020780702729/1> (concluding that broadband itself may have a direct influence on health and health outcomes and is a social determinant of health, if not a “super” determinant of health). While there are many factors associated with a consumer’s ability to use telehealth/telemedicine (e.g., rurality, age, literacy, income, etc.), studies have found that adequate broadband speeds are a “critical factor.” See, e.g., Amy M.J. O’Shea et al., *Association of Adequacy of Broadband Internet Service With Access to Primary Care in the Veterans Health Administration Before and During the COVID-19 Pandemic*, JAMA Network (Oct. 17, 2022), <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2797400> (“Our findings support the expanded availability of broadband, in particular, upload and download speeds of 100 [Mbps] or more to better meet the growing need for high-speed connectivity for daily life.”).

survey conducted in the third quarter of 2022 of private-sector establishments found that over 27% have some or all of their employees teleworking some or all of the time (with over 11% of respondents reporting that all of their employees teleworked all of the time), and over 95% expecting current levels of telework to stay the same over the next six months.¹⁴⁰ Similar to telehealth and telework, increased levels of online learning are likely here to stay beyond the COVID-19 pandemic. For example, virtual school enrollment across ten states increased 176% in the 2021-22 school year, as compared to the 2019-20 school year.¹⁴¹ And even students who are attending school in person still rely on home connectivity for schoolwork outside of school hours.¹⁴²

32. Current consumer broadband usage involves an increasing number of streams serving applications ranging from telehealth, remote learning, streaming video and gaming, and video conferencing/telework.¹⁴³ With approximately 21% of U.S. households having four or more people and an increasing number of homebuyers seeking multigenerational housing, this can lead to substantial household demand.¹⁴⁴ In addition, the number of connected devices per U.S. household continues to grow, from an average of 13 in 2021 to an average of 17 in 2023.¹⁴⁵ Several commenters agree that

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¹³⁹ MGMA Stat, *Telehealth Utilization and Patient Demand in 2023: Best Guesses and Best Practices* (Nov. 3, 2022), <https://www.mgma.com/data/data-stories/telehealth-utilization-and-patient-demand-in-2023> see also Tanya Albert Henry, *Millions of Medicare Patients Kept Telehealth Habit Post-Vaccines*, AMA (Feb. 6, 2023), <https://www.ama-assn.org/practice-management/digital/millions-medicare-patients-kept-telehealth-habit-post-vaccines> (finding that about 4 million Medicare patients received medical care through telehealth in each of the first two quarters in 2022); Jiang Li, *Telemedicine And Telehealth In 2023 And Beyond: From Leveling Out To Leveling Up* (Dec 27, 2022), <https://www.forbes.com/sites/forbestechcouncil/2022/12/27/telemedicine-and-telehealth-in-2023-and-beyond-from-leveling-out-to-leveling-up/?sh=5a02ef654843>; FAIR Health, *Monthly Telehealth Regional Tracker*, <https://www.fairhealth.org/fh-trackers/telehealth>.

¹⁴⁰ See Bureau of Labor Statistics *3Q2022 Survey*. See also Jennifer Liu, *More Americans are Now Working Fully Remote than 3 Months Ago, Despite Fewer WFH Job Openings*, CNBC (Feb. 13, 2023) <https://www.cnbc.com/2023/02/13/remote-work-ticked-up-in-january-and-could-signal-the-future-of-wfh.html> (noting that 46% of respondents in a January 2023 LinkedIn survey are working a hybrid or remote schedule); Kim Parker, *About a Third of U.S. Workers Who Can Work From Home Now Do So All the Time*, Pew Research Center (Mar. 30, 2023) <https://www.pewresearch.org/fact-tank/2023/03/30/about-a-third-of-us-workers-who-can-work-from-home-do-so-all-the-time/> (finding that 59% of hybrid workers work from home three or more days in a typical week).

¹⁴¹ Asher Lehrer-Small, *Virtual School Enrollment Kept Climbing Even As COVID Receded, New Data Reveal*, The 74 (Nov. 14, 2022), <https://www.the74million.org/article/virtual-school-enrollment-kept-climbing-even-as-covid-receded-new-data-reveal/> (updated Nov. 16, 2022).

¹⁴² CoSN, *CoSN Releases Findings of 2022 Home Connectivity Study* (July 14, 2022), <https://www.cosn.org/cosn-news/cosn-releases-findings-of-2022-home-connectivity-study/>.

¹⁴³ See, e.g., U.S. Bureau of Labor Statistics, U.S. Business Response Summary (Mar. 22, 2023), <https://www.bls.gov/news.release/brs1.nr0.htm> (*Bureau of Labor Statistics 3Q2022 Survey*); MGMA Staff Members, *Telehealth utilization and patient demand in 2023: Best guesses and best practices* (Nov. 3, 2022), <https://www.mgma.com/data/data-stories/telehealth-utilization-and-patient-demand-in-2023> (*MGMA Telehealth Survey*).

¹⁴⁴ In 2023, 16,038,000 households had four members, 7,192,000 had five, 2,721,000 had six, and 1,656,000 had seven or more, or 27,601,000 in total. 27,601,000 out of all 131,434,000 households in 2023 is approximately 21%. U.S. Bureau of the Census, *Historical Households Tables*, <https://www.census.gov/data/tables/time-series/demo/families/households.html> (Nov. 2023) (Table HH-4 Households by Size: 1960 to Present). See also Oyin Adedoyin, *More Parents are Moving In With Adult Children – at Younger Ages*, Wall Street Journal, (Feb. 22, 2023) <https://www.wsj.com/articles/more-parents-are-moving-in-with-adult-children-at-younger-ages-a931f3d7> (reporting that 14% of all home buyers in 2022 set up multigenerational homes, up from 11% in 2021).

¹⁴⁵ Parks Associates, *At CES 2024, Parks Associates announces new research showing average number of connected devices per US internet household reached 17 in 2023* (Jan. 11, 2024),

(continued...)

households increasingly have multiple people demanding bandwidth at the same time and note the need for higher speeds.¹⁴⁶ ADTRAN, in particular, asserts that in multiple-person households, multiple people make use of applications simultaneously, which requires extra capacity.¹⁴⁷ We do not anticipate usage decreasing, and accordingly must recognize that households of all sizes must have sufficient bandwidth to satisfy their needs.

33. Several commenters noted that fast speeds are vital to enable remote applications to work properly. For example, Next Century Cities observes that higher speeds are necessary for accessing healthcare, education, and legal services.¹⁴⁸ ADTRAN explains that consumers use of broadband service has changed significantly since 2015 and that “the pandemic catalyzed the development of numerous applications to support remote education, telehealth and work-from-home applications and services” which require “robust and reliable broadband service.”¹⁴⁹ Graphics-intensive telework, alone, can require 45 Mbps or more.¹⁵⁰

34. Changes in the use of remote applications are not the only drivers of higher speed requirements. A combination of remote applications, streaming, and other needs play a role in household broadband use. Services such as video and music streaming applications necessitate access to higher speeds. For example, as 4K video increases in popularity, individual households may have an increasing number of 25 Mbps video streams serving applications such as video conferencing, telehealth, and remote learning, in addition to streaming of video entertainment and gaming.¹⁵¹

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<https://www.parksassociates.com/blogs/press-releases/at-ces-2024-parks-associates-announces-new-research-showing-average-number-of-connected-devices-per-us-internet-household-reached-17-in-2023> with LinkedIn, *US internet household have an average of 16 connected devices* (May 4, 2022), <https://www.linkedin.com/pulse/us-internet-household-have-average-16-connected-devices-> (Parks Associates post).

¹⁴⁶ See ADTRAN Comments at 9; INCOMPAS Comments at 3; OTI Comments at 9. Additionally, several commenters note that changes brought about by the COVID-19 pandemic are here to stay that would affect household use. See ADTRAN Comments at 9; Next Century Cities Comments at 2, 11; NTCA Comments at 4. Commenters also remarked about how these applications demand greater usage than what is possible under the current benchmark. See ADTRAN Comments at 8; CCIA Comments at 1; NTCA Comments at 5-6; Next Century Cities Comments at 5; WTA Comments at 6.

¹⁴⁷ ADTRAN Comments at 9.

¹⁴⁸ Next Century Cities Comments at 5. See also FBA Comments at 14; Letter from Angie Kronenberg, Chief Advocate & General Counsel, INCOMPAS, 2 (filed Aug. 1, 2022) (INCOMPAS August 2022 *Ex Parte*).

¹⁴⁹ ADTRAN Comments at 8; see also Letter from Angie Kronenberg, Chief Advocate & General Counsel, INCOMPAS, 2 (filed Aug. 1, 2022) (INCOMPAS August 2022 *Ex Parte*) (“INCOMPAS’ members are experiencing more customers demanding higher-speed services”).

¹⁵⁰ Fast Feed Editorial Staff, *How To Get the Fastest Internet in a Home Office* (Mar. 12, 2020), <https://blog.frontier.com/2020/03/how-much-speed-do-you-need-to-do-your-job-from-home/>; see also Chantel Buchi, *The Best Internet Setup for Working from Home* (Sept. 26, 2023), <https://www.reviews.org/internet-service/work-from-home-internet-guide/> (recommending 100 Mbps for “most” teleworkers”).

¹⁵¹ Some recommend 25 Mbps download speed for streaming 4K video. See, e.g., Anthony Spadafora, *What internet speed do I need? Here’s how many Mbps is enough*, <https://www.tomsguide.com/us/internet-speed-what-you-need.news-24289.html> (last visited Feb. 14, 2024); *Find movies with 4K, HDR, Dolby Vision, or Dolby Atmos in the Apple TV app*, <https://support.apple.com/en-us/HT207949>, (last visited Feb. 14, 2024). While we acknowledge that not all services require 25 Mbps for 4K video, those citing lower-than-25 Mbps is required appear to either require bandwidth close to 25 Mbps or else would in many cases still consume a significant amount of household bandwidth. See, Google, *System requirements & supported devices for YouTube*, <https://support.google.com/youtube/answer/78358?hl=en> (last visited Feb. 14, 2024) (*YouTube Video Bandwidth Recommendations*) (recommends 20 Mbps); Netflix, *Internet connection speed recommendations*, <https://help.netflix.com/en/node/306> (last visited Feb. 14, 2024) (recommends 15 Mbps).

35. We believe that broad consumer demand for 100/20 Mbps service alone sufficiently demonstrates that the practical reality of consumer broadband usage often requires speeds of at least 100/20 Mbps, regardless of whether we have delineated a specific “use case,” as Free State Foundation claims is required.¹⁵² Several commenters support the significance of these adoption statistics.¹⁵³ In addition, as we explained in the *Notice*, in examining household use cases, a simple summation of required speeds for individual activities may provide a misleading picture of actual broadband needs for at least three reasons. First, occasional downloads of very large files can be bandwidth-intensive.¹⁵⁴ Second, it is important to account for larger households—as discussed above, as of 2023, approximately 21% of all U.S. households had four or more people.¹⁵⁵ Households of all sizes must have sufficient bandwidth to satisfy their needs. In addition, as discussed above, the number of connected devices per household continues to grow. Taking these factors into account suggests that fixed broadband download/upload needs could easily exceed 100/20 Mbps.¹⁵⁶

36. *ISP Deployment and Marketing Trends Demonstrate that a Higher Benchmark is Long Overdue.* BDC data show widespread deployment of speeds faster than 25 Mbps, and that deployment of at least 100/20 Mbps is the norm. Deployment trends suggest an overwhelming majority of providers are already offering speeds of at least 100 Mbps download: approximately 93% Americans had access to a terrestrial fixed broadband service with download speeds of at least 100 Mbps in December 2022.¹⁵⁷ In fact, FCC Form 477 deployment data indicate that since 2018, more than 90% of the population has had access to terrestrial fixed broadband service with download speeds of at least 100 Mbps.¹⁵⁸

¹⁵² Free State Foundation Comments at 6-7, 17-18.

¹⁵³ See, e.g., FBA Comments at 5-13; NTCA Comments at 3-4, 10.

¹⁵⁴ Morgan Park, *The era of 100GB games is upon us, and the average PC gamer is underprepared*, PC Gamer (May 12, 2023), <https://www.pcgamer.com/the-era-of-100gb-games-is-upon-us-and-the-average-pc-gamer-is-underprepared/>; RJ Pierce, *Why Are Games Getting MASSIVE Install Sizes? Here's a Tech Explainer*, Tech Times (Sept. 2, 2021), <https://www.techtimes.com/articles/264914/20210902/why-games-getting-massive-install-sizes-heres-tech-explainer.htm>. At 25 Mbps, it would take roughly nine hours to download 100 GB.

¹⁵⁵ U.S. Bureau of the Census, *Historical Households Tables*, <https://www.census.gov/data/tables/time-series/demo/families/households.html> (Nov. 2022) (Table HH-4 Households by Size: 1960 to Present).

¹⁵⁶ We disagree with TechFreedom’s claims that the Commission is basing the decision to raise the benchmark solely on “entertainment uses of the Internet” and that we have not outlined information concerning other uses that justified raising the benchmark. TechFreedom Comments at 14-15. As an initial matter, section 706 places no limitation on the content of information that Americans may need to be able to receive or transmit by broadband. Indeed, “high-quality video,” a potential use of advanced telecommunications capability described in section 706, would seem to best describe entertainment uses. 47 U.S.C. § 1302(d)(1). Further, we have identified numerous current non-entertainment uses of broadband, such as telework, telehealth, and telelearning, each of which require significant bandwidth. We also decline to adopt the suggestion of Andrew Coy and the Digital Harbor Foundation that we create a speed index representing the needs of users by applying an approach similar to that of the consumer price index, measuring the online activities of American households by examining download, upload, and latency factors. Andrew Coy and the Digital Harbor Foundation Comments at 1-2. The Commission currently lacks sufficient data to conduct this type of comprehensive examination and calculation.

¹⁵⁷ Fig. 1, *infra*.

¹⁵⁸ This considers access to download speeds of at least 100 Mbps only, and does not consider upload speeds. In contrast, other analyses in this Report consider access to a combined download/upload speed threshold, and therefore are not directly comparable. These percentages include all 50 States and the District of Columbia. Our data regarding 100/20 Mbps, while demonstrating a generally high level of current deployment nevertheless reveal notable digital divides between urban and rural and non-Tribal and Tribal areas. See Section III.A.1.c. TechFreedom, a critic of raising the benchmark to 100/20 Mbps, presents an argument that “raising the benchmark for what constitutes broadband will instantly widen the digital divide.” TechFreedom Comments at 11. TechFreedom is partially correct – raising the benchmark will correctly reveal a greater digital divide than previously reported. This is not a reason for ignoring the reality that 25/3 Mbps is no longer a relevant standard.

37. Most of the nation's largest providers focus their marketing efforts on fixed broadband speeds of at least 100 Mbps download, making slower offerings increasingly irrelevant.¹⁵⁹ For example, Charter markets 300 Mbps as their slowest Internet speed.¹⁶⁰ Verizon appears to market three tiers of fixed service with discounts for low-income customers, with the slowest tier being 300 Mbps.¹⁶¹ Google Fiber appears to market only 1, 2, 5, and 8 Gbps service.¹⁶²

38. *Increasing the Upload Speed Benchmark.* In addition to raising our download speed benchmark from 25 Mbps to 100 Mbps, we raise the current 3 Mbps upload speed benchmark for fixed services to 20 Mbps. Our rationale for our increase in the download benchmark applies equally, if not more, to increasing the upload speed.¹⁶³ Broadband funding programs have evolved not only to expect faster download speeds, but faster upload speeds, as well. For example, the BEAD Program requires an upload speed of 20 Mbps and winning bidders in the Bringing Puerto Rico Together and USVI Fund programs are committed to providing minimum upload speeds of 20 and 500 Mbps, respectively.¹⁶⁴

39. Consumer subscription patterns and usage requirements indicate that upload speed is increasingly important—the subscription patterns and consumer uses discussed above that support increasing the download speed benchmark, also support an increase in the upload speed benchmark. Further, OpenVault's data shows that average household monthly upload broadband usage increased over 30% faster than download usage increased between December 2019 and December 2023.¹⁶⁵ Several commenters also noted trends indicating increased upload traffic and speed requirements, especially as they relate to remote applications like telework, telehealth, and online cloud storage.¹⁶⁶

¹⁵⁹ Commenters agree that marketing trends are relevant in setting the benchmark. *See, e.g.*, INCOMPAS Comments at 4-5; NTCA Reply at 3-4.

¹⁶⁰ Charter Communications, *Spectrum Internet Speeds*, <https://www.spectrum.com/internet> (last visited Feb. 14, 2024) (Charter Communications provides broadband service under the brand Spectrum).

¹⁶¹ Verizon, *Check if you're eligible to save on Verizon Home Internet*, <https://www.verizon.com/discounts/verizon-forward/> (last visited Feb. 14, 2024) (see "Which Verizon Home Internet plans qualify for Verizon Forward?").

¹⁶² *Choose the speed you need — from the 1 Gig we're known for to the fastest we've ever offered*, <https://fiber.google.com/internet/> (last visited Feb. 14, 2024).

¹⁶³ No commenter specifically argued against increasing the benchmark upload speed to at least 20 Mbps (as discussed below, some requested a faster benchmark). Rather, commenters that argued against increasing the upload speed did so by simultaneously critique both our proposed download and upload speeds using the same general arguments. *See* Free State Foundation Comments at 13-19, TechFreedom Comments at 9-16.

¹⁶⁴ Infrastructure Act, div. F, tit. I, § 60102(h)(4)(A)(i)(I), 135 Stat. at 1199; *Bringing Together Puerto Rico Broadband Speed Requirements*; *USVI Fund Broadband Speed Requirements*. Multiple state programs also require upload speeds of at least 20 Mbps. *See, e.g.*, Iowa Program (20 Mbps), Maryland Program (20 Mbps), Michigan Program (100 Mbps), Washington Program (20 Mbps).

¹⁶⁵ *See OpenVault 4Q2023 Report* at 13; *OpenVault 4Q2020 Report* at 7. OpenVault reports average monthly download bandwidth consumption was 600.9 GB in December 2022, compared to 325 GB (344 GB - 19 GB) in December 2019 (a roughly 85% increase), while it reports average monthly upload bandwidth consumption was 40.05 GB in December 2023, compared to 19 GB in December 2019 (a roughly 111% increase). *Id.*

¹⁶⁶ OTI notes the upward trend in upload speeds in their comment by noting most of the 30-40% upward trend increase in traffic is related to uploads. OTI Comments at 6 (citing Doug Dawson, *How Will Cable Companies Cope with COVID-19?* (June 26, 2020), <https://potsandpansbyccg.com/2020/06/26/how-will-cable-companies-cope-with-covid-19/>). OTI also observes that higher upload speed is especially important with people continuing to use significant upload bandwidth for remote tasks like virtual meetings, doctors' appointments, and classes. OTI Comments at 6. Commenter Dave Taht at Bufferbloat.net notes that there is more need for upload bandwidth for services like cloud-based storage, cross-device synching, telehealth, security cameras that store video, and emerging technology like virtual reality – all of which demand higher upload speeds than past requirements. Taht/Bufferbloat Comments at 11-12.

40. As noted above, multiple household members simultaneously using today's applications may often need more bandwidth, necessitating speeds higher than the current 3 Mbps benchmark. A 2021 study conducted by the Consortium for School Networking (CoSN) concluded that 3 Mbps is an inadequate upload speed to support even a single student in a household, let alone multiple students in the same household.¹⁶⁷ Instead, in 2021 CoSN recommended a per-student benchmark upload speed of 12 Mbps.¹⁶⁸ Zoom suggests 1.2 Mbps upload for a single 720p one-on-one video call and far more for higher quality video (3.8 Mbps) and video calls with groups of people (2.6-3.8 Mbps).¹⁶⁹ 4K live streams can require between 8 Mbps and 50 Mbps upload depending on, among other things, frame rate.¹⁷⁰ Thus it appears that in many instances, simultaneous use of telework, telehealth, remote learning, or personal video calling would significantly outstrip a 3 Mbps upload capability.

41. In the *Notice*, we sought comment on adopting a symmetrical benchmark which, in this case, would entail a 100 Mbps upload standard. Multiple commenters support adopting such a symmetrical benchmark, which also serves as support for increasing the upload benchmark as a general matter.¹⁷¹ We decline, however, to adopt a symmetrical benchmark at this time.

42. Our decision not to adopt a symmetrical 100/100 Mbps benchmark is heavily influenced by the standards that Congress established for determining inadequately served locations for the BEAD Program. While it is true that the RUS ReConnect Program (which received additional funding in the Infrastructure Act) requires deployment of symmetrical 100 Mbps service and the ARPA program has a preference for deployment of 100 Mbps symmetrical service,¹⁷² the size of these programs (\$3.3 billion

¹⁶⁷ Consortium for School Networking, Student Home Connectivity Study, at 8 (2021), https://emma-assets.s3.amazonaws.com/paqab/37cf06d0de533f59eb780f4ec065d766/Home_Connectivity_Study_Report_5.3.21_FINAL.pdf.

¹⁶⁸ Consortium for School Networking, Student Home Connectivity Study, at 8 (2021), https://emma-assets.s3.amazonaws.com/paqab/37cf06d0de533f59eb780f4ec065d766/Home_Connectivity_Study_Report_5.3.21_FINAL.pdf. Commenter ADTRAN points out that remote applications require more than 3 Mbps upload, especially if a household includes two or more people, and particularly as consumers originate additional traffic from applications like social media, gaming, and Internet-of-things-related applications. ADTRAN Comments at 11.

¹⁶⁹ Zoom, *Zoom system requirements: Windows, macOS, Linux*, <https://support.zoom.us/hc/en-us/articles/201362023-System-requirements-for-Windows-macOS-and-Linux> (last visited Feb. 14, 2024). Microsoft recommends 1.5 Mbps upload for a single 720p one-on-one video call, 4.0 Mbps for higher quality video, and 2.5-4.0 for video calls with groups of people using Teams, which Microsoft states “is always conservative on bandwidth utilization.” Microsoft, *Prepare your organization's network for Microsoft Teams*, <https://learn.microsoft.com/en-us/microsoftteams/prepare-network> (last visited Feb. 14, 2024).

¹⁷⁰ Boxcast, *Upload Speeds for 4K Live Streaming* (Dec. 20, 2022), <https://www.boxcast.com/blog/internet-speeds-for-4k-live-streaming>; YouTube Help, Choose Live Encoder Settings, Bitrates, and Resolutions, <https://support.google.com/youtube/answer/2853702?hl=en> (*YouTube Recommended Live Encoder Settings*) (last visited Feb. 14, 2024). Bandwidth recommendations for live streaming tend to be higher than for merely watching video of the same quality to ensure consistent throughput at the necessary speed. See Restream, *What is a good upload speed for streaming?* (July 1, 2022), <https://restream.io/blog/what-is-a-good-upload-speed-for-streaming/>. Compare, e.g., *YouTube Recommended Live Encoder Settings with YouTube Video Bandwidth Recommendations*.

¹⁷¹ See, e.g., FBA Comments at 3-4, 14-16 (supporting a 1 Gbps/1Gbps benchmark); Nebraska PSC Reply at 1-2 (referencing previously supporting 100/100 Mbps for high-cost USF programs); Next Century Cities Comments at 3-4 (arguing for a symmetrical benchmark to situate the Commission “as a broadband leader”); NRECA Comments at 4-6, 10 (arguing for a symmetrical benchmark based on NRECA member offerings and certain federal programs). We sought comment on this matter in the *Notice*. *Notice*, FCC 23-89 at 11, para. 22.

¹⁷² ReConnect's rules require that recipients provide speeds in the latest Federal Register Notice, which currently requires 100 Mbps symmetrical speeds. 7 CFR § 1740.3(a)(2); Rural Utilities Service, Rural eConnectivity Program, 87 Fed. Reg. 47690, 47692 (Aug. 4, 2022). The Department of the Treasury's rules state that if providing an upload speed of 100 Mbps “is not practicable, because of the excessive cost of the project or geography or

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for the ReConnect Program, \$10 billion for the ARPA program) pale in comparison to the BEAD Program.¹⁷³ Commenters only identify a “handful” of state programs and no Commission high-cost programs with such a requirement.¹⁷⁴ Further, proponents of a symmetrical requirement do not point to consumer usage statistics, deployment statistics, or specific significant widespread ISP offerings justifying a symmetrical standard.¹⁷⁵ Despite our decision to not adopt a symmetrical upload benchmark at this time, we fully support deployment of broadband at faster upload speeds, as evidenced by our high-cost USF programs, as well as the long-term goal that we discuss below. We intend to monitor upload speeds in future inquiries for purposes of considering additional updates to the fixed speed benchmark.

43. *Proposed Higher Speed Benchmarks.* Some commenters request that the Commission raise the benchmark higher than 100/20 Mbps because changes to speeds offered to consumers and consumers’ reliance on those speeds justifies a larger leap in the benchmark.¹⁷⁶ INCOMPAS, for example, argues that fundamental changes to speeds offered in the marketplace as well as consumer reliance on these speeds would support raising the benchmark to 1 Gbps and that adopting a 100/20 Mbps baseline is not truly “advanced” because many providers have already surpassed this benchmark.¹⁷⁷ The Fiber Broadband Association also seeks a higher benchmark, although it does not identify a specific speed alternative.¹⁷⁸ Other commenters argue that raising the benchmark above 100/20 Mbps is not necessary at this time, with some pointing to the incongruity of establishing a benchmark in excess of the BEAD standard of 100/20 Mbps.¹⁷⁹ We find that quadrupling our download benchmark while increasing the upload benchmark by nearly seven times its predecessor represents a significant change worthy of evaluation before considering additional increases, particularly in light of the current early stage of the BEAD Program.

44. *Transparency in Establishing and Evaluating Our Benchmark.* In the *Notice*, we sought comment, consistent with a recent recommendation by the Government Accountability Office (GAO), on means by which the Commission could make its current and future consideration of a benchmark for fixed broadband service as consistent and transparent as possible.¹⁸⁰ No commenters explicitly responded to this request, though commenters suggested a variety of means by which we could establish and evaluate our benchmark.¹⁸¹ In this Report, we have endeavored to fully explain our reasoning behind the

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topography of the area to be served by the project,” recipients are permitted to deploy service at an upload speed of 20 Mbps, so long as the upload speed is scalable to 100 Mbps. 31 CFR § 35.6(e)(2)(i)(B), *ARPA Final Rule*.

¹⁷³ Congress appropriated funding to the ReConnect program in various appropriations laws, including the Infrastructure Act, the Coronavirus Aid, Relief, and Economic Security Act, and annual appropriations. Lisa S. Benson, Cong. Rsch. Serv., R47017, *USDA’s ReConnect Program: Expanding Rural Broadband (2020)*, <https://crsreports.congress.gov/product/pdf/R/R47017>. ARPA amounts are provided directly from the American Rescue Plan Act. 42 U.S.C. § 804(a).

¹⁷⁴ Next Century Cities Comments at 4

¹⁷⁵ We note that OpenVault’s most recent monthly usage data support the conclusion that upload and download demand is far from symmetrical. *See OpenVault 4Q2023 Report* at 13.

¹⁷⁶ *See* INCOMPAS Comments at 2-6; FBA Comments at 2-14.

¹⁷⁷ INCOMPAS Comments at 2-6.

¹⁷⁸ FBA Comments at 2-14.

¹⁷⁹ ADTRAN Comments at 9-12; CTIA Comments at 15-16; WISPA Reply at 2.

¹⁸⁰ *Notice*, FCC 23-89, at 11, para. 24, *referencing* U.S. Government Accountability Office, *FCC Should Improve Its Communication of Advanced Telecommunications Capability Assessments* at 19 (2023), <https://www.gao.gov/assets/gao-23-105655.pdf>.

¹⁸¹ *See, e.g.*, ADTRAN Comments at 10-13; Andrew Coy and the Digital Harbor Foundation Comments at 1-2; Adaptive Spectrum and Signal Alignment, Incorporated (ASSIA) Comments at 5-6; FBA Comments at 5-14; Free State Foundation Comments at 13-19; WTA Comments at 5-7.

decision to raise the fixed speed benchmark and, with the exception of subscription statistics, which are based on business-sensitive confidential information, have used publicly available data to inform our analysis of fixed broadband speeds. We have similarly strived to use the same methods in setting our download and upload speeds, often relying on similar evidence. We intend to continue to examine evidence and the record similarly in the future, including the use of new and improved data sources to the extent such data becomes available.

45. *Technological Neutrality.* While some commenters suggest addressing different technologies with separate standards,¹⁸² other commenters noted preferences to applying the benchmark in a technology-neutral manner.¹⁸³ Our directive from Congress is to evaluate “whether advanced communications capability is being deployed to all Americans in a reasonable and timely fashion,” and section 706 is clear that advanced telecommunication capability can be delivered using “any technology.”¹⁸⁴ This directive requires us to adopt a standard for what consumers actually need for these purposes; it does not allow us to favor a technology or to advance the needs of a particular portion of the telecommunications industry. Additionally, the statutory standard does not invite differing standards for separate technologies. Either a technology is capable of providing advanced telecommunications capability or it is not. And while our examination takes into consideration what speeds are deployed and adopted, our benchmark is appropriately set without regard to specific technologies.¹⁸⁵

46. *Small Business Needs.* In the *Notice*, we asked what needs of small businesses should be taken into consideration in our determination of a new speed benchmark, noting that we agree with the GAO that conducting an analysis of small business broadband needs, assuming adequate data are available, could assist the Commission in determining whether the current fixed broadband benchmark is adequate.¹⁸⁶ ADTRAN, the only party to comment on this issue, argues that small businesses tend to purchase service that differs from consumer service, such as through performance guarantees (and at a higher price), and that, therefore, including small business would distort our analysis under section 706.¹⁸⁷ We are unable to evaluate ADTRAN’s assertions because the Commission does not currently have sufficiently comprehensive data on this issue, and we therefore lack a basis for meaningfully considering small business needs in this inquiry.¹⁸⁸ We hope to reexamine this issue in the future in the event small business specific data becomes available. Further, the Commission will continue to consider additional

¹⁸² See NTCA Comments at 6-9; NTCA Reply at 5 (NTCA Reply); WTA Comments at 9-10. NTCA and WTA comments seem to suggest that technology neutrality somehow disadvantages technologies with a higher bandwidth capacity. We disagree. Technology neutrality, which is mandated by the text of section 706, requires us to look at the needs of consumers to use advanced communications capabilities and make a benchmark determination accordingly.

¹⁸³ See CCIA Comments at 2; Free State Foundation Comments at 17; USTelecom Comments at 2-3.

¹⁸⁴ 47 U.S.C. § 1302(b) and (d)(1).

¹⁸⁵ As explained below, our analysis of fixed broadband is based on all fixed terrestrial services (fixed broadband services excluding fixed satellite service). Further, we conduct our analysis of fixed broadband both with and without fixed wireless.

¹⁸⁶ *Notice*, FCC 23-89, at 11, para. 25. We also noted GAO’s view is that the current minimum benchmark speed of 25/3 Mbps is likely not fast enough to meet the needs of small businesses, particularly with regard to upload speeds. *Notice*, FCC 23-89, at 11, para. 25. See also U.S. Government Accountability Office, *FCC Should Analyze Small Business Needs* at 26 (2021), <https://www.gao.gov/assets/gao-21-494.pdf>.

¹⁸⁷ ADTRAN Comments at 12.

¹⁸⁸ Although the BDC collects information on where mass market broadband service is made available to business, residential, and mixed-use locations, it does not collect service availability information on which business or mixed-use locations house small businesses. See FCC, *How to Format Fixed Broadband Availability Location Lists*, <https://help.bdc.fcc.gov/hc/en-us/articles/5291539645339-How-to-Format-Fixed-Broadband-Availability-Location-Lists> (last visited Feb. 14, 2024).

ways in which it can obtain more information about small business broadband needs.

47. *Long-Term Speed Goal.* In addition to raising our fixed speed benchmark speed from 25/3 Mbps to 100/20 Mbps, we find that adopting the *Notice*'s proposed aspirational goal of deployment of 1 Gbps/500 Mbps is necessary to give stakeholders a collective goal towards which to strive—a better, faster, more robust system of communication for American consumers.¹⁸⁹ We find that setting such a long-term goal is necessary so as to avoid sending an inappropriate signal to other policymakers as it appears, for instance, that some states may still be using 25/3 Mbps as their standard for some programs.¹⁹⁰ This long-term speed goal is aspirational—we do not intend to use it as the measure to determine our finding under section 706. Rather, we intend for it to serve as a guidepost for evaluating our efforts to encourage deployment. In addition, we believe that establishing an aspirational goal will have the effect of encouraging deployment of services more relevant for the future.¹⁹¹

48. As explained in the *Notice*, we based our new long-term goal on a speed adopted for many locations in recently established Commission USF programs.¹⁹² Many commenters note that setting a long-term goal is appropriate and support setting that goal at 1 Gbps/500 Mbps or higher.¹⁹³ The Nebraska PSC, for example, accurately explains that “[a]doption of a strategic forward-looking vision will help the Commission set the desired pace for broadband deployment and provide a clear gauge as to whether that deployment is on track,” while encouraging the Commission to consider an even higher goal.

49. While some commenters suggest that a long-term 1 Gbps symmetrical goal is necessary,¹⁹⁴ we decline to adopt a symmetrical long-term benchmark at this time. This decision is guided in part by the Commission's 2022 BDC data, which shows that 1 Gbps/500 Mbps service, the long-term fixed physical deployment goal, is not yet deployed to 50% of households¹⁹⁵—deployment of 1 Gbps symmetrical is even further off.¹⁹⁶ We will continue to re-evaluate our long term goal in future reports.¹⁹⁷

¹⁸⁹ *Notice*, FCC 23-89, at 11-12, para. 26.

¹⁹⁰ See, e.g., Georgia Code § 50-40-1(2), 50-40-2(a) (defining “broadband services” for purposes of “state-wide efforts to promote and facilitate deployment of broadband services” as services with a capability to transmit at a minimum speed of 25/3 Mbps); Business Oregon, *Rural Broadband Capacity Program*, https://www.oregon.gov/biz/aboutus/boards/bac/Pages/Rural_Broadband_Capacity_Pilot_Program.aspx (last visited Jan. 18, 2024) (permitting grants to fund construction of broadband infrastructure capable of delivering service at speed of at least 25/3 Mbps). At least two states tie the speed requirements for at least one of their programs to the Commission's benchmark (to change as the Commission's benchmark changes). See Minn. Stat. § 116J.394(b) (citing, in turn, Minn Stat. § 116J.39(b)); State of West Virginia, West Virginia Broadband Infrastructure Loan Insurance Guide at 5 (2018), <https://broadband.wv.gov/assets/files/pdfs/inner-pages/loan-insurance/WVEDA-Loan-Insurance-Guide-and-Form-2018.11.9.pdf>.

¹⁹¹ The Commission has previously stated that it reads section 706(a) as Congress's direction to accelerate deployment when deployment might not be proceeding in a reasonable and timely fashion. *2015 Report* at 1405, para. 49.

¹⁹² *Notice*, FCC 23-89, at 11-12, para. 26. See, e.g., *Bringing Together Puerto Rico Broadband Speed Requirements; USVI Fund Broadband Speed Requirements; Rural Digital Opportunity Fund Report and Order*, 35 FCC Red at 702-703, para. 3.

¹⁹³ Benton Institute Comments at 2-3; CCIA Comments at 1-2; Letter from Angie Kronenberg, Chief Advocate & General Counsel, INCOMPAS, 3 (filed Aug. 1, 2022) (INCOMPAS August 2022 *Ex Parte*); Nebraska PSC Reply at 2; Vantage Point Comments at 6; Vantage Point Reply at 6 (suggesting that our proposed long-term goal will soon be met, but based on average download speeds rather than 100% deployment); WTA Comments at 3, 10, 20-21.

¹⁹⁴ See ADTRAN Comments at 13-15; FBA Comments at 4; NDIA Reply at 3; NRECA Comments at 4, 6, 10; NTCA Comments at 6.

¹⁹⁵ For purposes of this Report, each unit within a populated BDC Broadband Serviceable Location (BSL) is considered to be a household.

50. We disagree with commenters that argue that the Commission should simply continue to review benchmarks yearly and increase the standard speed benchmark when necessary as opposed to setting a long-term goal,¹⁹⁸ as well as commenters that object to setting a long-term goal because it is difficult to predict what will be needed.¹⁹⁹ While we understand the reservations of certain commenters citing the difficulty in predicting future needs, we believe it still important to set an aspirational goal against which the industry can strive to achieve.²⁰⁰ This goal can be changed in the future should the progress of deployment slow down or speed up. As NTCA puts it: “[s]etting a long-term goal does not preclude providers capable of providing only 100/20 Mbps today from securing funds while also considering the capability to meet the demand they will experience from consumers in the future.”²⁰¹

51. In addition to proposing a long-term goal, we also sought comment in the *Notice* on how we should define “long-term,” noting that the length of support for many high-cost programs is 10 years.²⁰² We recognize that our long-term goal is new, and many ISPs are several years away from successfully completing the 1 Gbps/500 Mbps (or greater) 10-year buildout commitments that they have made. As a result, we conclude that it is best to initially observe market and investment trends before attaching a timeframe to our long-term goal. We intend to continually monitor this issue.

b. Data Sources and Methodology

52. As proposed in the *Notice*, we use the FCC BDC data in our analysis of December 2022 broadband service availability²⁰³ and rely on FCC Form 477 data for December 2018 through December

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¹⁹⁶ For example, the Commission’s estimates of 940/500 Mbps deployment from 2022 demonstrate that between approximately 55% and 61% of households do not have access to this speed, while between approximately 38% and 41% of households have at least one provider offering access to this speed tier. *Communications Marketplace Report et al.*, GN Docket No. 22-203, 37 FCC Rcd 15514, 15563, para. 61, Fig. II.A.33 (2022), (2022 *Communications Marketplace Report*), <https://docs.fcc.gov/public/attachments/FCC-22-103A1.pdf>. For purposes of this report, we use a download speed of 940 Mbps because that is the maximum advertised download speed reported in BDC data by two of the largest providers of fixed terrestrial broadband service. This is also what we reported in the 2022 *Communications Marketplace Report*. 2022 *Communications Marketplace Report*, 37 FCC Rcd at 15533, para. 31 & n.64.

¹⁹⁷ To the extent that we find this 1 Gbps/500 Mbps goal to be inadequate in light of future developments, as some parties have suggested it may be, we will raise it. See FBA Comments at 4; Letter from Angie Kronenberg, Chief Advocate & General Counsel, INCOMPAS, 3 (filed Aug. 1, 2022) (INCOMPAS August 2022 *Ex Parte*); NDIA Reply at 3; Nebraska PSC Reply at 2; NRECA Comments at 4, 6, 10; NTCA Comments at 6; Vantage Point Comments at 6; Vantage Point Reply at 6-7; WTA Comments at 3, 10, 20-21.

¹⁹⁸ See ACAM Coalition Comments at 1, 3-4; Rally Networks Comments at 2.

¹⁹⁹ See ACA Connects Comments at 7-8; CTIA Comments at 19; Free State Foundation Comments at 14; USTelecom Comments at 2, 4; WISPA Comments at 4-5; WISPA Reply at 3-4.

²⁰⁰ We note that our aspirational goal is merely that – aspirational. It should not distort otherwise rational ISP investment plans, as feared by ACA Connects. Further, because our long-term goal is not being used for our section 706 finding, it need not necessarily be based on a detailed projection of consumer needs; rather, we believe our already-established long-term goals in our high-cost USF programs serve as an adequate basis for our long-term goal.

²⁰¹ NTCA Reply at 4.

²⁰² *Notice*, FCC 23-89, at 12, para. 26.

²⁰³ BDC data as of December 31, 2022 includes all filings certified as of December 1, 2023. In the FCC’s BDC, data on fixed “availability” of broadband services show locations where a provider currently has a customer or where the provider is capable of performing a “standard broadband installation” (that is, can complete a routine installation within 10 business days after a service request is initiated with no charges or delays attributable to the extension of the provider’s network). These data provide a more highly granular assessment of “service availability” than the Commission’s former Form 477 fixed broadband deployment collection. The BDC does not currently factor in all

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2021 for historical trend purposes.²⁰⁴ The Commission has for many years relied primarily on the FCC Form 477 deployment data to evaluate the progress of advanced telecommunications capability,²⁰⁵ as that dataset was the most reliable and comprehensive data to assess broadband service availability.²⁰⁶ However, in the years since the Commission's last Section 706 Report, the Commission has established a new data collection for broadband service availability—the BDC.²⁰⁷ The Commission now requires facilities-based providers of fixed broadband Internet access services to file location-level service availability data directly with the Commission.²⁰⁸

53. In March 2020, Congress passed the Broadband Deployment Accuracy and Technological Availability Act (Broadband DATA Act),²⁰⁹ which required the Commission, among other things, to collect biannual data relating to the service availability and quality of service of fixed and mobile broadband Internet access service for the Commission to create broadband coverage maps.²¹⁰ Pursuant to the Broadband DATA Act, we now collect more precise, location level data on mass market broadband service availability and fixed broadband services through the BDC. In addition to improved precision, the BDC data is subject to input from consumers, state, local, and Tribal governmental entities, and other stakeholders who may submit challenges and crowdsource data to further refine the accuracy of service availability data, as well as the Commission's verification and audit efforts which collectively help to validate the accuracy of the provider-reported service availability data. Accordingly, in December 2022, the Commission sunset the collection of broadband deployment data through the FCC Form 477.²¹¹

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of the universal service goals that the Commission is analyzing as a part of this inquiry into “availability,” and as a result in this report we use the term “service availability” to refer to “availability” as reported in the Broadband Data Collection. See Broadband Data Collection, Data Specifications for Biannual Submission of Subscription, Availability, and Supporting Data (Feb. 7, 2023), <https://us-fcc.app.box.com/v/bdc-availability-spec> and 47 CFR § 1.7004.

²⁰⁴ Historically, service providers used the FCC Form 477 to report on where they had deployed broadband service. See FCC Form 477, Instructions for Filings as of December 31, 2019-June 30, 2022, <https://usfcc.app.box.com/v/Form477InstThruJune2022>. The first BDC filing window for the collection of data as of June 30, 2022, opened on June 30, 2022 and closed September 1, 2022. See *Inaugural Filing Window for Broadband Data Collection Has Opened; Filers May Begin Submitting Broadband Availability Data*, WC Docket Nos. 11-10, 19-195, Public Notice, 37 FCC Rcd 7656 (WCB/WTB/OEA 2022). The second BDC filing window for the collection of data as of December 31, 2022, opened on January 3, 2023 and closed March 1, 2023. See *Broadband Data Task Force Announces Opening of the Second Broadband Data Collection Filing Window*, WC Dockets Nos. 11-10, 19-195, Public Notice, 37 FCC Rcd 15161 (WCB/WTB/OEA 2022).

²⁰⁵ See, e.g., *2021 Report*, 36 FCC Rcd at 847-48, para. 21; *2018 Report*, 33 FCC Rcd at 1677, para. 43; *2016 Report*, 31 FCC Rcd at 729, para. 73.

²⁰⁶ *2021 Report*, 36 FCC Rcd at 847-48, para. 21.

²⁰⁷ *Establishing the Digital Opportunity Data Collection*, WC Dockets Nos. 19-195 and 11-10, Third Report and Order, 36 FCC Rcd 1126 (2021) (*BDC Third Report and Order*); *Establishing the Digital Opportunity Data Collection*, WC Dockets Nos. 19-195 and 11-10, Second Report and Order and Third Further Notice of Proposed Rulemaking, 35 FCC Rcd 7460, 7461, para. 1 (2020) (*BDC Second Order and Third Further Notice*); *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Dockets Nos. 19-195 and 11-10, Report and Order and Second Further Notice of Proposed Rulemaking, 34 FCC Rcd 7505, 7549, para. 112 (2019); *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10, Further Notice of Proposed Rulemaking, 32 FCC Rcd 6329, 6331-32, para. 8 (2017).

²⁰⁸ See 47 CFR § 1.7004.

²⁰⁹ Broadband Deployment Accuracy and Technological Availability Act, Pub. L. No. 116-130, 134 Stat. 228 (2020) (codified at 47 U.S.C. §§ 641-646) (Broadband DATA Act).

²¹⁰ 47 U.S.C. § 642(a)(1)(A).

²¹¹ *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Order, 37 FCC Rcd 14957 (2022) (*2022 Form 477 Order*) (sunsetting the collection of
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The third BDC filing window, for data as of June 30, 2023, closed on September 15, 2023.

54. The BDC offers several advantages over the FCC Form 477 data for the purposes of our section 706 analysis. The BDC is the most granular, detailed collection of broadband service availability data the FCC has ever gathered or released, depicting location-level information on fixed broadband Internet access service availability across the United States as well as standardized coverage maps for 3G, 4G LTE, and 5G-NR mobile wireless services. As part of the BDC, the Commission developed the Broadband Serviceable Location Fabric (Fabric).²¹² The Fabric is a dataset of all locations in the United States where fixed broadband Internet access service is or can be installed.²¹³ Fixed providers must then report whether they make services “available,” as the term is used for BDC purposes, specifying the technology and maximum advertised speed, at each location identified in the Fabric.²¹⁴ This allows the Commission to determine whether terrestrial fixed advanced telecommunications capability is available (as defined for BDC purposes) on a location-by-location basis. Previously, as part of their FCC Form 477 filings, facilities-based fixed broadband providers submitted data, by census block, about where they had deployed fixed broadband service; a census block was submitted if a fixed provider had deployed broadband service to at least one end-user premises in that block.²¹⁵ As the Commission has previously explained, this previous approach could overstate the coverage experienced by some consumers, especially in large or irregularly-shaped census blocks.²¹⁶ Because the BDC collects service availability data below the census block level, it represents a significant increase in granularity starting in 2022.

55. Our analysis of deployment for both fixed and mobile services uses census block population data developed by the U.S. Census Bureau and Commission staff estimates.²¹⁷ Prior to 2022,

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_____ broadband deployment data through FCC Form 477). The Commission clarified that it will continue to collect broadband and voice subscription data using the FCC Form 477, but filers will submit their data through the FCC BDC system. *Id.* at 14957, para. 1.

²¹² See *Broadband Data Task Force Announces the Availability of the Production Version of the Broadband Serviceable Location Fabric*, WC Docket Nos. 19-195, 11-10, Public Notice, 37 FCC Rcd 7537 (2022) (announcing that the Fabric was now available for broadband service providers and governmental entities to access) and Federal Communications Commission Broadband Data Collection Help Center, *What is the Location Fabric?* (Aug. 2, 2023), <https://help.bdc.fcc.gov/hc/en-us/articles/5375384069659-What-is-the-Location-Fabric->.

²¹³ See 47 U.S.C. § 642(b)(1)(A).

²¹⁴ Terrestrial fixed and satellite providers can do this by either submitting a list of locations (by unique location ID) for which they can make their service “available” or by providing a polygon that can be overlaid onto the Fabric data. See 47 CFR § 1.7004(c)(1); Broadband Data Collection, Data Specifications for Biannual Submission of Subscription, Availability, and Supporting Data at 21 (Feb. 7, 2023), <https://us-fcc.app.box.com/v/bdc-availability-spec>. Similarly, terrestrial fixed wireless providers may either submit a list of locations or propagation maps and model details that reflect the speeds and latency of its service. *Id.*

²¹⁵ For purposes of the analysis of access to advanced telecommunications capability in this report, for years 2018-2021, a census block is classified as served by fixed broadband if the FCC Form 477 data indicate that service is available in the census block, even if not to every location. Therefore, it is not necessarily the case that every household, housing unit, or person will have coverage from a given service provider in a census block that this analysis indicates is served. *2021 Report*, 36 FCC Rcd at 848, para. 22; see also *2022 Communications Marketplace Report*, 37 FCC Rcd at 15521, para. 15. Because a provider that reports offering service in a particular census block may not offer service, or service at that speed, to all locations in the census block, the number of providers presented in this report does not necessarily reflect the number of choices available in a particular household and does not purport to measure competition. See, e.g., *2022 Communications Marketplace Report*, 37 FCC Rcd at 15521, para. 15 & n.26.

²¹⁶ See, e.g., *2021 Report*, 36 FCC Rcd at 848, para. 22; *2020 Report*, 35 FCC Rcd at 8998, para. 26.

²¹⁷ Commission staff developed population estimates for 2018-21 by updated Census Bureau-level population and household-level data. These estimates are based on annual U.S. Census mid-year county- (or county-equivalent) level population and housing unit estimates for the 50 states and the District of Columbia. These data are used in

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the Commission had no information about broadband service availability below the census block, and therefore block-level population estimates were applied directly to the existing broadband service availability data to estimate the population with access to advanced telecommunications capability. Beginning in 2022, the BDC offers us sub-block, location-level broadband service availability data. The Fabric dataset, on which the BDC is based, contains the number of units in each Broadband Serviceable Location (BSL) but it does not contain information on the population of each BSL or unit therein. To estimate the population with access to advanced telecommunications capability for December 2022 and beyond, we will use our established block-level population estimation methodology as an input to estimate the population of each BSL.²¹⁸ Generally, we estimate the population of each unit within a census block by iteratively assigning the estimated population of the block to BSLs in turn based on a fixed probability, where that fixed probability is a decreasing function of the total number of units in the block. In this way, the population of each census block will equal the sum of population counts across all units in the block, but each unit—and therefore each BSL—within a block will generally not have the same population. We then estimate the number of households by counting the number of units within populated BSLs.²¹⁹

56. *Urban/Rural Classification.* For years prior to 2021, the designation of a census block as urban is based on the 2010 Urban Areas delineated by the U.S. Census Bureau, while for 2021 and 2022, urban/rural status is derived from the 2020 Urban Areas.²²⁰ Census blocks are completely within or outside of an urban area. A block's population, housing/BSLs, and territory are classified as urban if the block is within an Urban Area. Otherwise, a block's population, housing/BSLs, and territory are considered rural.

57. *Tribal Lands Classification.* The Commission uses federally recognized American Indian, Alaska Native, and Native Hawaiian Areas maintained by the U.S. Census Bureau as the source for Tribal lands classification. For metrics provided prior to 2021, the data vintage is the 2010 Census. For 2021 and 2022, data from the 2020 Census are used.²²¹

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conjunction with U.S. Census Bureau Topological Integrated Geographic Encoding and Referencing (TIGER) data to indicate new roads, that is, new housing development, to distribute population amongst the census blocks comprising each county (or county-equivalent). FCC, *Staff Block Estimates*, <https://www.fcc.gov/reports-research/data/staff-block-estimates> (last visited Jan. 9, 2024) (Staff Block Estimates).

²¹⁸ Federal Communications Commission Broadband Data Collection Help Center, *About the Fabric: What a Broadband Serviceable Location (BSL) Is and Is Not* (July 18, 2023), <https://help.bdc.fcc.gov/hc/en-us/articles/16842264428059-About-the-Fabric-What-a-Broadband-Serviceable-Location-BSL-Is-and-Is-Not>.

²¹⁹ For example, if a block has a population of 20 persons (based on staff estimates or Census counts, depending on the year of the data) and six units distributed across three BSLs (based on the contemporaneous version of the Fabric), each person is essentially assigned to a unit in turn by rolling a six-sided die. In the end, the population of each BSL will be an integer, and the population of the six units will not necessarily be equal. See Appendix A for a comprehensive explanation of our population distribution methodology.

²²⁰ For year-end 2018-2020 FCC Form 477 data that are submitted according to 2010 Census block geographies, we define as "urban" all 2010 Census urban areas and urban clusters that sit within a Metropolitan Statistical Area. See *Connect America Fund*, WC Docket No. 10-90, Order, 28 FCC Rcd 4242, 4244, para. 10 (WCB/WTB 2013). For year-end 2021 and 2022, we rely on the 2020 Census block geographies. United States Census Bureau, *Urban and Rural*, <https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html>.

²²¹ For purposes of the analysis of Tribal lands in this report, we use the definition that was used in the 2022 *Commercial Marketplace Report* and in the Commission's *Broadband Deployment Reports* since 2012. See 2022 *Communications Marketplace Report*, 37 FCC Rcd at 15538, para. 35 & n.71; *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 11-121, Eighth Broadband Progress Report, 27 FCC Rcd 10342, 10414-15 (2012). We acknowledge that the Commission has used other definitions of Tribal lands in other contexts. See, e.g., *Transforming the 2.5 GHz Band*, WT Docket No. 18-120, Report and Order, 34 FCC Rcd 5446, 5465-66, paras. 51-55 (2019) (*2.5 GHz Report and* (continued....))

58. *Satellite Services.* We find that FCC Form 477 deployment data and FCC BDC service availability data for satellite broadband service may overstate the extent to which satellite broadband service is available. The 2022 FCC BDC service availability data for satellite broadband indicate that satellite service offering 25/3 Mbps speeds is available to nearly all of the population.²²² However, other FCC Form 477 data indicate that satellite services have a relatively low subscription rate despite their apparent widespread service availability, and satellite capacity limits the number of subscribers that can be served without service degradation.²²³ Given this, and unless stated otherwise, consistent with past Reports, our analysis in this section is based on all fixed terrestrial services and does not include satellite services.²²⁴

(Continued from previous page)

Order); *Bridging the Digital Divide for Low-Income Consumers*, Fourth Report and Order, Order on Reconsideration, Memorandum Opinion and Order, WC Docket No. 17-287, Notice of Proposed Rulemaking, and Notice of Inquiry, 32 FCC Rcd 10475 (2017); *Connect America Fund et al.*, Report and Order, WC Docket No. 10-90, Further Notice of Proposed Rulemaking, and Order on Reconsideration, 33 FCC Rcd 11893, 11910-11, para. 55 & n.122 (2018); *Wireless Telecommunications Bureau Announces Procedures for 2.5 GHz Rural Tribal Priority Window*, WT Docket No. 18-20, Public Notice, 35 FCC Rcd 308, 313, para. 19 (WTB 2020). However, for purposes of this Report, we maintain our definition as previously employed.

As identified by the U.S. Census Bureau, Tribal lands fall into one of the following American Indian Area/Alaska Native Area/Hawaiian Home Land Class Code categories: (1) legal federally recognized American Indian area consisting of reservation and associated off-reservation trust land; (2) legal federally recognized American Indian area consisting of reservation only; (3) legal federally recognized American Indian area consisting of off-reservation trust land only; (4) joint use areas (legal); (5) statistical American Indian area defined for a federally recognized Tribe that does not have reservation or off-reservation trust land, specifically a Tribal Designated Statistical Area (TDSA) or Oklahoma Tribal Statistical Area (OTSA); (6) joint use areas (statistical); (7) Alaskan Native Village Statistical Areas (ANVSAs); and (8) Hawaiian Home Lands established by the Hawaiian Homes Commission Act of 1921. We exclude state recognized areas from the analysis of Tribal lands. Categories (1), (2), (3), and (4) are grouped together as Federal Reservations and categories (5) and (6) comprise Tribal Statistical Areas within this report. United States Census Bureau, *TIGER/Line Shapefiles and TIGER/Line Files Technical Documentation*, (Feb., 2021) https://www2.census.gov/geo/pdfs/maps-data/data/tiger/tgrshp2020/TGRSHP2020_TechDoc.pdf.

²²² The December 2022 BDC data indicate that satellite service offering 25/3 Mbps speeds is available to close to 100% of the U.S. population while a speed of 100/20 Mbps is available to approximately 16% of the U.S. population only.

²²³ The FCC Form 477 subscription data indicate that between December 2018 and December 2022, consumer subscriptions for satellite services at any speed increased slightly from approximately 1.8 million to approximately 1.9 million. The take rate for satellite services is just under 1.4%. While satellite coverage may enable operators to offer services to wide swaths of the country, overall satellite capacity may limit the number of consumers that can actually subscribe to satellite service at any one time. *2022 Communications Marketplace Report*, 37 FCC Rcd at 15704, para. 332 & n.963.

²²⁴ See *2021 Report*, 36 FCC Rcd at 851, para. 27; *2020 Report*, 35 FCC Rcd at 9000, para. 31; *2019 Report*, 34 FCC Rcd at 3870, para. 28; *2018 Report*, 33 FCC Rcd at 1678, para. 45; *2016 Report*, 31 FCC Rcd at 703, para. 3 (describing the matter as moot because no satellite services met or exceeded the then-applicable 25/3 Mbps fixed broadband benchmark). Service availability data submitted through the BDC continue to improve as filers become more acquainted with the filing requirements and as Commission staff conduct additional verifications of the data. Recently, as part of this effort, the Broadband Data Task Force released an updated data specification which included common data fields for satellite infrastructure data that satellite service providers use to estimate their service and coverage. See Broadband Data Collection, Data Specifications for Provider Infrastructure Data in the Challenge, Verification, and Audit Processes § 2.3 (December 21, 2023), <https://us-fcc.app.box.com/v/bdc-infrastructure-spec>. The Task Force has notified service providers (including satellite providers) that it will collect these additional data in the context of the Commission's statutory obligations to verify broadband service availability data. See *Establishing the Digital Opportunity Data Collection; Competitive Carriers Association and USTelecom – The Broadband Association Petition for Extension of Waiver Regarding the Requirement for a Certified Professional Engineer to Certify Broadband Data Collection Maps*, WC Docket No. 19-195, Order, DA 23-1123 at para. 22 (WTB/WCB/OEA Nov. 30, 2023).

59. *Terrestrial Fixed Wireless Services.* We find that the FCC Form 477 deployment data and BDC service availability data for terrestrial fixed wireless services indicate that these services are widely available and that subscription to these services has increased over time. However, the overall subscription rate remains relatively low.²²⁵ Therefore, for purposes of this Report, we present two sets of deployment and service availability estimates: one including fixed wireless services and one excluding fixed wireless services.²²⁶ As demonstrated in the Figures below, excluding fixed wireless services has the greatest effect in rural areas and Tribal lands.

c. Fixed Broadband Data

60. Figure 1 shows service availability of fixed terrestrial broadband at three minimum speed thresholds: 25/3 Mbps, 100/20 Mbps, and 940/500 Mbps.²²⁷ As noted above, the new fixed speed benchmark for evaluating access to advanced telecommunications capability is 100/20 Mbps and the new long-term goal is 1000/500 Mbps—the 25/3 Mbps threshold, the Commission’s former fixed speed benchmark, is included for comparison purposes. Further, because of the change in census geographies during our data collection period, caution should be exercised when considering the trends in service availability over time for urban and rural areas. In addition, due to the different parameters of the underlying data collections, the results for 2022 should not be directly compared with previous years. For purposes of the December 31, 2022 analysis, we measure service availability of fixed services based on the Fabric.²²⁸ Unless otherwise explicitly stated, the data we use in our analysis of the fixed marketplace are for the 50 states and the District of Columbia.²²⁹ Our analysis of deployment and service availability for both fixed and mobile services uses census block data developed by the U.S. Census Bureau and Commission staff estimates.²³⁰

61. As of 2022, Figure 1 shows that approximately 24 million Americans lack access to fixed broadband at our speed benchmark of 100/20 Mbps. Figure 1 also shows that service availability of advanced telecommunications capability at 100/20 Mbps is highest in urban areas and lowest in rural areas, with service availability in Tribal areas falling somewhere in between. Including fixed wireless, service availability is at approximately 98% in urban areas, approximately 72% in rural areas, and

²²⁵ Based on the FCC Form 477 subscription data, while subscription to fixed wireless services more than tripled between December 2018 and December 2022, from approximately 1.3 million to 4.5 million, the take rate for fixed wireless service in 2022 was approximately 4%.

²²⁶ As of December 31, 2022, the adoption rate of services meeting a 100/20 Mbps speed threshold was approximately 2% for fixed wireless services, approximately 26% for cable services, and approximately 38% for fiber-based services.

²²⁷ As discussed above, we use a download speed of 940 Mbps because that is the maximum advertised speed reported by two of the largest providers of fixed terrestrial broadband service. See Section III.A.1(a), *supra*. Appx. B-1 reports on service availability of fixed terrestrial services at our speed benchmark of 100/20 Mbps by state, District of Columbia, and U.S. Territory, while Appx. B-2 reports on service availability of fixed services, including satellite services, at different speed tiers.

²²⁸ Federal Communications Commission Broadband Data Collection Help Center, *What is the Location Fabric?* (Aug. 2, 2023), <https://help.bdc.fcc.gov/hc/en-us/articles/5375384069659-What-is-the-Location-Fabric->.

²²⁹ We separately present estimates for Puerto Rico, American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands in Appx. B-3.

²³⁰ Commission staff developed population estimates for 2018-21 by updated Census Bureau-level population and household-level data. These estimates are based on annual U.S. Census mid-year county- (or county-equivalent) level population and housing unit estimates for the 50 states and the District of Columbia. These data are used in conjunction with U.S. Census Bureau Topological Integrated Geographic Encoding and Referencing (TIGER) data to indicate new roads, that is, new housing development, to distribute population amongst the census blocks comprising each county (or county-equivalent). FCC, *Staff Block Estimates*, <https://www.fcc.gov/reports-research/data/staff-block-estimates> (last visited Jan. 9, 2024) (Staff Block Estimates).

approximately 76% in Tribal areas. Excluding fixed wireless, service availability is at approximately 97% in urban areas, approximately 64% in rural areas, and approximately 70% in Tribal areas. At 940/500 Mbps, an approximation for our long-term goal, the data show service availability of approximately 40% overall, approximately 45% in urban areas, approximately 24% in rural areas, and approximately 28% in Tribal areas.

Fig. 1
Service Availability (Millions) of Fixed Terrestrial Services at Different Speed Tiers

| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|--|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | Pop. | % |
| 25/3 Mbps | | | | | | | | | | |
| United States | 309.000 | 94.4% | 313.749 | 95.6% | 321.606 | 97.6% | 325.816 | 98.2% | 318.921 | 95.7% |
| Rural Areas | 50.146 | 77.7% | 53.834 | 82.7% | 59.821 | 90.9% | 62.146 | 92.6% | 56.254 | 83.1% |
| Urban Areas | 258.854 | 98.5% | 259.915 | 98.8% | 261.786 | 99.3% | 263.669 | 99.6% | 262.667 | 98.9% |
| Tribal Areas | 2.922 | 72.3% | 3.203 | 79.1% | 3.545 | 86.8% | 3.682 | 90.9% | 3.567 | 88.2% |
| 25/3 Mbps - Excluding Fixed Wireless | | | | | | | | | | |
| United States | 301.943 | 92.3% | 304.341 | 92.7% | 309.260 | 93.9% | 315.008 | 94.9% | 305.478 | 91.7% |
| Rural Areas | 44.508 | 69.0% | 46.358 | 71.2% | 49.634 | 75.4% | 53.382 | 79.5% | 45.859 | 67.7% |
| Urban Areas | 257.435 | 98.0% | 257.983 | 98.0% | 259.625 | 98.5% | 261.625 | 98.8% | 259.618 | 97.8% |
| Tribal Areas | 2.685 | 66.5% | 2.847 | 70.3% | 3.047 | 74.6% | 3.250 | 80.2% | 2.981 | 73.7% |
| 100/20 Mbps | | | | | | | | | | |
| United States | 289.752 | 88.6% | 294.124 | 89.6% | 301.670 | 91.6% | 312.472 | 94.1% | 309.107 | 92.7% |
| Rural Areas | 37.561 | 58.2% | 40.377 | 62.0% | 44.691 | 67.9% | 51.576 | 76.9% | 48.767 | 72.0% |
| Urban Areas | 252.191 | 96.0% | 253.747 | 96.4% | 256.979 | 97.5% | 260.896 | 98.5% | 260.341 | 98.0% |
| Tribal Areas | 1.999 | 49.5% | 2.221 | 54.8% | 2.487 | 60.9% | 2.998 | 74.0% | 3.087 | 76.3% |
| 100/20 Mbps - Excluding Fixed Wireless | | | | | | | | | | |
| United States | 287.781 | 88.0% | 291.342 | 88.8% | 297.851 | 90.4% | 307.791 | 92.7% | 301.531 | 90.5% |
| Rural Areas | 36.322 | 56.3% | 38.747 | 59.5% | 42.097 | 64.0% | 47.943 | 71.4% | 43.104 | 63.6% |
| Urban Areas | 251.458 | 95.7% | 252.596 | 96.0% | 255.754 | 97.0% | 259.847 | 98.1% | 258.427 | 97.3% |
| Tribal Areas | 1.949 | 48.3% | 2.133 | 52.6% | 2.355 | 57.7% | 2.906 | 71.7% | 2.810 | 69.5% |
| 940/500 Mbps | | | | | | | | | | |
| United States | 91.352 | 27.9% | 106.014 | 32.3% | 119.083 | 36.1% | 148.069 | 44.6% | 134.617 | 40.4% |
| Rural Areas | 6.830 | 10.6% | 9.038 | 13.9% | 11.960 | 18.2% | 16.084 | 24.0% | 16.204 | 23.9% |
| Urban Areas | 84.522 | 32.2% | 96.976 | 36.9% | 107.123 | 40.6% | 131.985 | 49.8% | 118.413 | 44.6% |
| Tribal Areas | 0.453 | 11.2% | 0.587 | 14.5% | 0.820 | 20.1% | 1.096 | 27.1% | 1.117 | 27.6% |
| 940/500 Mbps - Excluding Fixed Wireless | | | | | | | | | | |
| United States | 88.853 | 27.2% | 103.256 | 31.5% | 115.136 | 34.9% | 145.358 | 43.8% | 132.059 | 39.6% |
| Rural Areas | 6.681 | 10.4% | 8.907 | 13.7% | 11.480 | 17.4% | 15.810 | 23.6% | 15.670 | 23.1% |
| Urban Areas | 82.172 | 31.3% | 94.349 | 35.9% | 103.656 | 39.3% | 129.549 | 48.9% | 116.389 | 43.8% |
| Tribal Areas | 0.453 | 11.2% | 0.586 | 14.5% | 0.817 | 20.0% | 1.096 | 27.0% | 1.109 | 27.4% |
| Pop. Evaluated | 327.167 | 100.0% | 328.210 | 100.0% | 329.491 | 100.0% | 331.894 | 100.0% | 333.288 | 100.0% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

62. Figure 2 shows service availability of advanced telecommunications capability on Tribal lands, by rural and urban areas and by major Tribal lands category. As of December 2022, service availability on rural Tribal lands continues to lag behind service availability on urban Tribal lands: approximately 60% of Americans living on Tribal lands in rural areas have access to broadband at minimum speeds of 100/20 Mbps (including fixed wireless) while approximately 96% of Americans living on Tribal lands in urban areas have such access. The same pattern is observed excluding fixed wireless.

Fig. 2
Service Availability (Millions) on Tribal Lands of Fixed Terrestrial Services at 100/20 Mbps

| Area | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Pop. | % |
| 100/20 Mbps Including Fixed Wireless | | | | | | | | | | |
| Tribal Lands | 1.999 | 49.5% | 2.221 | 54.8% | 2.487 | 60.9% | 2.998 | 74.0% | 3.087 | 76.3% |
| Rural Areas | 0.568 | 27.0% | 0.728 | 34.4% | 0.926 | 43.1% | 1.256 | 56.0% | 1.338 | 60.3% |
| Urban Areas | 1.431 | 74.0% | 1.494 | 77.1% | 1.561 | 80.6% | 1.743 | 96.4% | 1.749 | 95.9% |
| Alaska Native Village Statistical Areas | 0.149 | 56.1% | 0.160 | 60.0% | 0.165 | 61.3% | 0.182 | 67.0% | 0.163 | 60.4% |
| Rural Areas | 0.071 | 41.1% | 0.081 | 47.0% | 0.086 | 49.2% | 0.094 | 53.0% | 0.078 | 44.2% |
| Urban Areas | 0.079 | 83.2% | 0.079 | 83.6% | 0.080 | 83.6% | 0.088 | 93.8% | 0.085 | 90.6% |
| Federal Reservations | 0.394 | 36.3% | 0.481 | 44.1% | 0.542 | 49.3% | 0.603 | 55.4% | 0.599 | 56.7% |
| Rural Areas | 0.190 | 25.2% | 0.250 | 33.0% | 0.296 | 38.7% | 0.359 | 44.3% | 0.359 | 46.1% |
| Urban Areas | 0.204 | 61.3% | 0.231 | 69.3% | 0.246 | 73.7% | 0.244 | 88.2% | 0.240 | 86.6% |
| Hawaiian Home Lands | 0.030 | 88.7% | 0.032 | 92.8% | 0.032 | 93.2% | 0.034 | 98.9% | 0.033 | 94.7% |
| Rural Areas | 0.003 | 46.1% | 0.004 | 63.2% | 0.004 | 65.8% | 0.008 | 95.5% | 0.006 | 78.9% |
| Urban Areas | 0.027 | 98.1% | 0.028 | 99.5% | 0.028 | 99.5% | 0.026 | 100% | 0.026 | 99.6% |
| Tribal Statistical Areas | 1.425 | 53.7% | 1.548 | 58.2% | 1.749 | 65.2% | 2.179 | 82.0% | 2.292 | 85.5% |
| Rural Areas | 0.304 | 25.9% | 0.392 | 33.3% | 0.541 | 45.0% | 0.794 | 63.8% | 0.895 | 71.3% |
| Urban Areas | 1.121 | 75.8% | 1.156 | 78.0% | 1.208 | 81.7% | 1.385 | 98.1% | 1.397 | 97.9% |
| 100/20 Mbps Excluding Fixed Wireless | | | | | | | | | | |
| Tribal Lands | 1.949 | 48.3% | 2.133 | 52.6% | 2.355 | 57.7% | 2.906 | 71.7% | 2.810 | 69.5% |
| Rural Areas | 0.521 | 24.8% | 0.647 | 30.6% | 0.807 | 37.6% | 1.174 | 52.3% | 1.082 | 48.8% |
| Urban Areas | 1.427 | 73.8% | 1.486 | 76.7% | 1.549 | 80.0% | 1.731 | 95.8% | 1.727 | 94.7% |
| Alaska Native Village Statistical Areas | 0.128 | 47.9% | 0.133 | 49.6% | 0.137 | 50.9% | 0.153 | 56.4% | 0.138 | 51.0% |
| Rural Areas | 0.049 | 28.7% | 0.054 | 31.3% | 0.058 | 33.3% | 0.067 | 37.6% | 0.055 | 31.0% |
| Urban Areas | 0.078 | 82.7% | 0.079 | 83.1% | 0.079 | 83.1% | 0.086 | 92.3% | 0.083 | 88.4% |
| Federal Reservations | 0.380 | 35.0% | 0.432 | 39.6% | 0.470 | 42.8% | 0.556 | 51.1% | 0.516 | 48.9% |
| Rural Areas | 0.178 | 23.6% | 0.208 | 27.4% | 0.234 | 30.6% | 0.321 | 39.6% | 0.291 | 37.3% |
| Urban Areas | 0.202 | 60.8% | 0.224 | 67.2% | 0.236 | 70.9% | 0.234 | 84.8% | 0.226 | 81.5% |
| Hawaiian Home Lands | 0.030 | 88.7% | 0.032 | 92.8% | 0.032 | 93.2% | 0.034 | 98.9% | 0.033 | 94.7% |
| Rural Areas | 0.003 | 46.1% | 0.004 | 63.2% | 0.004 | 65.8% | 0.008 | 95.5% | 0.006 | 78.9% |
| Urban Areas | 0.027 | 98.1% | 0.028 | 99.5% | 0.028 | 99.5% | 0.026 | 100% | 0.026 | 99.6% |
| Tribal Statistical Areas | 1.411 | 53.2% | 1.537 | 57.8% | 1.716 | 64.0% | 2.163 | 81.4% | 2.123 | 79.2% |
| Rural Areas | 0.291 | 24.8% | 0.381 | 32.3% | 0.510 | 42.5% | 0.778 | 62.5% | 0.731 | 58.2% |
| Urban Areas | 1.120 | 75.7% | 1.156 | 78.0% | 1.206 | 81.5% | 1.385 | 98.1% | 1.392 | 97.6% |
| Pop. Evaluated | 4.039 | 100% | 4.052 | 100% | 4.083 | 100% | 4.051 | 100% | 4.043 | 100% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

63. *Number of Fixed Service Providers.* We examine the number of fixed broadband provider options available to consumers in the United States using year-end FCC Form 477 deployment data from 2018 to 2021 and year-end FCC BDC service availability data from 2022. Our analysis considers options for fixed terrestrial services meeting three minimum speed thresholds— 25/3 Mbps, 100/20 Mbps, and 940/500 Mbps.

64. INCOMPAS suggests that the Commission should recreate the analysis it did in the *2022 Communications Marketplace Report* where the Commission published a chart that showed the percentage of households living in census blocks with multiple provider options, including the subscription take rates of 1% to 5%.²³¹ INCOMPAS argues that this type of analysis is helpful to understand the state of available broadband options in the market as viewed by customers.²³² INCOMPAS notes that the Commission can continue to do its analysis based on a census block and county level in order to more easily compare with its prior report, but in addition, it argues that the Commission should also do its analysis based on the individual household now that it has access to more granular information from the BDC data.²³³ INCOMPAS claims that adding subscribership information to the BDC data will lessen concern that the BDC data overstates the competitive options available to customers.²³⁴ We provide alternative estimates of the number of provider options available to households along the lines suggested by INCOMPAS in Figure 6, below.

65. As of December 2022, there were 2,179 entities of varying sizes and deployment and service availability footprints that reported providing fixed broadband technology services to residential consumers at speeds exceeding 200 kbps in at least one direction. Figure 3 presents the total number of providers of fixed broadband services, as well as the number of fixed broadband providers in rural and urban areas, from December 2018 through December 2022. The total number of providers has increased by approximately 9% since December 2018. The growth in the number of providers is higher in rural areas than in urban areas: Between December 2018 and December 2022, the number of providers in urban areas and rural areas increased by approximately 1% and approximately 9%, respectively.

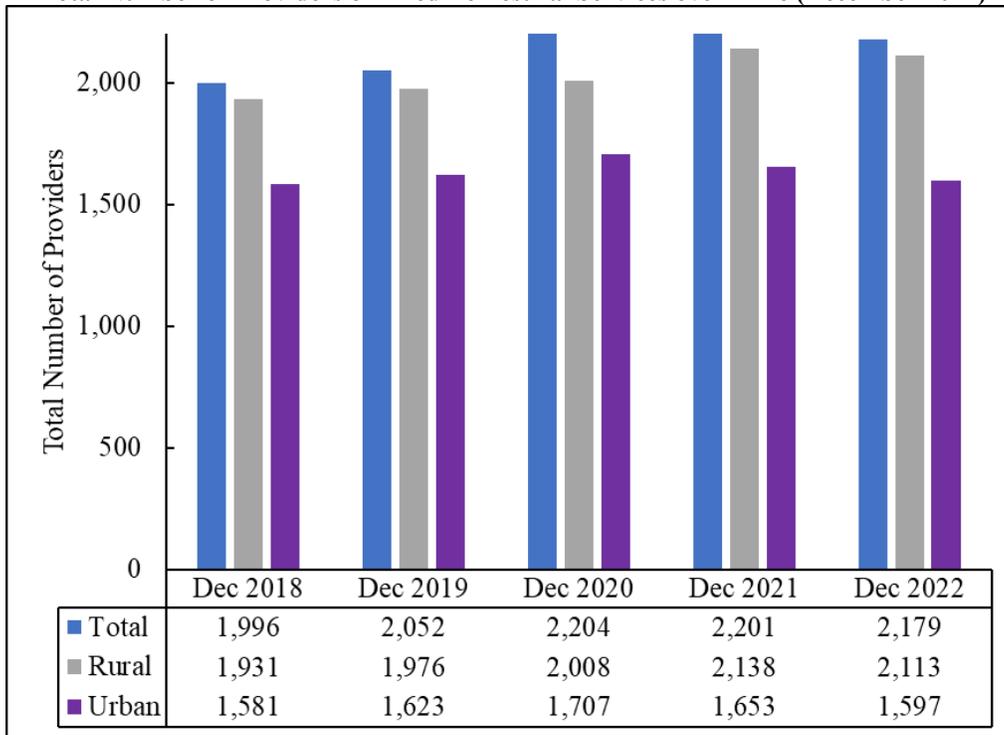
²³¹ INCOMPAS Comments at 7; Letter from Angie Kronenberg, President, INCOMPAS, to Marlene H. Dortch, Secretary, FCC, GN Docket 22-270, at 1 (filed Dec. 19, 2023) (INCOMPAS December 2023 *Ex Parte*).

²³² *Id.*

²³³ INCOMPAS Comments at 7-8.

²³⁴ *Id.* at 8; INCOMPAS December 2023 *Ex Parte* at 1.

Fig. 3
Total Number of Providers of Fixed Terrestrial Services over Time (December 2022)



Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates; 2010 and 2020 Census.

66. While there are over 2,000 providers of residential services, there is considerable variation in provider size and deployment and service availability footprint. The overwhelming majority of providers cover less than 1% of the U.S. population. In December 2022, only 10 providers covered at least 5% of the U.S. population, based on their reported service availability data; this is an increase from nine providers in December 2019.

67. Figure 4 reports estimates of the percentage of U.S. households living in areas where data indicate that zero, one, two, and three or more providers of fixed terrestrial broadband services are deployed at various speed tiers.²³⁵ This Figure uses FCC Form 477 year-end data from 2018-21 and FCC BDC year-end data for 2022. As noted above, we cannot compare the results for 2022 with previous years and therefore cannot compare any changes between 2018-21 and 2022. As of December 2022, there is a significant difference in the percentage of households with at least two provider options for 100/20 Mbps service compared to those with at least two provider options for 940/500 Mbps service.²³⁶

²³⁵ The FCC Form 477 year-end data from 2018 to 2020 are based on the 2010 census geographies; whereas the FCC Form 477 year-end 2021 and FCC BDC year-end 2022 data are based on 2020 census geographies. The percentage of households with an estimated number of fixed terrestrial provider options is measured as the number of households covered by the specific number of providers (e.g., zero, one, two, and at least three) divided by the total number of households. Throughout this section, percentages provided may not sum to exactly 100% due to rounding.

²³⁶ Figure 4 indicates that as of December 2022, approximately 55% of U.S. households had a choice of at least two fixed broadband providers. Using a methodology that defines broadband service availability as including both actual and potential competitive presence. ACA Connects asserts, though the Commission cannot independently verify, that as of mid-2023, 88.4 million U.S. households (that staff estimates to be approximately 68% of households) had at least two actual or potential competitive options for fixed broadband service. Letter from Brian (continued....)

Approximately 45% of households do not have more than one provider option for 100/20 Mbps service, and over 96% of households do not have more than one provider option for 940/500 Mbps service. This pattern persists when fixed wireless services are excluded. Approximately 40% of households do not have more than one provider for 100/20 Mbps service when fixed wireless services are excluded, and over 96% of households have less than two provider options for 940/500 Mbps service when fixed wireless services are excluded.

Fig. 4
Percentage of U.S. Households with Zero, One, Two, or At Least Three Provider Options for Fixed Terrestrial Services at Different Speed Tiers

| Provider Options | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|-------|-------|-------|-------|-------|
| 25/3 Mbps | | | | | |
| Zero | 5.4% | 4.3% | 2.3% | 1.6% | 4.7% |
| One | 27.2% | 22.5% | 10.9% | 8.6% | 18.8% |
| Two | 46.1% | 44.8% | 33.6% | 20.8% | 30.5% |
| At Least Three | 21.3% | 28.4% | 53.1% | 69.0% | 46.0% |
| 25/3 Mbps - Excluding Fixed Wireless | | | | | |
| Zero | 7.4% | 6.9% | 5.8% | 4.6% | 8.9% |
| One | 32.4% | 30.5% | 28.6% | 27.7% | 39.5% |
| Two | 51.5% | 53.1% | 55.0% | 55.9% | 44.1% |
| At Least Three | 8.7% | 9.4% | 10.6% | 11.9% | 7.4% |
| 100/20 Mbps | | | | | |
| Zero | 11.3% | 10.2% | 8.3% | 5.5% | 7.9% |
| One | 39.9% | 36.9% | 34.6% | 30.8% | 37.4% |
| Two | 38.9% | 41.1% | 41.9% | 43.0% | 36.6% |
| At Least Three | 9.9% | 11.7% | 15.2% | 20.7% | 18.2% |
| 100/20 Mbps - Excluding Fixed Wireless | | | | | |
| Zero | 11.9% | 11.0% | 9.4% | 6.7% | 10.2% |
| One | 42.0% | 40.2% | 38.7% | 37.3% | 49.8% |
| Two | 40.0% | 42.1% | 44.4% | 47.1% | 34.9% |
| At Least Three | 6.1% | 6.7% | 7.5% | 8.8% | 5.1% |
| 940/500 Mbps | | | | | |
| Zero | 72.0% | 67.6% | 63.6% | 55.0% | 62.0% |
| One | 25.6% | 29.7% | 31.3% | 40.9% | 34.4% |
| Two | 2.2% | 2.5% | 4.6% | 3.6% | 3.5% |
| At Least Three | 0.2% | 0.2% | 0.5% | 0.4% | 0.2% |
| 940/500 Mbps - Excluding Fixed Wireless | | | | | |
| Zero | 72.8% | 68.4% | 64.8% | 55.8% | 62.8% |
| One | 25.7% | 29.7% | 31.1% | 40.8% | 33.7% |
| Two | 1.4% | 1.7% | 3.9% | 3.1% | 3.4% |
| At Least Three | 0.1% | 0.1% | 0.1% | 0.3% | 0.1% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

68. We next evaluate the percentage of households that have a choice among multiple fixed terrestrial broadband service providers in rural and urban areas, and on Tribal lands. As shown in Figure 5, there is a significant difference in the percentage of households with at least two provider options in urban areas compared to households in rural areas and on Tribal lands. While approximately 63% of

(Continued from previous page)

Hurley, Chief Regulatory Counsel, ACA Connects, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 22-270 at 1-3 (filed Mar. 7, 2024) (ACA Connects *Ex Parte*).

households in urban areas have at least two provider options for 100/20 Mbps service, less than 24% of households living in rural areas and less than 31% of households on Tribal lands have at least two options for this service tier. This pattern persists when fixed wireless services are excluded. Approximately 47% of households in urban areas have at least two provider options for 100/20 Mbps service when fixed wireless services are excluded, while approximately 12% of households living in rural areas and approximately 17% of households on Tribal lands have at least two options for this service tier. Currently, for services meeting a 940/500 Mbps threshold, approximately 4% of households in urban areas have at least two options, compared to approximately 1% of households in rural areas and approximately 2% of households on Tribal lands. This pattern persists when fixed wireless services are excluded.

Fig. 5

Percentage of U.S. Households with Zero, One, Two, or At Least Three Provider Options for Fixed Terrestrial Services at Different Speed Tiers in Rural Areas, Urban Areas, and on Tribal Lands

| Provider Options | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|-------|-------|-------|-------|-------|
| 25/3 Mbps - Rural Areas | | | | | |
| Zero | 22.0% | 17.1% | 8.9% | 6.7% | 17.7% |
| One | 44.1% | 40.4% | 23.8% | 22.1% | 37.4% |
| Two | 25.7% | 29.5% | 32.2% | 28.6% | 27.0% |
| At Least Three | 8.2% | 13.0% | 35.2% | 42.6% | 17.8% |
| 25/3 Mbps - Urban Areas | | | | | |
| Zero | 1.2% | 1.0% | 0.6% | 0.3% | 1.3% |
| One | 22.9% | 18.0% | 7.7% | 5.2% | 13.8% |
| Two | 51.2% | 48.7% | 34.0% | 18.9% | 31.4% |
| At Least Three | 24.6% | 32.3% | 57.7% | 75.6% | 53.5% |
| 25/3 Mbps - Tribal Lands | | | | | |
| Zero | 25.6% | 19.3% | 11.8% | 7.7% | 12.2% |
| One | 36.4% | 35.4% | 24.2% | 18.6% | 29.1% |
| Two | 23.7% | 27.9% | 26.0% | 23.9% | 27.5% |
| At Least Three | 14.3% | 17.4% | 37.9% | 49.9% | 31.3% |
| 25/3 Mbps Excluding Fixed Wireless - Rural Areas | | | | | |
| Zero | 30.2% | 27.8% | 23.6% | 19.0% | 32.9% |
| One | 46.9% | 46.2% | 46.0% | 47.5% | 49.8% |
| Two | 20.7% | 23.3% | 26.7% | 29.2% | 16.1% |
| At Least Three | 2.3% | 2.8% | 3.6% | 4.4% | 1.2% |
| 25/3 Mbps Excluding Fixed Wireless- Urban Areas | | | | | |
| Zero | 1.6% | 1.6% | 1.3% | 0.9% | 2.6% |
| One | 28.7% | 26.5% | 24.1% | 22.7% | 36.8% |
| Two | 59.3% | 60.7% | 62.2% | 62.7% | 51.6% |
| At Least Three | 10.3% | 11.1% | 12.3% | 13.7% | 9.0% |
| 25/3 Mbps Excluding Fixed Wireless - Tribal Lands | | | | | |
| Zero | 31.4% | 27.9% | 23.8% | 17.7% | 26.4% |
| One | 44.1% | 44.1% | 44.3% | 40.7% | 48.0% |
| Two | 22.7% | 25.7% | 29.0% | 36.2% | 23.7% |
| At Least Three | 1.8% | 2.3% | 2.9% | 5.3% | 1.9% |
| 100/20 Mbps - Rural Areas | | | | | |
| Zero | 41.4% | 37.5% | 31.6% | 22.2% | 28.9% |
| One | 45.1% | 46.0% | 47.2% | 49.0% | 47.9% |
| Two | 11.8% | 14.4% | 18.2% | 23.5% | 18.8% |
| At Least Three | 1.7% | 2.1% | 3.1% | 5.4% | 4.4% |

| Provider Options | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|-------|-------|-------|-------|-------|
| 100/20 Mbps - Urban Areas | | | | | |
| Zero | 3.8% | 3.3% | 2.4% | 1.3% | 2.3% |
| One | 38.5% | 34.6% | 31.4% | 26.2% | 34.7% |
| Two | 45.7% | 47.9% | 48.0% | 48.0% | 41.3% |
| At Least Three | 12.0% | 14.2% | 18.3% | 24.6% | 21.8% |
| 100/20 Mbps - Tribal Lands | | | | | |
| Zero | 48.8% | 43.7% | 38.0% | 23.4% | 23.7% |
| One | 37.6% | 37.7% | 38.9% | 43.0% | 45.5% |
| Two | 13.1% | 17.7% | 21.6% | 30.0% | 24.1% |
| At Least Three | 0.5% | 0.9% | 1.4% | 3.5% | 6.8% |
| 100/20 Mbps Excluding Fixed Wireless - Rural Areas | | | | | |
| Zero | 43.1% | 39.8% | 35.3% | 27.3% | 37.0% |
| One | 44.9% | 45.6% | 47.2% | 51.8% | 50.7% |
| Two | 11.0% | 13.4% | 15.8% | 18.8% | 11.7% |
| At Least Three | 1.0% | 1.3% | 1.7% | 2.1% | 0.6% |
| 100/20 Mbps Excluding Fixed Wireless - Urban Areas | | | | | |
| Zero | 4.0% | 3.8% | 2.8% | 1.6% | 3.1% |
| One | 41.3% | 38.8% | 36.5% | 33.7% | 49.6% |
| Two | 47.2% | 49.4% | 51.7% | 54.3% | 41.0% |
| At Least Three | 7.4% | 8.0% | 9.0% | 10.5% | 6.3% |
| 100/20 Mbps Excluding Fixed Wireless - Tribal Lands | | | | | |
| Zero | 50.0% | 45.6% | 40.7% | 25.7% | 30.5% |
| One | 37.3% | 37.4% | 38.8% | 44.1% | 52.4% |
| Two | 12.3% | 16.4% | 19.5% | 27.6% | 16.2% |
| At Least Three | 0.3% | 0.7% | 1.0% | 2.5% | 0.9% |
| 940/500 Mbps - Rural Areas | | | | | |
| Zero | 89.4% | 86.1% | 81.8% | 75.7% | 76.2% |
| One | 10.1% | 13.2% | 16.9% | 22.2% | 22.5% |
| Two | 0.4% | 0.7% | 1.3% | 1.9% | 1.1% |
| At Least Three | 0.0% | 0.0% | 0.0% | 0.2% | 0.1% |
| 940/500 Mbps - Urban Areas | | | | | |
| Zero | 67.7% | 62.9% | 59.0% | 49.7% | 58.2% |
| One | 29.5% | 33.8% | 34.9% | 45.7% | 37.5% |
| Two | 2.6% | 3.0% | 5.5% | 4.1% | 4.1% |
| At Least Three | 0.2% | 0.2% | 0.6% | 0.5% | 0.2% |
| 940/500 Mbps - Tribal Lands | | | | | |
| Zero | 88.0% | 84.7% | 79.0% | 71.5% | 72.6% |
| One | 11.3% | 14.5% | 19.1% | 24.9% | 25.0% |
| Two | 0.7% | 0.8% | 1.9% | 3.3% | 2.3% |
| At Least Three | 0.0% | 0.0% | 0.0% | 0.3% | 0.1% |
| 940/500 Mbps Excluding Fixed Wireless - Rural Areas | | | | | |
| Zero | 89.6% | 86.2% | 82.5% | 76.1% | 77.0% |
| One | 10.0% | 13.1% | 16.3% | 22.0% | 21.9% |
| Two | 0.4% | 0.6% | 1.2% | 1.7% | 1.0% |
| At Least Three | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% |
| 940/500 Mbps Excluding Fixed Wireless- Urban Areas | | | | | |
| Zero | 68.6% | 63.9% | 60.3% | 50.7% | 59.0% |
| One | 29.7% | 34.0% | 34.9% | 45.5% | 36.9% |

| Provider Options | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|-------|-------|-------|-------|-------|
| Two | 1.6% | 2.0% | 4.7% | 3.5% | 4.0% |
| At Least Three | 0.1% | 0.1% | 0.2% | 0.4% | 0.2% |
| 940/500 Mbps Excluding Fixed Wireless - Tribal Lands | | | | | |
| Zero | 88.0% | 84.7% | 79.0% | 71.6% | 72.8% |
| One | 11.3% | 14.5% | 19.0% | 24.9% | 24.9% |
| Two | 0.7% | 0.8% | 1.9% | 3.3% | 2.3% |
| At Least Three | 0.0% | 0.0% | 0.0% | 0.3% | 0.1% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

69. Figure 6 provides alternative estimates of the number of provider options available to households in an attempt to present a more comprehensive assessment. To reduce the effect of the factors that could result in an understatement or overstatement of the proportion of households with a choice of multiple providers, we incorporate information from our confidential subscriber data before assessing the number of providers in each census block. In Figure 6, we present alternative estimates of the number of provider options for 25/3 Mbps, 100/20 Mbps, and 940/500 Mbps based on three scenarios that include *all* fixed technologies.²³⁷ These alternative estimates include satellite service, as well as any of the other fixed technologies, to the extent that the service meets the speed threshold and the scenario criteria. For comparison purposes, Scenario I presents fixed broadband coverage for all reported technologies, and takes the filer's data as released by the Commission. The two remaining scenarios include the filer's service availability data only if the filer's residential connections data meet the minimum penetration rate for the scenario. Scenario II compares each filer's BDC service availability data to its residential connections data and excludes the filer's service availability data from the tract if the filer does not attain a 1% penetration rate.²³⁸ Scenario III increases the penetration rate in Scenario II from 1% to 5%. Scenarios II and III analyze penetration rates without regard to subscription speed to account for consumers opting to subscribe to slower speed services than the maximum advertised speed offered by a provider. We reiterate that, in Scenarios II and III, our decision to exclude a filer's BDC service availability data does not mean that such service is not available in a particular census tract, only that the filer failed to attain the relevant penetration rate for purposes of these alternate estimates.

70. Comparing Scenario I to Scenario II and Scenario III shows the effect of penetration adjustments on the estimates of the number of provider options when a filer failed the penetration rate criteria for the scenario and its deployment data are excluded. For example, comparing Scenario I to Scenario II for 100/20 Mbps suggests that the percentage of households with at least two provider options would fall from approximately 61% to 49%, while comparing the Scenario I to Scenario III suggests that the percentage would fall from approximately 61% to 42%. In other words, a Scenario with a lower penetration rate results in more households having a greater number of provider options and fewer households having a lower number of provider options, relative to a Scenario with a higher penetration rate.

²³⁷ These estimates include fixed satellite services. The estimates for Scenarios II and III rely on confidential residential connections (subscriber) data.

²³⁸ We define the penetration rate as the filer's total number of residential connections in the tract divided by the filer's number of deployed households meeting the speed threshold in the census tract.

Fig. 6
Alternative Estimates for the Percentage of Households with Multiple Provider Options
for Fixed Terrestrial Services (December 31, 2022)

| Provider Options (December 31, 2022) | Fixed Terrestrial Services Excluding Satellite | Fixed Terrestrial Services Excluding Satellite and Fixed Wireless | Scenario I: All Technologies | Scenario II: All Technologies; 1% Penetration Rate | Scenario III: All Technologies; 5% Penetration Rate |
|--------------------------------------|--|---|------------------------------|--|---|
| 25/3 Mbps | | | | | |
| Zero | 4.7% | 8.9% | 0.0% | 1.9% | 5.0% |
| One | 18.8% | 39.5% | 0.0% | 20.2% | 37.1% |
| Two | 30.5% | 44.1% | 0.3% | 37.8% | 47.1% |
| At Least Three | 46.0% | 7.4% | 99.7% | 40.1% | 10.8% |
| 100/20 Mbps | | | | | |
| Zero | 7.9% | 10.2% | 6.9% | 8.2% | 9.2% |
| One | 37.4% | 49.8% | 32.4% | 43.1% | 48.6% |
| Two | 36.6% | 34.9% | 36.4% | 36.8% | 36.2% |
| At Least Three | 18.2% | 5.1% | 24.3% | 12.0% | 6.1% |
| 940/500 Mbps | | | | | |
| Zero | 62.0% | 62.8% | 62.0% | 63.4% | 64.1% |
| One | 34.4% | 33.7% | 34.4% | 33.4% | 33.0% |
| Two | 3.5% | 3.4% | 3.5% | 3.1% | 2.9% |
| At Least Three | 0.2% | 0.1% | 0.2% | 0.1% | 0.0% |

Source: FCC BDC, FCC Form 477 data; Staff Block Estimates.

Scenario I: Includes all technologies, including satellite services, and uses the filer data as released by the Commission.

Scenario II: Compares each filer's BDC service availability data to its confidential residential connections data, and excludes the filer's service availability data from any Census tract where the filer does not attain a 1% penetration rate. (Penetration rate= filer's total residential connections in the tract/filer's deployed households in the census tract that meet the speed threshold).

Scenario III: Increases the test penetration rate to 5%.

2. Mobile Broadband Service

a. Speed Benchmark

71. Consistent with past Commission practice, we decline to set a benchmark for determining service availability of advanced telecommunications capability for mobile services (mobile advanced telecommunications capability) in this Report. While the Commission now collects much improved mobile broadband data via the BDC, we continue to recognize that the performance characteristics of mobile service can be highly variable.²³⁹ Accordingly, we continue to evaluate mobile advanced telecommunications capability service availability without setting a performance benchmark for the purpose of this Report. While we do not set a benchmark for mobile advanced telecommunications capability at this time, we focus our main analysis of mobile broadband service availability on a single threshold speed for 5G-NR of 35/3 Mbps, which is the highest speed that the Commission collects in the BDC for mobile broadband.²⁴⁰ Specifically, we first analyze the provider-reported 5G-NR outdoor stationary coverage based on the Commission's BDC data from December 31, 2022, where service

²³⁹ 2021 Report, 36 FCC Rcd at 843-44, para. 15 (declining to set a benchmark, noting the inherent variability in the performance characteristics of mobile service); 2020 Report, 35 FCC Rcd at 8993, para. 16 (same).

²⁴⁰ See 47 CFR § 1.7004(c)(3)(i).

providers claim to provide 5G-NR mobile broadband service at speeds of at least 35/3 Mbps.²⁴¹ Second, in areas where providers claim to provide 5G-NR outdoor stationary coverage with speeds of at least 35/3 Mbps, we supplement provider-reported data with Ookla speed-test data, that identify areas showing median 5G-NR speed tests of at least 35/3 Mbps.²⁴² This supplemental approach attempts to further our understanding of the mobile broadband speeds that consumers are actually experiencing.²⁴³ By continuing the approach taken by the Commission in previous section 706 reports, we also can more readily assess progress over time.²⁴⁴

72. We analyze 5G-NR for this Report because it is the most advanced mobile technology that mobile providers are currently deploying. Because this Report focuses on *advanced* telecommunications capability, it is most appropriate to analyze a threshold beyond the mobile technology and speeds that are minimally adequate to originate and receive voice, data, graphics, and video telecommunications.²⁴⁵ Rather, mobile service throughout the country needs to be sufficiently advanced so as to provide a “high quality” experience for consumers.²⁴⁶ And this assessment must necessarily evolve with the advancement of mobile technology, as section 706 requires the Commission to inquire and assess mobile advanced telecommunications capability annually.²⁴⁷ Although we have analyzed 4G LTE in past reports, because 5G-NR is the advanced mobile technology that is currently being deployed and the main focus of the Commission’s efforts to ensure mobile service is universally available to all Americans,²⁴⁸ we use 5G-NR as the generation of technology for this Report’s analysis.

73. We analyze a 35 Mbps download-speed threshold for mobile advanced telecommunications capability. The statute requires an analysis of whether advanced telecommunications capability is being deployed to all Americans and defines advanced telecommunications capability as able

²⁴¹ As we explain below, while we focus our analysis in the main body of the Report on the 5G-NR outdoor stationary coverage at speeds of 35/3 Mbps, we also analyze other deployed provider-reported BDC coverage data for mobile broadband (e.g., 5G-NR 35/3 Mbps in-vehicle, 5G-NR 7/1 Mbps outdoor stationary and in-vehicle; 4G LTE 5/1 Mbps outdoor stationary and in-vehicle) in Appx. B-4. Further, for the years prior to 2022, we base our analysis on FCC Form 477 data.

²⁴² The Ookla speed-test data used in this report are user-initiated; therefore, they include tests taken under conditions that may be described as indoor, outdoor stationary, and in-vehicle mobile. We are not able to identify the conditions under which a given test was taken.

²⁴³ In addition to the analysis of 5G-NR coverage at 35/3 Mbps, in Appx. B-5 we also present the following: in areas where providers claim to provide 5G-NR outdoor stationary coverage with speeds of at least 7/1 Mbps, we supplement provider-reported data with Ookla speed-test data which identify areas showing median 5G-NR speed tests of at least 7/1 Mbps; and in areas where providers claim to provide 4G LTE or 5G-NR at 5/1 Mbps or better, we supplement provider-reported data with Ookla speed-test data which identify areas showing median mobile broadband speed tests of at least 10/3 Mbps.

²⁴⁴ *2021 Report*, 36 FCC Rcd at 841-42, para. 12; *2020 Report*, 35 FCC Rcd at 8993-94, para. 16; *2019 Report*, 34 FCC Rcd at 3863-64, para. 16.

²⁴⁵ 47 U.S.C. § 1302(d)(1); *2015 Report*, 30 FCC Rcd at 1390-91, paras. 19-23 (providing a legal analysis that these reports require an analysis of telecommunications capability that is “advanced”); *see also 2016 Report*, 31 FCC Rcd at 705, para. 13.

²⁴⁶ *2016 Report*, 31 FCC Rcd at 723-25; paras. 56-61 (discussing considerations for an appropriate speed for mobile service to be “advanced” telecommunication capability); *see also 2015 Report*, 30 FCC Rcd at 1390-91, paras. 20-21 (discussing interpretation of “advanced” in section 706).

²⁴⁷ 47 U.S.C. § 1302(a).

²⁴⁸ *See, e.g., Establishing a 5G Fund for Rural America*, GN Docket No. 20-32, Further Notice of Proposed Rulemaking, FCC 23-74 (Sept. 22, 2023) (*5G Fund FNPRM*) (seeking comment on a proposed 5G Fund for Rural America that would advance Commission efforts to ensure the deployment of high-speed, 5G-NR mobile service in areas of the country where, absent subsidies, it will continue to be lacking).

“to originate and receive high-quality voice, data, graphics, and video telecommunications.”²⁴⁹ When consumers attempt to access these services, they want them immediately—the longer it takes for a person to access these services, the less of an advanced experience they have. Smartphones—the ubiquitously used device for mobile broadband²⁵⁰—can have hundreds of gigabytes of memory, and a common use for smartphones can include downloading content such as pictures or videos from family and friends’ smartphones or other large data files.²⁵¹ The slower the download speed, the further Americans are from experiencing advanced, high-quality service as required by the statute.²⁵² Given the available BDC data, 35 Mbps is the most advanced download threshold we can analyze at this time.²⁵³

74. We use an upload speed threshold of 3 Mbps for our analysis. While the downlink brings content to consumers—and more bandwidth can bring that content to them more quickly—the uplink allows for consumers to send data to the Internet and higher upload speeds can allow consumers to send greater amounts of data to the Internet faster. Unlike download speeds, which determine how quickly a consumer receives the requested data, upload speeds need to be sufficiently fast to allow consumers to send data to the cloud. To that end, in considering upload speeds for mobile broadband, the upload threshold needs to be sufficient “to originate . . . high-quality . . . video telecommunications.”²⁵⁴ For smartphones to originate and stream video calls of at least 1080p resolution—a common resolution screen for smartphones²⁵⁵—3 Mbps allows for high-definition video conferencing on-the-go across several

²⁴⁹ 47 U.S.C. § 1302(d)(1).

²⁵⁰ Several different types of devices depend on mobile advanced telecommunications capability, such as smartwatches, tablets, hotspot devices, Internet of Things, and Internet services for cars. *See, e.g.*, T-Mobile, Plans and Devices, <https://www.t-mobile.com/cell-phones?INTNAV=tNav:Devices>; Samuel Greengard, *5G and IoT: Making Connections to Change the World*, Verizon (Dec. 1, 2022), <https://www.verizon.com/about/news/5g-iot-together-changing-our-world>; Tesla, Connectivity, <https://www.tesla.com/support/connectivity> (reselling mobile service as a premium service that allows security camera footage to be sent to the owner, video and music streaming within the car, live traffic visualization, and Internet browsing). While mobile uses are not just confined to a smartphone, smartphones are the ubiquitous use device, and the threshold for analysis must at least be sufficient to allow for high-quality usage of a smartphone. While mobile services need to be sufficiently advanced to support the ever evolving ecosystem of devices used by Americans, advanced telecommunications capability is not advanced if it cannot support advanced uses of smartphones, as over 85% of Americans now own a smartphone. Pew Research, Mobile Fact Sheet (Apr. 7, 2021), <https://www.pewresearch.org/internet/fact-sheet/mobile/>.

²⁵¹ A standard 5 MB high-quality photo, for example, would take just over a second to download at 35 Mbps: there are 8 bits to a byte; 5 megabytes (MB) is 40 megabits (mb). A download speed of 35 Mbps would download 5 MB (40 megabits) in just over 1 second. and the slower the download speed, the longer such downloads take. Receiving videos at high-definition resolutions, such as 4K or 1080p—consistent with high-quality data under the statute—can still require one to download a short video that can easily exceed 100 MB in size, and mobile broadband download speeds need to be commensurate with the ability to download such content to the smartphones that consumers have with them everywhere they go. Jack Schofield, *How Do I Shrink the Size of My Phone Videos?*, The Guardian (Mar. 5, 2020), <https://www.theguardian.com/technology/askjack/2020/mar/05/how-do-i-shrink-the-size-of-my-phone-videos> (noting the phone cameras are capable of ultra-high definition recordings but analyzing a 63-second video of 165MB). A 35 Mbps download speed allows that 100 MB video to download in less than 23 seconds.

²⁵² 47 U.S.C. § 1302(d)(1).

²⁵³ *See, e.g.*, 47 U.S.C. § 254(b)(2) (“Access to advanced telecommunications and information services should be provided in all regions of the Nation.”), (b)(3) (“Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.”).

²⁵⁴ 47 U.S.C. § 1302(d)(1).

²⁵⁵ 1920 x 1080 resolution displays or better are common in smartphones, but due to screen size, most manufacturers of high-end smartphones tend to not make these 4k screens. *See, e.g.*, Sydney Butler, *Why Don't Smartphones Have* (continued...)

software platforms at a frame rate of 24 frames per second²⁵⁶ or higher, depending on the platform.²⁵⁷ As a consequence, 3 Mbps allows for smooth origination of high-quality video telecommunications.²⁵⁸

75. For this Report, we focus on the providers' outdoor stationary coverage data for 5G-NR coverage, rather than in-vehicle 5G-NR coverage data. We recognize that providers are still in the process of deploying 5G-NR, and that this is our first Report analyzing the BDC data. The outdoor stationary coverage data—which typically shows broader coverage than in-vehicle data—will give us a better understanding of deployment of this technology today. We note, however, that as we look forward, we expect 5G-NR networks to continue to advance; as such, in other contexts (for example, in setting conditions for 5G-NR deployment in the 5G Fund),²⁵⁹ evaluating coverage using in-vehicle coverage maps may be appropriate in the future. Further, to provide a more complete picture of mobile deployment, we also evaluate provider-reported BDC coverage data for 5G-NR in-vehicle at speeds of 35/3 Mbps, 5G-NR outdoor stationary and in-vehicle at speeds of 7/1 Mbps, and 4G LTE outdoor stationary and in-vehicle at speeds of 5/1 Mbps in Appendix B-4.

b. Data Sources and Methodology

76. Under FCC Form 477 requirements for broadband deployment data, facilities-based providers of mobile wireless services were required to submit polygons indicating the minimum advertised upstream and downstream data speeds associated with that polygon, where the boundaries of that polygon represented the coverage area within which users should expect to receive those advertised speeds (or, if the provider did not advertise such speeds, the minimum upload and download data speeds

(Continued from previous page)

4k Screens Yet?, How To Geek (Feb. 22, 2022), <https://www.howtogeek.com/779368/why-dont-smartphones-have-4k-screens-yet/>.

²⁵⁶ 24 frames per second is the standard frame rate for cinema quality video. See Adobe, Frame Rate, <https://www.adobe.com/creativecloud/video/discover/frame-rate.html>.

²⁵⁷ See, e.g., Microsoft, Prepare Your Organization's Network for Microsoft Teams (Feb. 14, 2023), <https://learn.microsoft.com/en-us/microsoftteams/prepare-network> (“Teams is always conservative on bandwidth utilization and can deliver HD video quality in under 1.5Mbps. The actual bandwidth consumption in each audio/video call or meeting will vary based on several factors, such as video layout, video resolution, and video frames per second. When more bandwidth is available, quality and usage will increase to deliver the best experience.”). Microsoft observes that at least 1.5 Mbps upload speed is recommended and 4 Mbps upload is needed for best performance. See *id.* See also, e.g., Cisco, Webex, Help Center, What Are the Minimum Bandwidth Requirements for Sending and Receiving Video in Cisco Webex Meetings? (Oct. 31, 2023), <https://help.webex.com/en-us/article/WBX22158/What-are-the-Minimum-Bandwidth-Requirements-for-Sending-and-Receiving-Video-inCisco-Webex-Meetings?> FreeConference.com, What is Minimum Speed for Video Conferencing, <https://www.freeconference.com/blog/the-minimum-speed-required-for-video-conferencing/> (recommending 3 Mbps for high definition video conferencing); Zoom, Zoom System Requirements: iOS, iPadOS, And Android (Oct. 20, 2023), <https://support.zoom.us/hc/en-us/articles/201179966> (“For 720p HD video: 2.6 Mbps/1.8 Mbps (up/down); For 1080p HD video: 3.8 Mbps/3.0 Mbps (up/down).”); Vimeo, Video and Audio Compression Guidelines, <https://help.vimeo.com/hc/en-us/articles/12426043233169-Video-and-audio-compression-guidelines>.

²⁵⁸ The lowest upload speed that the Commission collects—1 Mbps—can lead to video telecommunications that are noticeably grainy and not “high quality” for an advanced experience. See, e.g., Microsoft, Prepare Your Organization's Network for Microsoft Teams (Feb. 14, 2023), <https://learn.microsoft.com/en-us/microsoftteams/prepare-network>; Cisco, Webex, Help Center, What Are the Minimum Bandwidth Requirements for Sending and Receiving Video in Cisco Webex Meetings? (Oct. 31, 2023), <https://help.webex.com/en-us/article/WBX22158/What-are-the-Minimum-Bandwidth-Requirements-for-Sending-and-Receiving-Video-inCisco-Webex-Meetings?>; FreeConference.com, What is Minimum Speed for Video Conferencing, <https://www.freeconference.com/blog/the-minimum-speed-required-for-video-conferencing/> (recommending 3 Mbps for high definition video conferencing); Zoom, Zoom System Requirements: iOS, iPadOS, And Android (Oct. 20, 2023), <https://support.zoom.us/hc/en-us/articles/201179966>.

²⁵⁹ See generally *5G Fund FNPRM*.

that users would expect to receive within the polygon).²⁶⁰ The FCC Form 477 instructions did not specify parameters that providers should use in their propagation models used to generate the projected coverage.²⁶¹ This allowed for two mobile providers with theoretically the exact same network deployment to file different coverage polygons with the Commission, leading to potential inconsistencies among mobile-provider coverage filings.

77. By contrast, the BDC has standardized certain factors that must be included in the mobile providers' propagation modeling, including requiring maps that represent specified speeds.²⁶² For example, for 5G-NR coverage, the BDC requires mobile broadband service providers to submit coverage data that indicate where mobile wireless users should expect to receive minimum user speeds of 7/1 Mbps with a cell edge probability of not less than 90% and cell loading of not less than 50%.²⁶³ And, the BDC also requires that a mobile provider report the assumptions that it relied on for its coverage modeling so that the Commission can better evaluate the modeled coverage.²⁶⁴ Importantly, the BDC also provides opportunities for consumers, State, local, and Tribal governmental entities, and other stakeholders to challenge the coverage and broadband service availability information reported to the FCC and depicted in the new maps. The Commission also has adopted verification and audit processes to ensure that the BDC data that a mobile provider submits are accurate, and coverage areas can be substantiated.²⁶⁵

78. We also supplement BDC data with Ookla's speed test data.²⁶⁶ FCC staff use data from these tests to calculate average upload and download speeds associated with U.S. geographic areas.²⁶⁷ We rely on the Ookla data to supplement our analysis primarily because they provide us with a large set of observations of actual speeds that customers receive.²⁶⁸ As the Commission has done previously, our

²⁶⁰ FCC Form 477, Instructions for Filings as of December 31, 2019-June 30, 2022 at 24-25, <https://usfcc.app.box.com/v/Form477InstThruJune2022>.

²⁶¹ See *id.* at 24-25, 31.

²⁶² Mobile broadband service providers submit separate coverage maps based upon standardized propagation modeling parameters for 3G, 4G LTE, and 5G-NR technologies. See Broadband Data Collection, Data Specifications for Biannual Submission of Subscription, Availability, and Supporting Data (Feb. 7, 2023), <https://us-fcc.app.box.com/v/bdc-availability-spec>.

²⁶³ See, e.g., *BDC Second Report and Order and Third Further Notice*, 35 FCC Rcd at 7479, para. 44. The maps also "must account for terrain and clutter and use terrain and clutter data with a resolution of 100 meters or better." 47 CFR § 1.7004(c)(3)(iii).

²⁶⁴ Compare FCC Form 477, Instructions for Filings as of December 31, 2019-June 30, 2022 at 24-25, 31, <https://usfcc.app.box.com/v/Form477InstThruJune2022> with Broadband Data Collection, Data Specifications for Biannual Submission of Subscription, Availability, and Supporting Data at 49-71 (Feb. 7, 2023), <https://us-fcc.app.box.com/v/bdc-availability-spec>.

²⁶⁵ See Broadband Data Collection, Data Specifications for Provider Infrastructure Data in the Challenge, Verification, and Audit Processes (December 21, 2023), <https://us-fcc.app.box.com/v/bdc-infrastructure-spec>; FCC, Broadband Data Collection, BDC System User Guide 242-47 (Sept. 20, 2023), <https://us-fcc.app.box.com/v/bdc-filer-user-guide>.

²⁶⁶ The data collected by the Ookla Speedtest mobile app include test results for download speed, upload speed, and latency, as well as other information, such as the location of the test and operating system of the handset. Ookla, Speedtest®, <https://www.speedtest.net/about> (last visited Jan. 19, 2024).

²⁶⁷ The Ookla data presented in this Report are based on tests that were executed in the second half of the year for 2020, 2021, and 2022 on the smartphone's cellular connection. Tests taken on 5G-NR networks were used to evaluate actual median speeds of at least 35/3 Mbps, tests taken on 5G-NR and 4G LTE networks were used to evaluate actual median speeds of at least 10/3 Mbps. FCC staff excluded test data that had missing GPS location data or a reported download or upload speed less than zero. Multiple tests by a single phone in the same locality and in the same day were averaged (using the median). All Ookla speed tests are user-initiated.

²⁶⁸ We note that, in general, crowd-sourced data can offer the advantage of generating a large volume of data at a very low cost, and of measuring actual consumer experience on a network in a wide variety of locations, indoor and
(continued....)

analysis of the service availability of mobile broadband services with a particular set of median speeds includes actual speed test data in counties with at least 300 test observations.²⁶⁹ The more densely populated counties have a higher likelihood of being included in this analysis because there generally are more observations in those geographical areas.²⁷⁰

c. Mobile Broadband Data

79. Figure 7 reports coverage for 5G-NR with a minimum speed of 35/3 Mbps.²⁷¹ Due to differences in the FCC Form 477 and FCC BDC data, as noted above, caution should be exercised when examining any changes between 2021 and 2022. At year-end 2022, approximately 91% of Americans lived in areas with 5G-NR coverage with minimum speeds of 35/3 Mbps, including approximately 64% of the population in rural areas, approximately 98% of the population in urban areas, and approximately 78% of the population in Tribal areas.

(Continued from previous page)

outdoor. Crowd-sourced data, however, often are not collected pursuant to statistical sampling techniques, and may require adjustments to construct a representative sample from the raw data. For instance, crowd-sourced mobile data come from a self-selected group of users, and there is often little control for most tests regarding such parameters as when people implement the test, whether the test is performed indoors or outdoors, the geographic location of the tester, and the vintage of the consumer's device. *2022 Communications Marketplace Report*, 37 FCC Rcd at 15705, para. 336 & n.969.

²⁶⁹ See *2022 Communications Marketplace Report*, 37 FCC Rcd at 15705-06, para. 336. This sample size threshold applies to each county for each time frame (2H2020, 2H2021, and 2H2022). If a county does not have at least 300 5G-NR observations during one of these time frames, the county is not included in the actual speed analysis for the period during which the number of observations falls below 300. The 300 observations threshold is a conservative threshold and is based on a general mean and median sample size analysis. We consider a county to have a sufficient sample size if there are at least 300 5G-NR observations in the second half of a given year, after the cleaning and trimming rules have been applied. County geography is assigned using the latitude and longitude coordinates that are collected during each Ookla speed test, via the device's GPS. This allows us to evaluate actual median upload and download speeds at the county level, in each year of the three-year time period, for counties in which approximately 80% to 92% of the U.S. population live (excluding the U.S. Territories). If an area has mobile broadband coverage with the minimum speeds in question, it is assigned the median upload and download speeds that are calculated for the county in which it is located.

²⁷⁰ Mobile wireless speeds vary both over time and over small local areas. Therefore, ascribing the median county Ookla speed to an entire county will sometimes overestimate or underestimate realized local speeds. Use of Ookla data alone would overestimate coverage as counties with only partial coverage would be represented as having 100% coverage.

²⁷¹ The analysis presented in Figure 7 includes the states and the District of Columbia. For analyses including U.S. Territories, see *infra* Appx. B-1 (reporting service availability of fixed terrestrial services at 100/20 Mbps, mobile 5G-NR with a minimum speed of 35/3 Mbps, and mobile 5G-NR with a median speed of 35/3 Mbps by state, District of Columbia, and U.S. Territory); Appx. B-6 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile 5G-NR with a minimum speed of 35/3 Mbps, and fixed terrestrial services at 100/20 Mbps and mobile 5G-NR with a median speed of 35/3 Mbps by state, District of Columbia, and U.S. Territory); Appx. B-7 (reporting the adoption rate of fixed terrestrial services in the United States and U.S. Territories); and Appx. B-8 and Appx. B-9 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile services at different speed tiers in the United States, with and without U.S. territories). For analyses involving Tribal Lands, see *infra* Appx. B-10 (reporting service availability of mobile 5G-NR with a minimum speed of 35/3 Mbps on Tribal Lands).

Fig. 7
Service Availability (Millions) of Mobile 5G-NR with a Minimum Speed of 35/3 Mbps²⁷²

| | 2020 | | 2021 | | 2022 | |
|-----------------------|---------|--------|---------|--------|---------|--------|
| | Pop. | % | Pop. | % | Pop. | % |
| United States | 237.475 | 72.1% | 321.790 | 97.0% | 303.330 | 91.0% |
| Rural Areas | 28.467 | 43.3% | 58.748 | 87.5% | 43.540 | 64.3% |
| Urban Areas | 209.008 | 79.3% | 263.041 | 99.3% | 259.791 | 97.8% |
| Tribal Areas | 2.308 | 56.5% | 3.603 | 88.9% | 3.145 | 77.8% |
| Pop. Evaluated | 329.491 | 100.0% | 331.894 | 100.0% | 333.288 | 100.0% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

80. Figure 8 reports the percentage of Americans living in the United States with mobile 5G-NR services at median speeds of at least 35/3 Mbps.²⁷³ At year-end 2022, approximately 98% of the population living in urban areas had access to 5G-NR services with a median speed of 35/3 Mbps, compared to approximately 71% of the population living in rural areas. Figure 8 does not reflect the service availability of 5G-NR at speeds of 35/3 Mbps across the entire United States; instead it reflects the percentage of the population living in counties with a sufficient number of Ookla speed tests such that we can evaluate the actual speeds of 35/3 Mbps.²⁷⁴ Further, the population within eligible counties is overlaid with coverage data from the FCC Form 477 and the FCC BDC data such that only the population living in areas where providers claim 5G-NR coverage with a minimum expected speed of 35/3 Mbps is counted towards the covered population figure.²⁷⁵

²⁷² The BDC requires filers to submit mobile broadband service availability coverage maps showing a minimum 90% cell edge probability of the designated speeds, whereas in years prior to 2022, FCC Form 477 required filers to submit coverage maps indicating the minimum advertised upload and download data speeds associated with the given network technology in the given frequency band. FCC, *Broadband Data Collection, Data Specifications for Biannual Submission of Subscription, Availability, and Supporting Data* at 50 (2023), <https://us-fcc.app.box.com/v/bdc-availability-spec>; FCC, *FCC Form 477 Local Telephone Competition and Broadband Reporting Instructions for Filings Through June 30, 2019* at 23 (2021), <https://us-fcc.app.box.com/v/Form477InstThruJune19>.

²⁷³ We present additional service availability data for mobile 5G-NR services at median speeds of at least 35/3 Mbps for each state, the District of Columbia, and U.S. Territory in Appx. B-1 (reporting service availability by state, the District of Columbia, and U.S. Territory).

²⁷⁴ The percentages in Figure 8 are higher than those in Figure 7 because we are not evaluating the population in counties that have fewer than 300 5G tests. This condition eliminates many rural and otherwise unserved counties.

²⁷⁵ The analysis in Figure 8 is based on Ookla data, and excludes any county for which there is insufficient Ookla data. Further, the population within eligible counties is overlaid with coverage data from FCC Form 477 and the FCC BDC such that only the population living in areas where providers claim 5G-NR coverage with a minimum expected speed of 35/3 Mbps is counted towards the covered population figure. The combination of a limited number of counties with 5G-NR Ookla data and the use of FCC 477 coverage data in 2021 leads to a very high percentage of the evaluated population in 2021 being classified as served in Figure 8. The subsequent decline in the percentage of the evaluated population with 5G-NR coverage with a median speed of 35/3 Mbps in 2022 is also related to the switch to BDC data and a greater number of counties meeting the minimum Ookla test threshold.

Fig. 8
Service Availability (Millions) of Mobile 5G-NR with a Median Speed of 35/3 Mbps (Ookla)²⁷⁶

| | 2020 | | 2021 | | 2022 | |
|-----------------------|---------|-------|---------|-------|---------|-------|
| | Pop. | % | Pop. | % | Pop. | % |
| United States | 209.080 | 79.0% | 288.126 | 98.4% | 286.315 | 93.9% |
| Rural Areas | 15.758 | 55.9% | 36.499 | 92.0% | 33.283 | 71.0% |
| Urban Areas | 193.322 | 81.8% | 251.627 | 99.4% | 253.032 | 98.0% |
| Pop. Evaluated | 264.520 | 80.3% | 292.861 | 88.2% | 304.974 | 91.5% |

Source: FCC Form 477 data; FCC BDC data; Ookla Speedtest data; Staff Block Estimates.

81. *Number of Mobile Service Providers.* As of December 31, 2022, there were three nationwide facilities-based providers of mobile broadband services. In addition, a new nationwide facilities-based provider has since entered the market.²⁷⁷ Besides these nationwide providers, there are many regional providers and smaller local providers offering service in a few geographical areas. Many Mobile Virtual Network Operators (MVNOs) and cable providers also offer mobile broadband services.

82. Figure 9 presents 5G-NR coverage by number of service providers.²⁷⁸ Approximately 91% of the population, 61% of road miles, and 25% of square miles were covered by at least one 5G-NR service provider at advertised speeds of 35/3 Mbps. In contrast, approximately 77% of the population, 38% of road miles, and 10% of square miles were covered by at least two 5G-NR service providers. Finally, approximately 48% of the population, 19% of road miles, and 3% of square miles were covered by at least three 5G-NR service providers.

Fig. 9
Estimated 5G-NR Coverage with a Minimum Speed of 35/3 Mbps (December 31, 2022)

| Geography | One or More Providers | Two or More Providers | Three or More Providers |
|-------------------|-----------------------|-----------------------|-------------------------|
| Area | 24.8% | 9.5% | 3.2% |
| Population | 91.0% | 76.8% | 48.0% |
| Road Miles | 60.5% | 37.7% | 19.0% |

Source: FCC BDC and 2020 Census data.

83. Figure 10 reports 5G-NR population coverage in rural and urban areas. At least one 5G-NR service provider covered almost 98% of the urban population and approximately 64% of the rural population. Further, at least two 5G-NR service providers covered approximately 88% of the urban population and approximately 33% of the rural population. Finally, at least three 5G-NR service providers covered approximately 58% of the urban population and 11% of the rural population.

²⁷⁶ We do not report results for Tribal lands in Figure 8 because we have concerns with the reliability of the Ookla data for these areas. Tribal areas not only typically have fewer speed tests, but there are also fewer of these areas relative to urban and rural areas. Thus, service availability estimates for Tribal areas are more sensitive to sample variance. The population figure reported in the bottom row of Figure 8 is the population evaluated for the reported time period, and the percentage is the percentage of the U.S. population evaluated. Figures that include service availability of 5G-NR services with a median speed of 35/3 Mbps show less than 100% of the population evaluated due to the unavailability of Ookla data in certain places as explained. Thus, for example, the 264.520 million population evaluated figure for 2020 in Figure 8 represents approximately 80% of the overall population in the 50 U.S. states and the District of Columbia.

²⁷⁷ As a result, we present information using up to three or more providers since the data we use is as of December 31, 2022.

²⁷⁸ See CTIA Comments at 8; WIA Comments at 1.

Fig. 10
Estimated 5G-NR Coverage with a Minimum Speed of 35/3 Mbps
in Rural and Urban Areas (December 31, 2022)

| Geography | One or More Providers | Two or More Providers | Three or More Providers |
|-------------------------|-----------------------|-----------------------|-------------------------|
| Population | 91.0% | 76.8% | 48.0% |
| Rural Population | 64.3% | 32.8% | 10.8% |
| Urban Population | 97.8% | 88.1% | 57.5% |

Source: FCC BDC and 2020 Census data.

84. Figure 11 reports 5G-NR population coverage in Tribal and non-Tribal areas. At least one 5G-NR service provider covered approximately 91% the population in non-Tribal areas and approximately 78% of the population in Tribal areas. Further, at least two 5G-NR service providers covered 77% of the population in non-Tribal areas and approximately 55% of the population in Tribal areas. Finally, at least three 5G-NR service providers covered approximately 48% of the population in non-Tribal areas and approximately 31% of the population in Tribal areas.

Fig. 11
Estimated 5G-NR Coverage with a Minimum Speed of 35/3 Mbps
in Tribal and Non-Tribal Areas (December 31, 2022)

| Geography | One or More Providers | Two or More Providers | Three or More Providers |
|------------------------------|-----------------------|-----------------------|-------------------------|
| Population | 91.0% | 76.8% | 48.0% |
| Non-Tribal Population | 91.2% | 77.1% | 48.2% |
| Tribal Population | 77.8% | 55.4% | 30.5% |

Source: FCC BDC and 2020 Census data.

3. Fixed and Mobile Broadband Data

85. Figure 12 shows service availability of fixed terrestrial services with speeds of at least 100/20 Mbps and 5G-NR mobile broadband services with a minimum speed of 35/3 Mbps.²⁷⁹ At year-end 2022, approximately 45 million Americans lacked access to both services. Service availability of 5G-NR services in rural areas significantly lagged behind the service availability in urban areas. While approximately 96% of Americans living in urban areas had access to fixed terrestrial services at 100/20 Mbps and mobile 5G-NR services at 35/3 Mbps, less than 50% of Americans living in rural areas had access to such services.

²⁷⁹ We present additional service availability data for fixed terrestrial and/or mobile broadband services in the appendices. See *infra* Appx. B-1 (reporting service availability of fixed terrestrial services at 100/20 Mbps, mobile 5G-NR with a minimum speed of 35/3 Mbps, and mobile 5G-NR with a median speed of 35/3 Mbps by state, District of Columbia, and U.S. Territory); Appx. B-6 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile 5G-NR with a minimum speed of 35/3 Mbps, and fixed terrestrial services at 100/20 Mbps and mobile 5G-NR with a median speed of 35/3 Mbps by state, District of Columbia, and U.S. Territory); Appx. B-8 and Appx. B-9 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile services at different speed tiers in the United States, with and without U.S. territories); Appx. B-11 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile services at different median speed tiers in the United States based on Ookla data); and Appx. B-3 (reporting service availability of fixed terrestrial and mobile services at different speed tiers in the U.S. Territories).

Fig. 12
Service Availability (Millions) of Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR
with a Minimum Speed of 35/3 Mbps

| | 2020 | | 2021 | | 2022 | |
|--|---------|--------|---------|--------|---------|--------|
| | Pop. | % | Pop. | % | Pop. | % |
| 100/20 Mbps and Mobile 5G-NR 35/3 Mbps | | | | | | |
| United States | 224.640 | 68.2% | 305.321 | 92.0% | 288.503 | 86.6% |
| Rural Areas | 20.181 | 30.7% | 46.103 | 68.7% | 33.736 | 49.8% |
| Urban Areas | 204.460 | 77.5% | 259.218 | 97.9% | 254.767 | 95.9% |
| Tribal Areas | 1.685 | 41.3% | 2.842 | 70.1% | 2.664 | 65.9% |
| 100/20 Mbps and Mobile 5G-NR 35/3 Mbps - Excluding Fixed Wireless | | | | | | |
| United States | 222.645 | 67.6% | 301.096 | 90.7% | 282.785 | 84.8% |
| Rural Areas | 18.883 | 28.7% | 42.900 | 63.9% | 29.896 | 44.1% |
| Urban Areas | 203.762 | 77.3% | 258.196 | 97.5% | 252.889 | 95.2% |
| Tribal Areas | 1.618 | 39.6% | 2.767 | 68.3% | 2.481 | 61.4% |
| Pop. Evaluated | 329.491 | 100.0% | 331.894 | 100.0% | 333.288 | 100.0% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

86. Figure 13 shows service availability of fixed terrestrial services at speeds of at least 100/20 Mbps and 5G-NR mobile broadband services with a median speed of 35/3 Mbps using Ookla mobile data. Including fixed wireless, service availability was approximately 96% in urban areas and 56% in rural areas. Excluding fixed wireless, service availability was approximately 96% in urban areas and 49% in rural areas.

Fig. 13
Service Availability (Millions) of Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR
with a Median Speed of 35/3 Mbps (Ookla)

| | 2020 | | 2021 | | 2022 | |
|--|---------|-------|---------|-------|---------|-------|
| | Pop. | % | Pop. | % | Pop. | % |
| 100/20 Mbps and Mobile 5G-NR 35/3 Mbps | | | | | | |
| United States | 202.224 | 76.4% | 278.414 | 95.1% | 274.424 | 90.0% |
| Rural Areas | 12.062 | 42.8% | 30.119 | 75.9% | 26.163 | 55.8% |
| Urban Areas | 190.163 | 80.5% | 248.295 | 98.1% | 248.261 | 96.2% |
| 100/20 Mbps and Mobile 5G-NR 35/3 Mbps - Excluding Fixed Wireless | | | | | | |
| United States | 201.036 | 76.0% | 275.401 | 94.0% | 269.607 | 88.4% |
| Rural Areas | 11.398 | 40.4% | 28.054 | 70.7% | 23.124 | 49.3% |
| Urban Areas | 189.638 | 80.3% | 247.347 | 97.7% | 246.483 | 95.5% |
| Pop. Evaluated | 264.520 | 80.3% | 292.861 | 88.2% | 304.974 | 91.5% |

Source: FCC Form 477 data; FCC BDC data; Ookla Speedtest data; Staff Block Estimates.

87. Figure 14 shows service availability of fixed terrestrial services for the United States, including U.S. territories, with speeds of at least 100/20 Mbps and 5G-NR broadband with a minimum speed of 35/3 Mbps.²⁸⁰ At year-end 2022, service availability in urban areas was significantly higher than

²⁸⁰ We present additional service availability data for 100/20 Mbps fixed terrestrial and/or mobile broadband services, including U.S. territories, in the appendices. See *infra* Appx. B-8 and Appx. B-9 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile services at different speed tiers, with and without U.S. Territories); Appx. B-12 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile 5G-NR with a minimum speed of 35/3 Mbps by state and county, including U.S. Territories); and Appx. B-13 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile 5G-NR with a minimum speed of 35/3 Mbps by state and county, segmented by urban and rural areas, including U.S. Territories)

service availability in rural areas, with service availability in Tribal areas falling somewhere in between. Including fixed wireless, service availability was approximately 96% in urban areas, approximately 66% in Tribal areas, and approximately 50% in rural areas. Excluding fixed wireless, service availability was approximately 95% in urban areas, approximately 61% in Tribal areas, and approximately 44% in rural areas.

Fig. 14

Service Availability (Millions) of Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps for the United States, Including U.S. Territories

| | 2020 | | 2021 | | 2022 | |
|--|---------|--------|---------|--------|---------|--------|
| | Pop. | % | Pop. | % | Pop. | % |
| 100/20 Mbps and Mobile 5G-NR 35/3 Mbps | | | | | | |
| United States | 224.645 | 67.5% | 308.660 | 92.0% | 291.746 | 86.6% |
| Rural Areas | 20.181 | 30.6% | 46.362 | 68.8% | 33.916 | 49.9% |
| Urban Areas | 204.464 | 76.6% | 262.298 | 97.8% | 257.830 | 95.9% |
| Tribal Areas | 1.685 | 41.3% | 2.842 | 70.1% | 2.664 | 65.9% |
| 100/20 Mbps and Mobile 5G-NR 35/3 Mbps - Excluding Fixed Wireless | | | | | | |
| United States | 222.650 | 66.9% | 303.997 | 90.6% | 285.699 | 84.8% |
| Rural Areas | 18.883 | 28.6% | 43.039 | 63.8% | 29.995 | 44.1% |
| Urban Areas | 203.766 | 76.3% | 260.958 | 97.3% | 255.704 | 95.1% |
| Tribal Areas | 1.618 | 39.6% | 2.767 | 68.3% | 2.481 | 61.4% |
| Pop. Evaluated | 333.018 | 100.0% | 335.530 | 100.0% | 336.881 | 100.0% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

88. Figure 15 shows service availability of fixed terrestrial services with speeds of at least 100/20 Mbps and 5G-NR broadband with a minimum speed of 35/3 Mbps on Tribal lands.²⁸¹ As of year-end 2022, Tribal lands in urban areas had higher service availability compared to Tribal lands in rural areas.

Fig. 15

Service Availability (Millions) on Tribal Lands of Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps

| Area | 2020 | | 2021 | | 2022 | |
|---------------------------------|-------|-------|-------|-------|-------|-------|
| | Pop. | % | Pop. | % | Pop. | % |
| Including Fixed Wireless | | | | | | |
| Tribal Lands | 1.685 | 41.3% | 2.842 | 70.1% | 2.664 | 65.9% |
| Rural Areas | 0.477 | 22.2% | 1.123 | 50.1% | 0.956 | 43.1% |
| Urban Areas | 1.208 | 62.4% | 1.719 | 95.1% | 1.708 | 93.6% |

²⁸¹ We present additional service availability data for 100/20 Mbps fixed terrestrial and/or mobile broadband services on tribal lands in the appendices. See *infra* Appx. B-14 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile 5G-NR with a minimum speed of 35/3 Mbps on tribal lands by state); Appx. B-15 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile 5G-NR with a minimum speed of 35/3 Mbps (in-vehicle) on tribal lands); Appx. B-16 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile 5G-NR with a minimum speed of 7/1 Mbps on tribal lands); Appx. B-17 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile 5G-NR with a minimum speed of 7/1 Mbps (in-vehicle) on tribal lands); Appx. B-18 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile 4G LTE with a minimum speed of 5/1 Mbps on tribal lands); and Appx. B-19 (reporting service availability of fixed terrestrial services at 100/20 Mbps and mobile 4G LTE with a minimum speed of 5/1 Mbps (in-vehicle) on tribal lands).

| Area | 2020 | | 2021 | | 2022 | |
|--|-------|--------|-------|--------|-------|--------|
| | Pop. | % | Pop. | % | Pop. | % |
| Alaska Native Village Statistical Areas | 0.095 | 35.3% | 0.133 | 49.0% | 0.098 | 36.3% |
| Rural Areas | 0.036 | 20.7% | 0.062 | 34.8% | 0.033 | 18.5% |
| Urban Areas | 0.059 | 62.0% | 0.071 | 76.2% | 0.065 | 69.4% |
| Federal Reservations | 0.271 | 24.7% | 0.539 | 49.5% | 0.467 | 44.2% |
| Rural Areas | 0.109 | 14.2% | 0.296 | 36.5% | 0.232 | 29.8% |
| Urban Areas | 0.163 | 48.8% | 0.242 | 87.7% | 0.235 | 84.8% |
| Hawaiian Home Lands | 0.010 | 28.5% | 0.030 | 88.3% | 0.031 | 89.8% |
| Rural Areas | 0.001 | 18.5% | 0.006 | 72.1% | 0.005 | 61.6% |
| Urban Areas | 0.009 | 30.8% | 0.024 | 93.6% | 0.026 | 98.7% |
| Tribal Statistical Areas | 1.309 | 48.8% | 2.140 | 80.5% | 2.068 | 77.1% |
| Rural Areas | 0.331 | 27.6% | 0.759 | 61.0% | 0.686 | 54.6% |
| Urban Areas | 0.978 | 66.1% | 1.381 | 97.8% | 1.382 | 96.9% |
| Excluding Fixed Wireless | | | | | | |
| Tribal Lands | 1.618 | 39.6% | 2.767 | 68.3% | 2.481 | 61.4% |
| Rural Areas | 0.416 | 19.4% | 1.059 | 47.2% | 0.793 | 35.7% |
| Urban Areas | 1.202 | 62.1% | 1.708 | 94.4% | 1.688 | 92.5% |
| Alaska Native Village Statistical Areas | 0.091 | 33.6% | 0.116 | 42.9% | 0.087 | 32.3% |
| Rural Areas | 0.032 | 18.2% | 0.047 | 26.2% | 0.023 | 13.1% |
| Urban Areas | 0.059 | 61.8% | 0.070 | 74.7% | 0.064 | 68.4% |
| Federal Reservations | 0.236 | 21.4% | 0.497 | 45.7% | 0.408 | 38.6% |
| Rural Areas | 0.077 | 10.0% | 0.264 | 32.5% | 0.187 | 24.0% |
| Urban Areas | 0.159 | 47.8% | 0.233 | 84.4% | 0.221 | 79.8% |
| Hawaiian Home Lands | 0.010 | 28.5% | 0.030 | 88.3% | 0.031 | 89.8% |
| Rural Areas | 0.001 | 18.5% | 0.006 | 72.1% | 0.005 | 61.6% |
| Urban Areas | 0.009 | 30.8% | 0.024 | 93.6% | 0.026 | 98.7% |
| Tribal Statistical Areas | 1.282 | 47.8% | 2.123 | 79.9% | 1.955 | 72.9% |
| Rural Areas | 0.306 | 25.5% | 0.743 | 59.7% | 0.578 | 46.0% |
| Urban Areas | 0.976 | 65.9% | 1.381 | 97.7% | 1.377 | 96.5% |
| Pop. Evaluated | 4.083 | 100.0% | 4.051 | 100.0% | 4.043 | 100.0% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

B. Affordability

89. If broadband is unaffordable, it is not effectively available, even if it has been physically deployed.²⁸² Far too many households across the country wrestle with how to pay for gas and groceries and also keep up with the broadband bill. We find that to truly close the connectivity gap and ensure that all Americans have access to advanced telecommunications capability, broadband services must be affordable. While income is not the only factor, 2023 data collected by the Pew Research Center indicated that adults with annual household incomes of \$30,000-\$69,999 per year were more than four times more likely not to subscribe to home broadband service than those with incomes of \$100,000 or more per year, and those with incomes less than \$30,000 per year were more than eight times more likely not to have home broadband service.²⁸³ Furthermore, the COVID-19 pandemic made clear the

²⁸² See Section II, *supra*.

²⁸³ Pew Research Center, *Internet, Broadband Fact Sheet* (Jan. 31, 2024),

<https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>. Further, a University of Kansas study

(continued....)

importance of obtaining affordable broadband. According to an EveryoneOn survey taken during the COVID-19 pandemic, 18% of households making \$50,000 or less lost broadband connectivity and 49% were on the brink of doing so due to an inability to pay.²⁸⁴

90. Determining whether broadband service is affordable, however, warrants thoughtful consideration. First, there is no consensus on how to define affordability. For example, the Cambridge Dictionary defines “affordability” as “the state of being cheap enough for people to be able to buy,”²⁸⁵ while economists have devised other definitions of affordability.²⁸⁶ Second, while the concept of broadband adoption is related to the concept of broadband affordability, the two concepts are not the same. For example, a household might have the income to afford broadband service, but choose not to subscribe because it does not have a need for the Internet or streaming video, or because broadband is not available. Alternatively, a household might subscribe to broadband even though it imposes significant financial hardship. Third, affordability is likely to vary not only with a household’s income, but also with

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 conducted between January 2021 and January 2022 found that cost is the top reason that respondents living in cities do not have broadband access at home. Donna Ginther et al., University of Kansas, *Broadband in Kansas: The Challenges of Digital Access and Affordability* at 24 (2023), <https://ipsr.ku.edu/broadband/BroadbandinKansas.pdf> (*Kansas Study*).

²⁸⁴ EveryoneOn, *Affordability and the Digital Divide*, at 5 (Dec. 2021), <https://static1.squarespace.com/static/5aa8af1fc3c16a54bcb0415/t/61ad7722de56262d89e76c94/1638758180025> (*EveryoneOn 2021*). See also Colleen McClain et al., Pew Research Center, *90% of Americans say the internet has been essential or important to them, many made video calls and 40% used technology in new ways. But while tech was a lifeline for some, others faced struggles* (Sept. 1, 2021), <https://www.pewresearch.org/internet/2021/09/01/the-internet-and-the-pandemic/> (survey finding that more than half of lower-income broadband users said they worried a lot or some about being able to pay for high-speed internet). For a description of the methodology used to determine lower income, see Pew Research Center, *53% of Americans Say the Internet Has Been Essential During the COVID-19 Outbreak*, (Apr. 30, 2020), at n.1, <https://www.pewresearch.org/internet/2020/04/30/53-of-americans-say-the-internet-has-been-essential-during-the-covid-19-outbreak/>.

²⁸⁵ Cambridge Dictionary, *Meaning of affordability in English* <https://dictionary.cambridge.org/us/dictionary/english/affordability> (last visited Jan. 10, 2024). Definitions of the related word “affordable” include “able to be afforded: having a cost that is not too high” and “[t]hat can be afforded (in various senses); (now usually) inexpensive, reasonably priced”. Merriam Webster Dictionary, *affordable*, <https://www.merriam-webster.com/dictionary/affordable> (last visited Jan. 10, 2024) and Oxford English Dictionary, *Oxford English Dictionary*, <https://www.oed.com/search/dictionary/?scope=Entries&q=affordable> (last visited Jan. 10, 2024).

²⁸⁶ Most economists’ definitions of affordability relate prices to income. Economists have defined affordability in a narrow sense as the ability of a household to purchase a specific bundle of necessary goods and service with the available disposable income. They have defined it more broadly as the ability to purchase such a bundle without having to constrain the consumption of other necessities. These concepts are difficult to translate into empirical measures. Indicators to approximate them include prices, the share of income needed to purchase a good or service, and the residual income left after expenses for a necessity. See generally Karen E. Hancock, “Can pay? Won’t pay?” or *Economic Principles of “Affordability,”* 30 *Urban Studies* 127 (1993). There have also been efforts to establish affordability thresholds. For example, in 1998, the U.S. Environmental Protection Agency (EPA) introduced an affordability threshold for the cost of water of 2.5% of median household income and uses it to vary policy interventions. Environmental Protection Agency, *Announcement of Small System Compliance Technology Lists for Existing National Primary Drinking Water Regulations and Findings Concerning Variance Technologies*, 63 *Fed. Reg.* 42032, at 42046 (Aug. 6, 1998). In housing, 30% of median income is often considered an affordability benchmark. Christopher Herbert, Alexander Hermann & Daniel McCue, *Joint Center for Housing Studies of Harvard University, Measuring Housing Affordability: Assessing the 30-Percent of Income Standard* at 2-3 (Dec. 2018), https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Herbert_Hermann_McCue_measuring_housing_affordability.pdf.

the choices and characteristics of the available broadband services (including the number of competing providers, the characteristics of the broadband offerings, and the price of such offerings), and the price of other goods and services the household consumes. In addition, whether a household adopts broadband service depends not only on its affordability but also on the household's preferences and other household characteristics.

91. In the *Notice*, we sought comment on whether affordability should be examined and how it could be defined and measured.²⁸⁷ Several commenters express general support for the Commission's universal service goals and suggest that an analysis of affordability should be dealt with in the universal service context.²⁸⁸ Other commenters contend that an analysis of affordability is beyond the legal scope of the Report.²⁸⁹ Other commenters emphasize the importance of developing a comprehensive understanding of affordability and note the relevance of price and affordability for broadband adoption.²⁹⁰ Commenters point out that a thorough assessment of affordability would require a comprehensive evidentiary basis using multiple indicators, such as the share of income needed to pay for broadband, the vulnerability of households to interruptions in subscriptions, and the total cost of broadband.²⁹¹ Commenters also allude to the need to examine these factors for income groups, geographies, and demographics.²⁹²

92. Two recent studies suggest that affordability is a barrier to broadband subscription for low-income households,²⁹³ and cost appears to be a primary obstacle.²⁹⁴ Other studies suggest that

²⁸⁷ *Notice*, at 22-24, paras. 54-57.

²⁸⁸ See, e.g., INCOMPAS Comments at 10-12; USTelecom Comments at 6-7; NCTA Comments at 11-12; and CTIA Reply Comments at 2-3.

²⁸⁹ See, e.g., ADTRAN Comments at 7-8; CTIA Comments at 21-24; Free State Foundation Comments at 19-22; US Telecom Comments at 5-7; TechFreedom Comments at 4-6; ACA Connects Comments at 6-8 and NCTA Comments at 7-9.

²⁹⁰ See, e.g., Benton Institute Comments at 6-7; OTI Comments at 9-11; Next Century Cities Comments at 6-7; NDIA Reply Comments at 3-4; and NRECA Comments at 9-10.

²⁹¹ See, e.g., Benton Institute Comments at 7-8. The Benton Institute encourages the Commission to establish a data collection program for affordability. It should be modeled after the Measuring Broadband America program and measure the following dimensions of affordability: prices by income, subscribed speeds by income, devices in household and the associated cost for purchases and maintenance, consistency and continuity of service each year, and discount information such as participation in Lifeline, ACP, and Internet Essentials. See OTI Comments at 9-11; NDIA Reply Comments at 4.

²⁹² See, e.g., Next Century Cities Comments at 2; NRECA Comments at 9-20; WTA Comments at 4.

²⁹³ See, e.g., National Telecommunications and Information Administration, *New Analysis Shows Offline Households are Willing to Pay \$10-a-Month on Average for Home Internet Service, Though Three in Four Say Any Cost is Too Much* (Oct. 6, 2022), <https://www.ntia.gov/blog/2022/new-analysis-shows-offline-households-are-willing-pay-10-month-average-home-internet>; Benton Institute Comments, Appendix A at 9-21.

²⁹⁴ See, e.g., National Telecommunications and Information Administration, *New Analysis Shows Offline Households are Willing to Pay \$10-a-Month on Average for Home Internet Service, Though Three in Four Say Any Cost is Too Much* (Oct. 6, 2022), <https://www.ntia.gov/blog/2022/new-analysis-shows-offline-households-are-willing-pay-10-month-average-home-internet>; *EveryoneOn 2021*, at 5 (survey finding that 40% of households making \$50,000 or less report being unable to pay anything for high-speed internet and 22% of them report being able to pay only \$25/month for it); Andrew Perrin, *Mobile Technology and Home Broadband 2021*, Pew Research Center (June 3, 2021), <https://www.pewresearch.org/internet/2021/06/03/mobile-technology-and-home-broadband-2021/> (finding that 45% of non-adopters "do not subscribe to high-speed internet at home . . . [because] the monthly cost of a subscription is too expensive"); Becky Chao & Claire Park, *The Cost of Connectivity 2020* at 10 (2020), https://d1y8sb8igg2f8e.cloudfront.net/documents/The_Cost_of_Connectivity_2020_XatkXnf.pdf; Benton Foundation 2019 at 65-66 (discussing multiple studies); Rafi Goldberg, National Telecommunications and Information Administration, *Unplugged: NTIA Survey Finds Some Americans Still Avoid Home Internet Use*,

(continued....)

affordability varies across different demographics and geographies.²⁹⁵ These studies suggest that the affordability of broadband depends on various household characteristics, including household income and expenditures, and the choices, product characteristics, and prices of not only broadband service but also the prices of other products and services that a household consumes. This suggests that a comprehensive analysis of affordability will require access to detailed and disaggregated data on broadband characteristics and prices, the prices of other household goods and services, and on various household characteristics – characteristics that are likely to vary with geography.

93. Given the lack of data and information in the record, in this Report, we necessarily limit ourselves to an initial analysis of some of the factors that affect affordability. We do not have sufficient data to draw detailed conclusions as to the general affordability of broadband service or its affordability for particular types of households. Specifically, we examine the level and variability of prices for fixed and mobile broadband service, the share of income used to pay for broadband for different income groups and geographies, and we present information on an example household.²⁹⁶

94. *Prices for Broadband.* Given we find above that full access to advanced telecommunications capabilities requires fixed and mobile service, we examine the costs of stand-alone and combined service. We also discuss the contribution of low-cost plans and of subsidy programs in improving affordability.

95. Figure 16 compares prices for telecommunications and Internet services with the chained Consumer Price Index for all Urban Consumers (chained CPI-U).²⁹⁷ Between December 2009 and 2023, prices for goods and services overall increased by approximately 37%. Prices for Internet services increased at a lower rate, by approximately 11%. However, in real, inflation-adjusted terms, prices for Internet services declined by approximately 19%. Prices for wireless telephone services decreased by approximately 25% (45% in inflation-adjusted prices). On the other hand, prices for landline telephone services increased faster than prices overall, by approximately 51% (10% in inflation-adjusted prices).

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<https://www.ntia.doc.gov/blog/2019/unplugged-ntia-survey-finds-some-americans-still-avoid-home-internet-use> (with respect to families with incomes of less than \$25,000/year) (last visited Feb. 14, 2024); John B. Horrigan & Maeve Duggan, Pew Research Center, Home Broadband 2015 at 15-18 (2015), <https://www.pewresearch.org/wp-content/uploads/sites/9/2015/12/Broadband-adoption-full.pdf>.

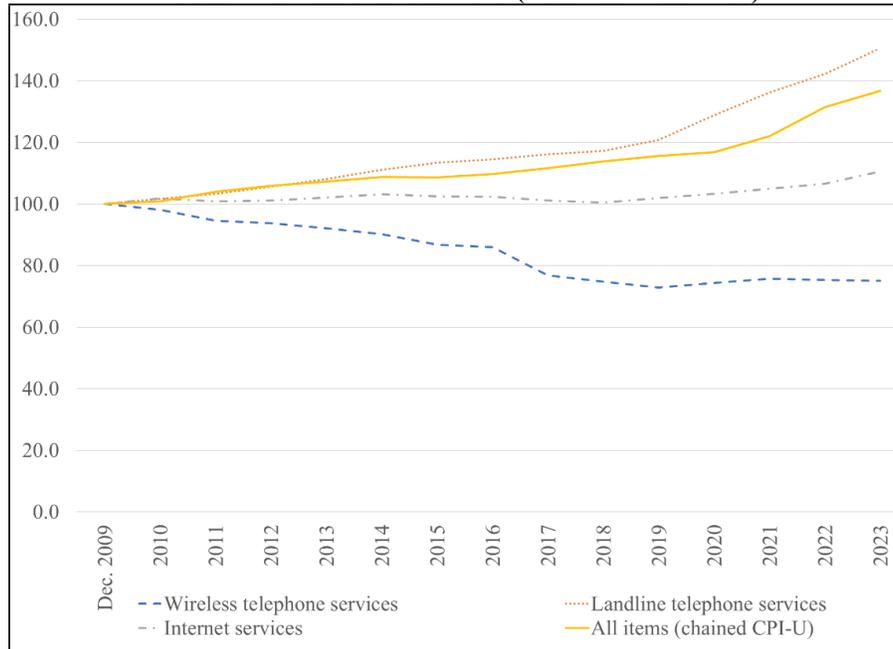
²⁹⁵ See, e.g., Kansas Study, discussed, *supra*. See also *EveryoneOn 2021*, discussed, *supra*.

²⁹⁶ To overcome data limitations, we explore several scenarios using an “example household” which is a hypothetical household with characteristics suitable for assessing affordability. For the purposes of our analysis, we assume that this household has an income of 200% of the federal poverty level, as this was one of the qualifying criteria for the Affordable Connectivity Program. To reflect variation in household sizes, we look at households with one to four members. To reflect price and income variation across geographies, we create example households for each census division and Alaska, which accommodates our use of the URS data. For one, two, three, and four member households in the 48 contiguous states and the District of Columbia, the 2023 federal poverty level for annual income is \$14,580, \$19,720, \$24,860, and \$30,000, respectively. In Alaska, the 2023 federal poverty level for one, two, three, and four member households is \$18,210, \$24,640, \$31,070, and \$37,500, respectively. The federal poverty income levels are then doubled and used to determine the share of income that households of varying size would have to spend on fixed and mobile internet access and for fixed and mobile service combined.

²⁹⁷ BLS, Databases, *Tables & Calculators by Subject*,

https://data.bls.gov/timeseries/CUUR0000SEED03?output_view=data (last visited Jan. 9, 2024); BLS, Databases, *Tables & Calculators by Subject*, https://data.bls.gov/timeseries/CUUR0000SEED04?output_view=data (last visited Jan. 9, 2024); BLS, Databases, *Tables & Calculators by Subject*, https://data.bls.gov/timeseries/CUUR0000SEED03?output_view=data (last visited Jan. 9, 2024); and BLS, Databases, *Tables & Calculators by Subject*, https://data.bls.gov/timeseries/SUUR0000SA0?output_view=data (last visited Jan. 9, 2024).

Fig. 16
Annual Consumer Price Indices for All Urban Consumers (CPI-U)
Telecommunications 2009-2023 (December 2009=100)



Source: BLS, *Databases, Tables & Calculators by Subject*, https://data.bls.gov/timeseries/CUUR0000SEED03?output_view=data (last visited Jan. 9, 2024); BLS, *Databases, Tables & Calculators by Subject*, https://data.bls.gov/timeseries/CUUR0000SEED04?output_view=data (last visited Jan. 9, 2024); BLS, *Databases, Tables & Calculators by Subject*, https://data.bls.gov/timeseries/CUUR0000SEEE03?output_view=data (last visited Jan. 9, 2024); and BLS, *Databases, Tables & Calculators by Subject*, https://data.bls.gov/timeseries/SUUR0000SA0?output_view=data (last visited Jan. 9, 2024).

96. The Commission currently collects price data in the Urban Rate Survey (URS).²⁹⁸ The URS collects advertised prices for undiscounted, residential fixed broadband.²⁹⁹ While the URS includes prices from across the United States, for many providers and for multiple speed tiers, it is not a comprehensive census of all fixed prices.³⁰⁰ The URS data only document prices for certain urban areas,³⁰¹ and even for the reported geographic areas, URS prices are not necessarily the ones faced by households due to differences in promotional pricing or service availability. We therefore use the URS data only to construct average prices for large areas, in line with its intended use in the Universal Service program to construct national average prices for speed tiers.³⁰²

97. For purposes of this Report, we use the 2024 URS, documenting prices for fixed broadband in December 2023, to examine fixed broadband prices. In addition, we use the same

²⁹⁸ FCC, *Urban Rate Survey Data & Resources* (Dec. 26, 2023), <https://www.fcc.gov/economics-analytics/industry-analysis-division/urban-rate-survey-data-resources>.

²⁹⁹ FCC, *2024 Urban Rate Survey – Fixed Broadband Service* (Dec. 26, 2023) <https://us-fcc.app.box.com/s/nm40qvqpeywxlgmtui31hkbwiunjqmxb> at 1.

³⁰⁰ *Id.*

³⁰¹ *Id.*

³⁰² *Id.*

methodology as in the International Broadband Data Report (IBDR)³⁰³ to collect mobile broadband prices for 27 representative service providers (both facilities based and MVNOs). We then use this price information to examine the share of income an example household at 200% of the 2023 federal poverty line—one of the thresholds used to determine whether a household qualifies for the Affordable Connectivity Program (ACP)—would need to spend to obtain fixed, mobile, and both fixed and mobile broadband.³⁰⁴

98. Figure 17 shows weighted summary statistics of the monthly fixed broadband Internet prices per household at the national-level and for the nine census divisions, Alaska, and Puerto Rico—census divisions are the smallest geographic unit for which the 2024 URS data are statistically representative.³⁰⁵ We include plans with unlimited capacity across three speed tiers: 25/3 Mbps; 100/20 Mbps; and 940/500 Mbps. Because prices vary depending on local conditions, such as population density and dispersion, difficulty of construction, technology, and the intensity of competition, both the mean and standard deviation of prices vary across census divisions. The high standard deviation points to the variability of prices within each geographic area. This suggests that across geographies, low-cost options are available, but it does not imply that such options are available at every location.³⁰⁶

Fig. 17
Monthly Fixed Broadband Internet Prices Per Household,
by Census Division and Speed Tier

| Download / Upload | Census Division/AK/PR | Mean (\$) | St.Dev. (\$) | Min. (\$) | Median (\$) | Max. (\$) | Count |
|-------------------|-----------------------|-----------|--------------|-----------|-------------|-----------|-------|
| 25/3 Mbps | New England | 83.83 | 17.25 | 30.00 | 87.00 | 112.00 | 62 |
| | Middle Atlantic | 86.24 | 17.26 | 15.00 | 87.00 | 160.39 | 298 |
| | East North Central | 69.63 | 24.39 | 14.95 | 79.99 | 139.99 | 354 |
| | West North Central | 42.94 | 24.93 | 14.95 | 30.00 | 111.50 | 340 |
| | South Atlantic | 78.71 | 17.39 | 14.95 | 79.99 | 144.94 | 390 |
| | East South Central | 67.14 | 20.46 | 14.95 | 79.99 | 95.00 | 128 |
| | West South Central | 81.59 | 10.50 | 25.00 | 80.41 | 129.99 | 125 |
| | Mountain | 66.70 | 25.58 | 14.95 | 55.00 | 150.00 | 215 |
| | Pacific Except Alaska | 77.22 | 13.26 | 14.95 | 79.99 | 185.00 | 232 |
| | Alaska | 131.38 | 14.02 | 60.00 | 129.99 | 159.00 | 199 |
| Puerto Rico | 77.08 | 48.01 | 29.99 | 49.99 | 149.00 | 226 | |
| National | 75.94 | 22.95 | 14.95 | 79.99 | 185.00 | 2569 | |
| 100/20 Mbps | New England | 105.38 | 22.77 | 39.95 | 109.99 | 188.96 | 173 |

³⁰³ 47 U.S.C. § 1303(b). The IBDR price collection considers discounts, promotions, and bundles for both fixed and mobile service, but because the IBDR is focused on international comparisons, the U.S. data are not collected at the level of granularity needed for the analysis in this Report. See *2022 Communications Marketplace Report*, 37 FCC Rcd at 16415, para. 96, Appx. G.

³⁰⁴ The calculation assumes that households subscribe to broadband for the entire household but obtain mobile broadband for each household member, taking advantage of multi-line discounts.

³⁰⁵ We use the sampling weights of the URS. A description of the URS weights can be found at FCC, *2024 Urban Rate Survey – Fixed Broadband Service* (Dec. 26, 2023) at 6, <https://us-fcc.box.com/s/nm4oqvqpeywxlgmtui31hkbwiunjmqxb>. In the fixed broadband URS, Alaska is separated from the Pacific census division and sampled in its own strata. FCC, *2024 Urban Rate Survey – Fixed Broadband Service* (Dec. 26, 2023) at 3-4, <https://us-fcc.box.com/s/nm4oqvqpeywxlgmtui31hkbwiunjmqxb>. By using census divisions, we lose information on the local variability of fixed broadband prices. However, the number of data points in the URS is too small to make statistically valid inferences for smaller geographic units.

³⁰⁶ See, e.g., Udit Paul, Vinothini Gunasekaran, Jiamo Liu, Tejas N. Narechania, Arpit Gupta, & Elizabeth Belding, *Decoding the Divide: Analyzing Disparities in Broadband Plans Offered by Major US ISPs*. arXiv: 2302.14216 (2023), <https://arxiv.org/abs/2302.14216>.

| Download / Upload | Census Division/AK/PR | Mean (\$) | St.Dev. (\$) | Min. (\$) | Median (\$) | Max. (\$) | Count |
|-------------------|-----------------------|-----------|--------------|-----------|-------------|-----------|-------|
| | Middle Atlantic | 104.49 | 24.96 | 30.00 | 109.99 | 186.39 | 738 |
| | East North Central | 98.94 | 28.45 | 30.00 | 99.99 | 185.76 | 657 |
| | West North Central | 81.41 | 25.63 | 30.00 | 79.00 | 148.50 | 607 |
| | South Atlantic | 101.78 | 25.85 | 15.00 | 107.00 | 315.00 | 780 |
| | East South Central | 97.50 | 20.58 | 41.95 | 99.99 | 119.99 | 168 |
| | West South Central | 100.35 | 25.21 | 15.00 | 100.51 | 159.99 | 340 |
| | Mountain | 74.43 | 33.44 | 30.00 | 72.75 | 139.99 | 162 |
| | Pacific Except Alaska | 99.03 | 23.83 | 30.00 | 99.99 | 127.76 | 297 |
| | Alaska | 184.99 | 1.10 | 179.99 | 184.99 | 199.00 | 125 |
| | Puerto Rico | 74.71 | 9.12 | 30.00 | 79.99 | 84.99 | 292 |
| National | 100.18 | 26.26 | 15.00 | 100.99 | 315.00 | 4339 | |
| 940/500 Mbps | New England | 231.10 | 92.14 | 69.95 | 300.00 | 350.00 | 72 |
| | Middle Atlantic | 206.21 | 93.09 | 69.95 | 180.00 | 350.00 | 272 |
| | East North Central | 203.15 | 107.49 | 69.99 | 255.00 | 1000.00 | 240 |
| | West North Central | 159.40 | 82.97 | 49.00 | 125.00 | 299.95 | 273 |
| | South Atlantic | 199.07 | 108.10 | 35.00 | 255.00 | 599.99 | 367 |
| | East South Central | 167.38 | 89.89 | 30.00 | 119.99 | 350.00 | 96 |
| | West South Central | 176.50 | 89.28 | 69.95 | 140.97 | 301.52 | 197 |
| | Mountain | 220.23 | 103.74 | 20.00 | 299.95 | 299.95 | 112 |
| | Pacific Except Alaska | 208.69 | 96.62 | 49.99 | 255.00 | 300.00 | 339 |
| | Alaska | - | - | - | - | - | 0 |
| Puerto Rico | 88.43 | 13.39 | 70.00 | 84.99 | 140.00 | 62 | |
| National | 197.85 | 99.46 | 20.00 | 240.00 | 1000.00 | 2030 | |

Source: FCC, Urban Rate Survey Data and Resources (Dec. 26, 2023), <https://www.fcc.gov/economics-analytics/industry-analysis-division/urban-rate-survey-data-resources>. The download/upload speed indicates that the advertised speed is between that speed and the higher tier (for example, 25/3 Mbps means advertised download/upload speed is at least 25/3 Mbps but not greater than 100/20 Mbps).

99. As noted above, we collect price information for 27 facilities-based service providers and MVNOs.³⁰⁷ Price information comes from manual data collection from providers’ websites, as of December 2023 and January 2024.³⁰⁸ Only plans that offered at least 30 GB of unthrottled data per month and line were considered,³⁰⁹ and we also collected information for both post-paid and pre-paid service

³⁰⁷ The sample includes 27 providers with extensive nationwide service either as a facilities based provider or an MVNO: AT&T, T-Mobile, Verizon, Consumer Cellular, Credo, Boost Mobile, Boost Infinite, Cricket, FreeUp, Gen Mobile, Good2Go, Google Fi, H2O Wireless, MetroPCS, Mint, Pure Talk, RedPocket, Simple Mobile, Straight Talk, Tello, Ting, Total by Verizon, US Cellular, US Mobile, Ultra Mobile, Visible, and Wing.

³⁰⁸ We use the following formula (that takes into account one-time and on-going fees) to calculate the average monthly rate:

$$Price_{24Month} = \frac{[(PromoPrice_1 * PromoDuration_1) + (PromoPrice_2 * PromoDuration_2) + NonPromoPrice * (24 - PromoDuration_1 - PromoDuration_2) + 24 * (AccessFee + MonthlyOtherFees - MonthlyRebate) + ActivationFee + OtherFees - Rebate]}{24}$$

See 2022 Communications Marketplace Report, 37 FCC Rcd at Appx. G, para. 102.

³⁰⁹ Reports on mobile data usage provide a range of estimates and tend to rely on an average. Ericsson estimates average mobile data use in North America for 2023 at 25.9 GB and expected use in 2024 at 32.4 GB per month. Ericsson, *Mobile Data Traffic Outlook* (Nov. 2023), <https://www.ericsson.com/en/reports-and-papers/mobility-report/dataforecasts/mobile-traffic-forecast> (see Figure 10); see also GSMA, *The Mobile Economy North America 2023*, at 16 (2023) (citing Ericsson’s projections), <https://www.gsma.com/mobileeconomy/wp-content/uploads/2023/09/260923-Mobile-Economy-North-America-2023.pdf>); CTIA, *2023 Annual Survey*

(continued....)

options. For comparability reasons, we exclude plans with device discounts, and only include plans that assume consumers bring their own devices. We also exclude provider discounts that may be inaccessible for low-income households.³¹⁰ Providers sometimes have multiple plans that meet our requirements for inclusion into the dataset. In those cases, we only include a provider's lowest priced plan or combination of plans that serve one, two, three, and four lines. Figure 18 summarizes the median, mean, minimum, and maximum prices for the cheapest available one, two-, three-, and four-line plans across the 27 providers sampled. Figure 18 reflects the overall price level and variance across the nation but does not imply that all plans are available in all locations. Cheaper plans with lower data caps are available in many locations for consumers with lower mobile data use.³¹¹

Fig. 18
Lowest Cost 30 GB Nationwide Mobile Plan Prices (Price per Line)

| | Mean (\$) | St. Dev. (\$) | Min. (\$) | Median (\$) | Max. (\$) |
|---------------------|-----------|---------------|-----------|-------------|-----------|
| 1 Line (\$) | 47.28 | 12.36 | 20.00 | 50.00 | 71.50 |
| 2 Lines (\$) | 43.47 | 11.66 | 20.00 | 40.00 | 65.00 |
| 3 Lines (\$) | 40.86 | 11.98 | 20.00 | 39.17 | 65.00 |
| 4 Lines (\$) | 39.29 | 12.24 | 20.00 | 38.02 | 64.00 |

Source: Statistics calculated over the lowest cost plan or combination of plans from each provider that provides unthrottled 30 GB 5G-NR service for specified number of lines. No discounts included other than introductory promotional offers. Staff data collection from providers' websites between Dec. 19, 2023 and Jan. 12, 2024.

100. *Income Shares Used to Subscribe to Broadband.* Whether a particular price is affordable also depends in part on the disposable income of a household.³¹² As a first step, this Report presents data on broadband expenses across income deciles (Figure 19) and on the burden of broadband on an example household with an income corresponding to 200% of the 2023 federal poverty level (Figure 20). Economic analysis suggests that affordability cannot be purely defined using a fixed percentage of

(Continued from previous page)

Highlights at 3 (2023), <https://api.ctia.org/wp-content/uploads/2023/11/2023-Annual-Survey-Highlights.pdf> (“Wireless data traffic is only expected to increase even more, as Ericsson predicts average monthly data use per smartphone to grow to 58 GB by 2028—more than 4x the 14 GB of monthly use per smartphone seen today.”). For the purposes of our analysis for this report, we have adopted a threshold of 30 GB per month, consistent with current advanced uses. 47 U.S.C. § 1302(d)(1); *2015 Report*, 30 FCC Rcd at 1390-91, paras. 19-23 (providing a legal analysis that these reports require an analysis of telecommunications capability that is “advanced”); *2016 Report*, 31 FCC Rcd at 705, para. 13. We therefore did not include plans that provided lower data limits at a lower price such as Twigby, TracFone, Reach Mobile, Unreal, and Spectrum, nor did we include providers that have no data component in their plans, like Textnow and Go Talk.

³¹⁰ We did not include any discounts for using auto-payments because these may be hard for low-credit scoring or unbanked households to claim. For some prepaid plans, a different rate might be available if one pays in advance for longer period of time. In those cases, we chose the prepaid plan with the shortest term period, in order not to exclude households with liquidity constraints. We also did not include any discounts for online purchase in order not to exclude households without internet service. Finally, we did not include any plans that also required a fixed Internet subscription from the provider.

³¹¹ For example, the one-line Verizon Unlimited prepaid plan is \$60 per month, while the one-line Verizon 15 GB prepaid plan is \$45 per month. Verizon, *Verizon Prepaid*, <https://www.verizon.com/plans/prepaid/> (last visited Feb. 12, 2024). Similarly, the one-line T-Mobile Unlimited prepaid plan is \$50 per month, while the one-line T-Mobile 10 GB prepaid plan is \$40 per month. T-Mobile, *T-Mobile Prepaid*, <https://prepaid.t-mobile.com/prepaid-plans> (last visited Feb. 12, 2024).

³¹² In 2016, the Commission directed the Wireline Competition Bureau “to measure the extent to which voice and broadband service expenditures exceeded two percent of low-income consumers’ disposable household income as compared to the next highest income group.” It stated that it did not intend to establish a presumption that this threshold distinguished affordable from non-affordable service. See *Lifeline and Link Up Reform and Modernization, et al.*, WC Docket No. 11-42 et al., Third Report and Order, Further Report and Order, and Order on Reconsideration, 31 FCC Rcd 3962, 4112, para. 408 (2016).

income, as incomes vary greatly.³¹³ However, evaluating the share of income spent is broadly informative of the degree of affordability and can be improved upon in future editions of this Report.

101. Figure 19 shows the median cost of fixed broadband as a share of household income,³¹⁴ differentiated for three speed tiers, by Census division. Differences in broadband prices and regional incomes translate into considerable variation even within speed tiers, particularly for the two lowest income deciles. For example, households at the 10th income percentile must spend between approximately 5% of their income in the Mountain Census Division and approximately 11% in Alaska for subscription to median-priced 100/20 Mbps broadband service. Households at the 20th percentile must spend between approximately 3% (Mountain) and approximately 6% (Alaska) for median-priced 100/20 Mbps broadband service.

Fig. 19
Median Fixed Broadband Internet Cost as a Share of Household Income,
by Census Division, Speed Tier, and Income Percentile

| Download/ Upload | Census Division/AK | Income Percentile | | | |
|---------------------|-----------------------|-------------------|------------------|------------------|------------------|
| | | 10 th | 20 th | 50 th | 90 th |
| 25/3 Mbps | New England | 6.0% | 3.1% | 1.2% | 0.4% |
| | Middle Atlantic | 6.7% | 3.4% | 1.3% | 0.4% |
| | East North Central | 6.2% | 3.3% | 1.4% | 0.5% |
| | West North Central | 2.1% | 1.2% | 0.5% | 0.2% |
| | South Atlantic | 6.0% | 3.2% | 1.3% | 0.5% |
| | East South Central | 7.6% | 4.0% | 1.6% | 0.6% |
| | West South Central | 6.5% | 3.5% | 1.4% | 0.5% |
| | Mountain | 3.6% | 2.0% | 0.9% | 0.3% |
| | Pacific Except Alaska | 5.1% | 2.7% | 1.1% | 0.4% |
| | Alaska | 7.6% | 4.1% | 1.8% | 0.7% |
| 100/20 Mbps | New England | 7.5% | 3.9% | 1.5% | 0.5% |
| | Middle Atlantic | 8.5% | 4.3% | 1.7% | 0.6% |
| | East North Central | 7.8% | 4.1% | 1.7% | 0.6% |
| | West North Central | 5.6% | 3.1% | 1.3% | 0.5% |
| | South Atlantic | 8.0% | 4.2% | 1.8% | 0.6% |
| | East South Central | 9.5% | 5.1% | 2.0% | 0.7% |
| | West South Central | 8.2% | 4.4% | 1.8% | 0.6% |
| | Mountain | 4.7% | 2.6% | 1.1% | 0.4% |
| | Pacific Except Alaska | 6.4% | 3.3% | 1.3% | 0.5% |
| | Alaska | 10.8% | 5.8% | 2.6% | 1.1% |
| 940/500 Mbps | New England | 20.5% | 10.6% | 4.1% | 1.5% |
| | Middle Atlantic | 14.0% | 7.0% | 2.7% | 0.9% |
| | East North Central | 19.8% | 10.4% | 4.4% | 1.6% |
| | West North Central | 8.9% | 4.8% | 2.1% | 0.8% |
| | South Atlantic | 19.0% | 10.1% | 4.2% | 1.5% |
| | East South Central | 11.4% | 6.1% | 2.4% | 0.9% |

³¹³ See Karen E. Hancock. "Can pay? Won't pay?" or *Economic Principles of "Affordability,"* 30 *Urban Studies* 127 (1993).

³¹⁴ We use income deciles from the American Community Survey 1-Year 2022 Public Use Microdata Sample. United States Census Bureau, *Explore Data*, <https://data.census.gov/mdat/#/> (last visited Jan. 9, 2024). Income has been adjusted into 2023 dollars by the Chained Consumer Price Index For All Urban Consumers, using the inflation rate from December 2022 to December 2023. BLS, *BLS Data Viewer*, <https://beta.bls.gov/dataViewer/view/timeseries/SUUR0000SA0> (last visited Jan. 12, 2024).

| Download/ Upload | Census Division/AK | Income Percentile | | | |
|---------------------|-----------------------|-------------------|------------------|------------------|------------------|
| | | 10 th | 20 th | 50 th | 90 th |
| | West South Central | 11.5% | 6.2% | 2.5% | 0.9% |
| | Mountain | 19.5% | 10.9% | 4.7% | 1.8% |
| | Pacific Except Alaska | 16.3% | 8.5% | 3.4% | 1.2% |
| | Alaska | - | - | - | - |

Source: FCC, Urban Rate Survey Data and Resources (Dec. 26, 2023), <https://www.fcc.gov/economics-analytics/industry-analysis-division/urban-rate-survey-data-resources>; United States Census Bureau, Explore Data, <https://data.census.gov/mdat/#/> (last visited Jan. 9, 2024); and BLS, *BLS Data Viewer*, <https://beta.bls.gov/dataViewer/view/timeseries/SUUR0000SA0> (last visited Jan. 12, 2024). We note that there is no 940/500 Mbps plan in Alaska.

102. Figure 20 shows the share of income that example households of varying size would have to spend for fixed, mobile, and both fixed and mobile broadband, assuming that fixed broadband is obtained for the entire household and that all individuals in the household have mobile broadband.³¹⁵ Income shares are calculated by census division—with Alaska separated as in the URS—for households at 200% of the 2023 federal poverty level, based on the U.S. Department of Health and Human Services 2023 poverty guidelines. Figure 20 shows wide regional variation in the share of income that households would have to spend on broadband. In addition, the income share varies with the size of the household. For example, one-member households require between approximately 3% and 6% of their income for both fixed and mobile broadband, while four-member households require between approximately 4% and 5% of their income for both fixed and mobile broadband.

103. During the pandemic, Congress acted to help close the broadband affordability gap, establishing the \$3.2 billion Emergency Broadband Benefit Program as part of the Consolidated Appropriations Act, 2021, under which eligible low-income households could receive a discount off the cost of broadband service and certain connected devices during an emergency period relating to the COVID-19 pandemic, and participating providers could receive a reimbursement for such discounts.³¹⁶ The Infrastructure Act³¹⁷ then extended the program beyond the emergency period, changed the name to the ACP, and appropriated an additional \$14.2 billion for the ACP, which changed the monthly support amount but maintains a monthly discount and the one-time connected device reimbursement.³¹⁸ However, due to the projected depletion of funding for the ACP in April 2024, the Commission has begun the process of winding down the program, absent further congressional funding to continue this unprecedentedly successful program.³¹⁹ The wind-down process includes an enrollment freeze, which

³¹⁵ The weighted median monthly price of fixed broadband is for service at advertised speeds of at least 25/3 Mbps but not greater than 100/20 Mbps, as shown in Figure 17. The median monthly price of wireless is derived from the data collection conducted by FCC staff in December 2023 and January 2024 as shown in Figure 18.

³¹⁶ Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, div. N, tit. IX, § 904(i), 134 Stat. 1182, 2130, 2135 (2020); *Emergency Broadband Benefit Program*, WC Docket No. 20-445, Report and Order, 36 FCC Rcd 4612 (2021).

³¹⁷ Infrastructure Act, div. F, tit. V, § 60502(a), 135 Stat. at 1238; *id.*, div. J, tit. IV, 135 Stat. at 1382 (appropriating \$14.2 billion to the Commission for the ACP).

³¹⁸ The ACP launched on December 31, 2021, and the Emergency Broadband Benefit Program ceased accepting new enrollments on December 30, 2021. *Emergency Broadband Benefit Program*, WC Docket Nos. 20-445, 21-450, Order, 36 FCC Rcd 16484 (WCB 2021); Press Release, FCC, FCC Launches Affordable Connectivity Program, (Dec. 31, 2021), <https://docs.fcc.gov/public/attachments/DOC-378908A1.pdf>. The Commission adopted final ACP rules in January 2022. *Affordable Connectivity Program, Emergency Broadband Benefit Program*, WC Docket Nos. 21-450, 20-445, Report and Order and Further Notice of Proposed Rulemaking, 37 FCC Rcd 484 (2022) (*ACP Report and Order and Further Notice*).

³¹⁹ See *Affordable Connectivity Program*, WC Docket No. 21-450, Order, DA 24-23 (WCB Jan. 11, 2024) (setting out requirements and procedures for ending the ACP due to lack of funding) (*ACP Wind-Down Order*). See also

(continued....)

went into effect on February 8, 2024.³²⁰ At the time ACP enrollments stopped, there were over 23 million households benefiting from the ACP.³²¹ In Figure 20, we consider the effect of ACP and Lifeline subsidies on the share of income spent on broadband for example households of varying size with an income of 200% of the federal poverty level.³²² Taking ACP and Lifeline subsidies into account, a one-member household required between approximately 2% and 5% of their income for both fixed and mobile broadband, while four-member households required between approximately 3% and 4% of their income for both fixed and mobile broadband.

Fig. 20
Estimated Expense of Fixed and Mobile Broadband as a Share of Household Income (at 200% Federal Poverty Level), by Census Division and Household Size

| Division | Household Size | Median Monthly Price of Fixed | Median Monthly Price of Mobile | Monthly Household Income at 200% of FPL | Income Share Spent on Fixed | Income Share Spent on Mobile | Income Share Spent on Both | Income Share Spent on Both, Minus ACP | Income Share Spent on Both, Minus ACP and Lifeline |
|--------------------|----------------|-------------------------------|--------------------------------|---|-----------------------------|------------------------------|----------------------------|---------------------------------------|--|
| New England | 1 | \$87.00 | \$50.00 | \$2,430 | 3.6% | 2.1% | 5.6% | 4.4% | 4.0% |
| | 2 | \$87.00 | \$80.00 | \$3,287 | 2.6% | 2.4% | 5.1% | 4.2% | 3.9% |
| | 3 | \$87.00 | \$117.50 | \$4,143 | 2.1% | 2.8% | 4.9% | 4.2% | 4.0% |
| | 4 | \$87.00 | \$152.08 | \$5,000 | 1.7% | 3.0% | 4.8% | 4.2% | 4.0% |
| Middle Atlantic | 1 | \$87.00 | \$50.00 | \$2,430 | 3.6% | 2.1% | 5.6% | 4.4% | 4.0% |
| | 2 | \$87.00 | \$80.00 | \$3,287 | 2.6% | 2.4% | 5.1% | 4.2% | 3.9% |
| | 3 | \$87.00 | \$117.50 | \$4,143 | 2.1% | 2.8% | 4.9% | 4.2% | 4.0% |
| | 4 | \$87.00 | \$152.08 | \$5,000 | 1.7% | 3.0% | 4.8% | 4.2% | 4.0% |
| East North Central | 1 | \$79.99 | \$50.00 | \$2,430 | 3.3% | 2.1% | 5.3% | 4.1% | 3.7% |
| | 2 | \$79.99 | \$80.00 | \$3,287 | 2.4% | 2.4% | 4.9% | 4.0% | 3.7% |
| | 3 | \$79.99 | \$117.50 | \$4,143 | 1.9% | 2.8% | 4.8% | 4.0% | 3.8% |
| | 4 | \$79.99 | \$152.08 | \$5,000 | 1.6% | 3.0% | 4.6% | 4.0% | 3.9% |
| West North Central | 1 | \$30.00 | \$50.00 | \$2,430 | 1.2% | 2.1% | 3.3% | 2.1% | 1.7% |
| | 2 | \$30.00 | \$80.00 | \$3,287 | 0.9% | 2.4% | 3.3% | 2.4% | 2.2% |
| | 3 | \$30.00 | \$117.50 | \$4,143 | 0.7% | 2.8% | 3.6% | 2.8% | 2.6% |
| | 4 | \$30.00 | \$152.08 | \$5,000 | 0.6% | 3.0% | 3.6% | 3.0% | 2.9% |
| South Atlantic | 1 | \$79.99 | \$50.00 | \$2,430 | 3.3% | 2.1% | 5.3% | 4.1% | 3.7% |
| | 2 | \$79.99 | \$80.00 | \$3,287 | 2.4% | 2.4% | 4.9% | 4.0% | 3.7% |
| | 3 | \$79.99 | \$117.50 | \$4,143 | 1.9% | 2.8% | 4.8% | 4.0% | 3.8% |
| | 4 | \$79.99 | \$152.08 | \$5,000 | 1.6% | 3.0% | 4.6% | 4.0% | 3.9% |
| East South Central | 1 | \$79.99 | \$50.00 | \$2,430 | 3.3% | 2.1% | 5.3% | 4.1% | 3.7% |
| | 2 | \$79.99 | \$80.00 | \$3,287 | 2.4% | 2.4% | 4.9% | 4.0% | 3.7% |
| | 3 | \$79.99 | \$117.50 | \$4,143 | 1.9% | 2.8% | 4.8% | 4.0% | 3.8% |
| | 4 | \$79.99 | \$152.08 | \$5,000 | 1.6% | 3.0% | 4.6% | 4.0% | 3.9% |
| West South | 1 | \$80.41 | \$50.00 | \$2,430 | 3.3% | 2.1% | 5.4% | 4.1% | 3.8% |
| | 2 | \$80.41 | \$80.00 | \$3,287 | 2.4% | 2.4% | 4.9% | 4.0% | 3.7% |

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Wireline Competition Bureau Announces the Final Month of the Affordable Connectivity Program, WC Docket No. 21-450, Public Notice, DA 24-195 (WCB Mar. 4, 2024) (*ACP Final Month Public Notice*).

³²⁰ *ACP Wind-Down Order*, DA 24-23, at 8, para. 21. See also *Wireline Competition Bureau Reminder of February 8, 2024 Enrollment Freeze for the Affordable Connectivity Program*, WC Docket No. 21-450, Public Notice, DA 24-103, (Feb. 6, 2024).

³²¹ Universal Service Administrative Service Company, *ACP Enrollment and Claims Tracker* (Feb. 13, 2024), <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#total-enrolled> (Total Households at Enrollment Freeze).

³²² The Lifeline program, the Emergency Broadband Benefit (EBB) during the COVID-19 pandemic, and the ACP are discount programs designed to make broadband subscriptions more affordable. The ACP subsidy is up to \$30 per household, per month (up to \$75 per month for households on qualifying Tribal lands), and the Lifeline subsidy is up to \$9.25 per household, per month (up to \$34.25 per month for eligible subscribers on Tribal lands). 47 U.S.C. § 1752(a)(7)(A) (establishing benefit amount for ACP); and FCC, *Lifeline Support for Affordable Communications* (Sept. 19, 2023), <https://www.fcc.gov/lifeline-consumers>.

| Division | Household Size | Median Monthly Price of Fixed | Median Monthly Price of Mobile | Monthly Household Income at 200% of FPL | Income Share Spent on Fixed | Income Share Spent on Mobile | Income Share Spent on Both | Income Share Spent on Both, Minus ACP | Income Share Spent on Both, Minus ACP and Lifeline |
|-----------------------|----------------|-------------------------------|--------------------------------|---|-----------------------------|------------------------------|----------------------------|---------------------------------------|--|
| Central | 3 | \$80.41 | \$117.50 | \$4,143 | 1.9% | 2.8% | 4.8% | 4.1% | 3.8% |
| | 4 | \$80.41 | \$152.08 | \$5,000 | 1.6% | 3.0% | 4.6% | 4.0% | 3.9% |
| Mountain | 1 | \$55.00 | \$50.00 | \$2,430 | 2.3% | 2.1% | 4.3% | 3.1% | 2.7% |
| | 2 | \$55.00 | \$80.00 | \$3,287 | 1.7% | 2.4% | 4.1% | 3.2% | 2.9% |
| | 3 | \$55.00 | \$117.50 | \$4,143 | 1.3% | 2.8% | 4.2% | 3.4% | 3.2% |
| | 4 | \$55.00 | \$152.08 | \$5,000 | 1.1% | 3.0% | 4.1% | 3.5% | 3.4% |
| Pacific Except Alaska | 1 | \$79.99 | \$50.00 | \$2,430 | 3.3% | 2.1% | 5.3% | 4.1% | 3.7% |
| | 2 | \$79.99 | \$80.00 | \$3,287 | 2.4% | 2.4% | 4.9% | 4.0% | 3.7% |
| | 3 | \$79.99 | \$117.50 | \$4,143 | 1.9% | 2.8% | 4.8% | 4.0% | 3.8% |
| | 4 | \$79.99 | \$152.08 | \$5,000 | 1.6% | 3.0% | 4.6% | 4.0% | 3.9% |
| Alaska | 1 | \$129.99 | \$50.00 | \$3,035 | 4.3% | 1.6% | 5.9% | 4.9% | 4.6% |
| | 2 | \$129.99 | \$80.00 | \$4,107 | 3.2% | 1.9% | 5.1% | 4.4% | 4.2% |
| | 3 | \$129.99 | \$117.50 | \$5,178 | 2.5% | 2.3% | 4.8% | 4.2% | 4.0% |
| | 4 | \$129.99 | \$152.08 | \$6,250 | 2.1% | 2.4% | 4.5% | 4.0% | 3.9% |

Source: The column “Income Share Spent on Both, Minus ACP” is based on \$30 of support. The column “Income Share Spent on Both, Minus ACP and Lifeline” is based on \$30 ACP support and \$9.25 Lifeline support. United States Department of Health and Human Services, Annual Update of the HHS Poverty Guidelines, 88 Fed. Reg. 3424 (January 19, 2023); FCC, Urban Rate Survey Data and Resources (Dec. 26, 2023), <https://www.fcc.gov/economics-analytics/industry-analysis-division/urban-rate-survey-data-resources>; and FCC staff mobile pricing data collection from Dec. 19, 2023 and Jan. 12, 2024.

104. Given the overall lack of data and information in the record, as noted above, we necessarily limit ourselves to an initial analysis of some of the factors that affect affordability. We do not have sufficient data, however, to draw any conclusions as to the general affordability of broadband service or its affordability for particular types of households. We believe that more comprehensive data are necessary for us to make any definitive conclusions about the number of households for which broadband remains unaffordable. We nevertheless find available affordability data to be instructive and intend to use these data to inform development of Commission policy. We plan to revisit affordability in future section 706 inquiries.

C. Adoption

105. In this section, we examine the universal service goal of broadband adoption. As a general matter, we consider our goal of universal adoption to be a universal lack of barriers to adoption other than service availability and service affordability – not 100% adoption. Such barriers most notably include the affordability of devices used to access broadband services (including those used by people with disabilities), the lack of information about programs that make broadband services more affordable, such as the ACP, and digital literacy.

106. Our previous section discussing affordability suggested that broadband remains unaffordable for far too many Americans. Adoption, however, is not the same as affordability. Some households that have the income to afford broadband may choose not to subscribe due to a lack of information, lack of digital literacy, or because they cannot afford to purchase a device to access broadband service.³²³

107. For purposes of this inquiry, we consider access to devices used to connect to broadband to be an adoption-related matter. Even if broadband service is affordable, consumers may not find it

³²³ We agree with NCTA that many issues can affect broadband adoption and discuss two of the issues that USTelecom raises (lack of access to devices and lack of digital skills) in our discussion of Adoption. See USTelecom Comments at 7. Further, as stated above, we also acknowledge the third example given by USTelecom (“relevance”) in explaining how our evaluation of adoption is not necessarily premised on a goal of 100% adoption. See *id.*

useful to adopt it if the devices used to connect to it are too expensive for potential subscribers. For example, 37% of non-broadband users in a Pew Research Center survey stated that the cost of a computer is a reason that they do not subscribe.³²⁴ The ACP's up-to-\$100 device subsidy, available in certain circumstances,³²⁵ can certainly play a role in reducing this barrier to adoption,³²⁶ but it is unclear the extent to which it fully and universally solves the problem. Further, programs such as the ACP are only effective if potential subscribers know about them. Congress recognized this issue in 2021 when authorizing the Commission to provide grants to ACP outreach partners,³²⁷ a program that the Commission continued to implement until the enrollment freeze on February 8, 2024 stopped grant-funded outreach activities consistent with wind-down procedures.³²⁸ As we discuss in detail below, during the duration of the ACP, the Commission has conducted its own significant ACP awareness programs, both directly and through partners.³²⁹

108. Lack of digital literacy can also be a barrier to adoption.³³⁰ The National Digital Inclusion Alliance has stated that digital literacy and cost are the greatest barriers to broadband adoption.³³¹ We note that the Digital Equity Act, enacted as part of the Infrastructure Act, provides for State Digital Equity Capacity Grants that are to include State Digital Equity Plans in their applications with measurable objectives for promoting, among other things, digital literacy,³³² a grant program that we will follow with interest.

109. Against this background, we analyze the Commission's broadband adoption data, recognizing that each of these factors plays a role in why someone with theoretically affordable broadband physically deployed to them might not subscribe. Due to our current lack of data regarding these barriers to adoption, we analyze these data primarily as an indicator of potential barriers to adoption.

³²⁴ Andrew Perrin, Pew Research Center, *Mobile Technology and Home Broadband 2021* (June 3, 2021), <https://www.pewresearch.org/internet/2021/06/03/mobile-technology-and-home-broadband-2021/>.

³²⁵ See 47 CFR § 54.1803(b).

³²⁶ The ACP provides a one-time discount of up to \$100 for a laptop, desktop, or tablet per household, provided that the household contributes more than \$10 but less than \$50 toward the cost of the device. 47 U.S.C. § 1752(b)(5); *ACP Report and Order and Further Notice* at 65, para. 136.

³²⁷ See 47 U.S.C. § 1752(b)(10)(C)(ii)(IV).

³²⁸ See, e.g., *Affordable Connectivity Program*, WC Docket No. 21-450, Second Report and Order, 37 FCC Rcd 9928 (2022) (*ACP Second Report and Order*); *Affordable Connectivity Program*, WC Docket No. 21-450, Third Report and Order, 37 FCC Rcd 9989 (2022) (*ACP Third Report and Order*). WCB announced in its wind-down order dated January 11, 2024, that grant-funded outreach will cease concurrent with a freeze in ACP enrollments. *ACP Wind-Down Order*, DA 24-23, at 10-11, para. 27.

³²⁹ See Section IV.D, *infra*.

³³⁰ In addition to USTelecom, Next Century Cities also observes that lack of digital literacy can prevent broadband adoption. Next Century Cities Comments at 7. See also Kevin Schwartzbach, Rockefeller Institute of Government, *Addressing Digital Literacy and Other Reasons for Non-Adoption of Broadband* (July 8, 2022), <https://rockinst.org/blog/addressing-digital-literacy-and-other-reasons-for-non-adoption-of-broadband/>; Congressional Research Service, *State Broadband Initiatives: Selected State and Local Approaches as Potential Models for Federal Initiatives to Address the Digital Divide*, ii (Apr. 6, 2020), <https://crsreports.congress.gov/product/pdf/R/R46307>.

³³¹ *Empowering and Connection Communities Through Digital Equity and Internet Adoption: Hearing Before the Subcomm. on Comm'n's and Tech, 116th Cong. 2 (2020)* (Written Testimony of Angela Siefer, Executive Director, National Digital Inclusion Alliance), <https://docs.house.gov/meetings/IF/IF16/20200129/110416/HHRG-116-IF16-Wstate-SieferA-20200129.pdf>.

³³² See Infrastructure Act, div. F, tit. III, § 60304(c)(1)(B)(iii), 135 Stat. at 1214.

110. Our assessment of adoption of fixed terrestrial broadband services in the United States from 2018 to 2021 is based upon FCC Form 477 subscriber/connection data collected at the census tract level, and FCC Form 477 deployment data collected at the census block level. The assessment of adoption of broadband services in 2022 is based upon the same tract-level FCC Form 477 connection data, and FCC BDC service availability data that are collected at a location-by-location level based on the Broadband Serviceable Locations identified in the December 2022 Fabric. For this analysis, we aggregate data up to the geographic level reported in each figure; for example, the United States, Tribal Areas, and Urban and Non-Urban Core Areas located therein. We evaluate the adoption of fixed terrestrial services at speeds of our fixed speed benchmark of 100/20 Mbps, an approximation of our long-term goal using 940/500 Mbps, and the former fixed speed benchmark of 25/3 Mbps, both with and without fixed wireless.³³³

111. For the years 2018 through 2021, the reported adoption rates are the number of residential fixed terrestrial connections divided by the number of households located in the census blocks in which the FCC Form 477 deployment data indicate that fixed terrestrial services are deployed and meet the reported speed threshold. Similarly, for the year 2022, the reported adoption rate is the number of fixed terrestrial connections divided by the number of households in which the BDC service availability data indicate fixed terrestrial services are deployed and meet the reported speed threshold. A census tract is designated as “Urban Core” if it has a land area less than three square miles and a population density of at least 1,000 people per square mile. A census tract is designated as “Non-Urban Core” if it has not been designated as Urban Core. We define a census tract as a Tribal Area if more than 50% of the land area in the census tract is designated as Tribal lands.³³⁴ In addition to the Figures presented here, we present the mobile broadband penetration rate by state in Appendix B-20. To estimate the adoption of mobile broadband we present the penetration rate, or number of mobile wireless devices per capita, by state.³³⁵ As seen in Appendix B-20, the penetration rate exceeds 100% in every state.³³⁶ This indicates that the average subscriber has more than one connected device.

³³³ See *infra* Appx. B-1 (presenting service availability for fixed terrestrial services at our speed benchmark of 100/20 Mbps by state, the District of Columbia, and U.S. Territory).

³³⁴ Because our subscriber data are submitted at the census tract level, some census tracts will contain a mixture of census blocks on Tribal lands and census blocks that are not on Tribal lands. For example, for 2022, the Tribal lands area category in the figures below contain 93% of households and 85% of the land area of census blocks that are designated as Tribal lands, and 7% of households and 15% of the land area of census blocks that are not designated as Tribal lands. Moreover, because connections data are collected at the census tract level, we have no ability to determine whether the residential connections are for households located on census blocks designated as urban, non-urban (rural), or Tribal lands.

³³⁵ We use Numbering Resource Utilization/Forecast (NRUF) data to estimate state-level penetration rates (the number of mobile wireless connections per 100 people). NRUF data track how many phone numbers have been assigned to mobile wireless devices. Note that NRUF-based penetration rates can exceed 100% because NRUF identifies the number of connected devices that have associated telephone numbers, and a single subscriber may have multiple connected devices.

³³⁶ CTIA estimates that, as of 2022, there were approximately 1.6 wireless connections for every person in the U.S. CTIA, *2023 Annual Survey Highlights* at 5 (2023), <https://api.ctia.org/wp-content/uploads/2023/11/2023-Annual-Survey-Highlights.pdf>.

112. Figure 21 reports adoption rates based on year-end data from 2018 to 2022 for the United States, Urban Core and Non-Urban Core Areas, and Tribal Areas. The data shows that as of year-end 2022, approximately 42% of households subscribe to broadband at our fixed speed benchmark of 100/20 Mbps when it is available. Under 20% of households subscribe to broadband at our long-term goal speed approximate of 940/500 Mbps when it is available. Adoption rates for the United States as a whole are higher in Urban areas at speeds of 25/3 Mbps and 100/20 Mbps, while Non-Urban areas have slightly higher adoption rates at speeds of 940/500 Mbps. For Tribal Areas, adoption rates for the 25/3 Mbps speed tier are higher in Urban Areas, while adoption rates for the faster speed tiers are higher in Non-Urban Areas.

Fig. 21
Overall Adoption Rate for Fixed Terrestrial Services at Different Speed Tiers

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|-------|-------|-------|-------|-------|
| 25/3 Mbps | | | | | |
| United States | 65.1% | 69.4% | 76.0% | 80.0% | 78.7% |
| Non-Urban Core Areas | 59.9% | 64.6% | 70.1% | 73.1% | 75.3% |
| Urban Core Areas | 69.2% | 73.3% | 81.0% | 84.9% | 80.9% |
| Tribal Areas | 44.0% | 46.5% | 52.3% | 59.3% | 58.5% |
| Non-Urban Core Areas | 38.7% | 40.6% | 46.3% | 52.0% | 53.6% |
| Urban Core Areas | 56.1% | 61.8% | 70.0% | 77.7% | 71.1% |
| 25/3 Mbps - Excluding Fixed Wireless | | | | | |
| United States | 66.3% | 71.1% | 78.3% | 81.3% | 79.7% |
| Non-Urban Core Areas | 62.4% | 67.9% | 74.6% | 76.4% | 79.4% |
| Urban Core Areas | 69.3% | 73.4% | 81.1% | 84.5% | 79.8% |
| Tribal Areas | 47.2% | 51.1% | 59.0% | 63.3% | 64.5% |
| Non-Urban Core Areas | 42.7% | 46.1% | 54.2% | 57.0% | 61.7% |
| Urban Core Areas | 56.6% | 62.2% | 70.5% | 77.0% | 70.1% |
| 100/20 Mbps | | | | | |
| United States | 15.7% | 21.1% | 27.6% | 32.8% | 41.7% |
| Non-Urban Core Areas | 13.1% | 18.6% | 25.4% | 29.9% | 41.2% |
| Urban Core Areas | 17.5% | 22.9% | 29.3% | 34.7% | 42.1% |
| Tribal Areas | 9.9% | 15.8% | 23.3% | 24.6% | 31.8% |
| Non-Urban Core Areas | 10.2% | 16.3% | 24.9% | 26.6% | 34.5% |
| Urban Core Areas | 9.4% | 14.8% | 19.9% | 20.6% | 26.3% |
| 100/20 Mbps - Excluding Fixed Wireless | | | | | |
| United States | 15.7% | 21.2% | 27.9% | 33.1% | 42.2% |
| Non-Urban Core Areas | 13.2% | 18.8% | 26.0% | 30.7% | 43.1% |
| Urban Core Areas | 17.4% | 22.9% | 29.3% | 34.5% | 41.6% |
| Tribal Areas | 10.1% | 16.4% | 24.2% | 25.2% | 34.7% |
| Non-Urban Core Areas | 10.5% | 17.2% | 26.4% | 27.5% | 39.2% |
| Urban Core Areas | 9.4% | 14.8% | 19.9% | 20.6% | 26.4% |
| 940/500 Mbps | | | | | |
| United States | 7.5% | 9.4% | 16.2% | 16.0% | 19.9% |
| Non-Urban Core Areas | 8.1% | 9.7% | 16.6% | 16.2% | 20.3% |
| Urban Core Areas | 7.2% | 9.3% | 16.0% | 16.0% | 19.6% |
| Tribal Areas | 7.7% | 7.9% | 14.6% | 14.9% | 20.7% |
| Non-Urban Core Areas | 12.0% | 11.3% | 15.7% | 15.9% | 22.6% |
| Urban Core Areas | 2.7% | 2.8% | 12.4% | 12.9% | 15.8% |
| 940/500 Mbps - Excluding Fixed Wireless | | | | | |
| United States | 7.6% | 9.6% | 16.6% | 16.2% | 20.2% |

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|-----------------------------|-------|-------|-------|-------|-------|
| Non-Urban Core Areas | 8.2% | 9.8% | 17.1% | 16.4% | 20.8% |
| Urban Core Areas | 7.4% | 9.5% | 16.4% | 16.2% | 19.8% |
| Tribal Areas | 7.7% | 7.9% | 14.7% | 14.8% | 20.9% |
| Non-Urban Core Areas | 12.0% | 11.3% | 15.8% | 15.8% | 22.8% |
| Urban Core Areas | 2.7% | 2.8% | 12.4% | 12.9% | 15.8% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

113. Figure 22 reports average county-level adoption rates for fixed terrestrial services by quartile ranking for median household income, population density, household poverty rate and the proportion of the population that resides in a rural area.³³⁷ The data are further disaggregated by speed tier.³³⁸ In general, these data suggest that the average household adoption rate in a county increases with median household income and population density, and decreases with increases in the poverty rate and rural population rate.³³⁹ We note that these trends are not as clear for the 940/500 Mbps tier.

Fig. 22
Average County Overall Adoption Rate for Fixed Terrestrial Services by County Level
Demographic Variable (December 31, 2022)

| | 25/3 Mbps | 100/20 Mbps | 940/500 Mbps |
|---|-----------|-------------|--------------|
| Median Household Income | | | |
| First Quartile (Lowest Median Household Income) | 51.1% | 28.4% | 12.2% |
| Second Quartile | 59.4% | 32.1% | 13.7% |
| Third Quartile | 62.7% | 32.4% | 11.2% |
| Fourth Quartile (Highest Median Household Income) | 74.5% | 41.7% | 17.3% |
| Median Household Income - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 54.5% | 30.3% | 12.7% |
| Second Quartile | 63.3% | 34.2% | 13.7% |

³³⁷ This demographic analysis is based upon county-level adoption rates and the most recently available ACS Data; that is, ACS Five-Year Estimates for 2018-2022 for county-level data for the 50 states and the District of Columbia. Median household income is based on 2022 data and is measured in 2022 Inflation-Adjusted Dollars. The household poverty rate is defined as the number of households living below the federal poverty rate divided by the total number of households ACS includes in the poverty calculation. Population density is defined as the total estimated population residing in the county as of 2022 divided by the square miles of land in the county, where the estimate of land area is based upon the 2020 Census. We designate a 2020 census block as urban or rural based on the designation of the 2020 Census. The rural population rate is defined as the total estimated population residing in the county residing in the “rural” census blocks as categorized for this *Report* divided by the total estimated population in the county.

³³⁸ We note that this analysis is based upon the best data currently available and may not accurately reflect how adoption may be associated with the subscriber’s demographic data. Our connections data are based upon the data submitted by the providers, and we do not know the demographics of the providers’ customers.

³³⁹ The adoption of fixed terrestrial broadband varies across demographic groups and households with less income are less likely to subscribe to a fixed broadband service for their home. See Pew Research Center, *Internet/Broadband Fact Sheet* (Jan. 31, 2024), <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>. Incomes tend to be lower in rural areas, and subscription to home broadband services is generally lower in rural areas. Counties with a higher proportion of rural population will tend to have lower population density because fewer people live in these counties than in counties with more urban areas. In Fig. 22, the quartile with the lowest population density will likely correspond to the quartile with the highest rural population rate. Thus, the observation that the average overall adoption rate for fixed terrestrial services increases with population density is akin to the observation that the average overall adoption rate for fixed terrestrial services decreases as the rural population rate increases.

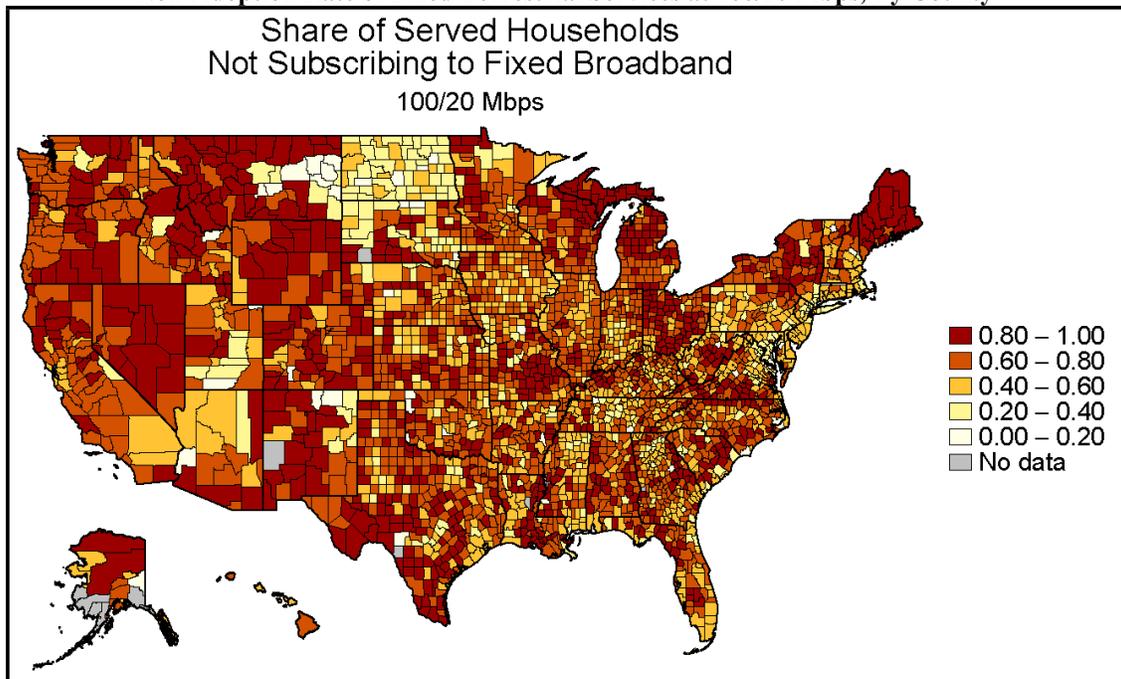
| | 25/3 Mbps | 100/20 Mbps | 940/500 Mbps |
|--|-----------|-------------|--------------|
| Third Quartile | 66.9% | 35.3% | 11.4% |
| Fourth Quartile (Highest Median Household Income) | 76.9% | 43.5% | 17.3% |
| Population Density | | | |
| First Quartile (Lowest Population Density) | 53.5% | 30.5% | 8.8% |
| Second Quartile | 51.4% | 30.1% | 11.4% |
| Third Quartile | 63.7% | 32.7% | 14.4% |
| Fourth Quartile (Highest Population Density) | 79.1% | 41.4% | 18.9% |
| Population Density - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 57.1% | 33.5% | 8.9% |
| Second Quartile | 56.0% | 33.4% | 11.8% |
| Third Quartile | 68.2% | 34.5% | 14.6% |
| Fourth Quartile (Highest Population Density) | 80.0% | 41.9% | 18.8% |
| Household Poverty Rate | | | |
| First Quartile (Lowest Household Poverty Rate) | 70.2% | 40.1% | 15.3% |
| Second Quartile | 64.0% | 32.6% | 12.1% |
| Third Quartile | 60.9% | 32.7% | 15.1% |
| Fourth Quartile (Highest Household Poverty Rate) | 52.6% | 29.3% | 12.0% |
| Household Poverty Rate - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 73.4% | 42.6% | 15.4% |
| Second Quartile | 67.8% | 34.9% | 12.0% |
| Third Quartile | 64.7% | 34.6% | 15.6% |
| Fourth Quartile (Highest Household Poverty Rate) | 55.7% | 31.2% | 12.2% |
| Rural Population Rate | | | |
| First Quartile (Lowest Rural Population Rate) | 76.6% | 40.6% | 17.2% |
| Second Quartile | 63.0% | 32.5% | 13.6% |
| Third Quartile | 59.1% | 29.7% | 14.1% |
| Fourth Quartile (Highest Rural Population Rate) | 51.9% | 31.3% | 10.5% |
| Rural Population Rate - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Rural Population Rate) | 77.3% | 41.3% | 17.2% |
| Second Quartile | 66.9% | 34.5% | 13.7% |
| Third Quartile | 64.4% | 32.1% | 14.8% |
| Fourth Quartile (Highest Rural Population Rate) | 56.1% | 34.4% | 10.6% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022.

114. Based on December 2022 BDC data, we also analyze the non-adoption rate of fixed broadband at speeds of 100/20 Mbps or higher across counties in the United States. We measure the adoption gap as the number of households in a county for which 100/20 Mbps or higher broadband is available minus the number of households in a county subscribing to 100/20 Mbps or higher service. Then, we divide the adoption gap by the number of households in a county for which 100/20 Mbps or higher broadband is available. Households that are counted as non-adopters include those subscribed to satellite plans or fixed broadband at lower speeds, as well as those who are not subscribed to fixed broadband at all—this includes households for whom broadband is not affordable but also others who opt not to subscribe, even though they could afford it. There is a great deal of heterogeneity in non-adoption, as seen in Figure 23. For example, counties in North Dakota have quite low non-adoption rates, while counties in Maine and Nevada have very high non-adoption rates. Even more states have a great deal of variation in non-adoption on a county-by-county basis, such as Arkansas and Utah. As explained above, multiple interrelated factors influence the adoption gap. Further work is needed to explore the patterns of

non-adoption of fixed broadband.

Fig. 23
Non-Adoption Rate of Fixed Terrestrial Services at 100/20 Mbps, By County



Source: Staff analysis based on Dec. 2022 FCC BDC data.

Fig. 23 depicts the ratio of households in a county that do not subscribe to 100/20 Mbps service even though the service is available at the location. It includes terrestrial fixed service (fixed wireline and wireless) but does not include satellite or mobile broadband. As seen in Fig. 22, above, many households continue to subscribe to slower speed tiers, even when 100/20 Mbps service is available. Several reasons can explain this such as: the needs of a household may be served at lower access speeds, a household may not be aware of the availability of service, or the service may not be affordable.

D. Availability

115. Although the Commission’s universal service goals all inform the availability of advanced telecommunications capability,³⁴⁰ the Commission in the *Future of USF Report* also adopts a goal of availability that is distinct from physical deployment, affordability, adoption, and equitable access.³⁴¹ We posited in the *Notice* that availability should refer to consumers’ ability to purchase broadband service in areas where service is physically deployed,³⁴² noting the example that broadband service may be physically deployed to a location, but the wiring of a building does not support the capability for all of its tenants to receive service.³⁴³ We sought examples and also asked whether this goal should be understood to encompass the quality of broadband service, including for example the frequency of service outages.³⁴⁴ In addition, we asked in the *Notice* whether there is quantitative or qualitative data

³⁴⁰ See Section II, *supra*.

³⁴¹ We again note that the universal service goal of availability is distinguished from the concept of “service ability,” which for the purposes of this Report we consider to be central to the evaluation of the physical deployment universal service goal.

³⁴² *Notice of Inquiry*, FCC 23-89, at 26, para. 62 (citing *Future of USF Report*, 37 FCC Red at 10046-47, para. 12).

³⁴³ *Id.*

³⁴⁴ *Id.*

on which the Commission can rely to analyze service availability for this purpose.³⁴⁵ For the reasons discussed below, we do not establish a standard for our universal service goal of availability at this time, although we discuss potential measures and available data.

116. We find that for purposes of our discussion of the Commission’s universal service goals in this inquiry, all aspects of service quality should be evaluated in the context of availability. We conclude that if a “service” does not have the characteristics reasonably expected of that service when a consumer wants to use it based on measurable statistical standards, that service is not “available.” Actual (as opposed to advertised) speed received, consistency of speed, and data allowances are also important.³⁴⁶ While we evaluate service quality in the context of availability, we acknowledge that many aspects of service quality could also be viewed in the context of evaluating whether the service has been “deployed.” In other words, if the service “deployed” does not, in fact, have the characteristics reasonably expected of such service (such as sufficiently low latency and sufficiently high consistency of service), that “service” could be said to have not been truly deployed to a location.

117. Service quality is important—it has a real and significant effect on consumers’ ability to use critical web-based applications, including those that facilitate telehealth, telework, and virtual learning.³⁴⁷ Many commenters support including service quality—particularly latency—as part of our inquiry,³⁴⁸ some of which noted that high latency can adversely affect an application’s quality of service.³⁴⁹ Some commenters also argue that measuring actual speeds received, rather than advertised speeds, is more useful in determining the quality of the service provided.³⁵⁰ We disagree with USTelecom, which does not support including service quality metrics by arguing that service quality is beyond the scope of section 706,³⁵¹ as well as parties arguing that our efforts would be duplicative of Commission programs and requirements.³⁵² These parties fail to articulate how service can be considered available when it is of less than reasonably expected quality. Indeed, we note that section 706(d)(1) includes the adjective “high-quality” in its definition of advanced telecommunications capability.³⁵³

118. *Latency.* Latency, which is the measure of the time it takes a packet of data to travel from one point in the network to another, and which is typically measured by round-trip time in milliseconds (ms), is an important and often-measured aspect of service quality.³⁵⁴ As a measurement of

³⁴⁵ *Id.*

³⁴⁶ Certain metrics may be combined. For example, we could measure the minimum speed that a consumer actually receives 99.999% of the time.

³⁴⁷ In fact, one commenter suggests that the Commission “balance its near-term efforts on achieving internet resilience and minimizing latency, instead of only increasing ‘speed’ or ‘bandwidth’.” Taht/Bufferbloat Comments at 1.

³⁴⁸ See ADTRAN Comments at 15-17; ASSIA Comments at 2-4; Taht/Bufferbloat Comments at 3; WISPA Comments at 5-6; Hawkins Comments at 1.

³⁴⁹ ADTRAN Comments at 15-17; ASSIA Comments at 2-4; Hawkins Comments at 1; Taht/Bufferbloat Comments at 3. Mr. Taht notes that even with increased speed, reducing latency is the only way to improve responsiveness. Taht/Bufferbloat Comments at 3. Mr. Taht also provides two charts demonstrating that low latency is important, but does not specify a standard that the Commission should use when evaluating latency in the context of measuring advanced telecommunications capability. Taht/Bufferbloat Comments at 4-5.

³⁵⁰ ADTRAN Comments at 17; ASSIA Comments at 4.

³⁵¹ USTelecom Comments at 4; WISPA Reply at 7-8.

³⁵² USTelecom Comments at 4.

³⁵³ 47 U.S.C. § 1302(d)(1).

³⁵⁴ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 15-191,

(continued....)

advanced telecommunications capability, latency can be critical because it affects a consumer's ability to use real-time applications, including voice over Internet Protocol (VoIP), video calling, distance learning applications, and online gaming.³⁵⁵ For more than a decade, the Commission has required its broadband supported with USF high-cost funding to have latency sufficiently low for real-time applications, such as VoIP.³⁵⁶ We note that there are many different standards for latency.³⁵⁷ For example, based on a detailed analysis of International Telecommunications Union design objectives, the Commission has operationalized this standard for performance measurement purposes to mean that 95% or more of all peak period measurements (also referred to as observations) of network round trip latency are at or below 100 milliseconds (ms).³⁵⁸ The Department of Commerce requires BEAD funding recipients to meet the same standard, and requires broadband service with a maximum round trip latency of 100 ms at a location (among other requirements) for that location to be served.³⁵⁹

119. In the *Notice*, we observed that it may be appropriate to analyze latency metrics from Report to Report, and inquired whether latency metrics should be incorporated into our evaluation of advanced telecommunications capability.³⁶⁰ Certain commenters encourage the Commission to consider performance metrics such as latency.³⁶¹ Some commenters contend that latency should be included in the definition of advanced telecommunications capability,³⁶² and describe how common use cases such as videoconferencing or gaming are dependent on latency.³⁶³ Other commenters state that a consideration of service quality factors such as latency would expand the Commission's Section 706 inquiry beyond its intended purpose.³⁶⁴ If we do present information on latency, commenters indicate that the Commission should maintain consistency with its high-cost USF programs by applying a standard of a roundtrip of

(Continued from previous page) _____
Eleventh Broadband Progress Notice of Inquiry, 30 FCC Rcd 8823, 8835, para. 32 (2015) (*Eleventh Notice of Inquiry*).

³⁵⁵*Id.* 8835, para. 32 n.69. High latencies may affect the perceived quality of some interactive services such as phone calls over the Internet, video chat and video conferencing, or online multiplayer games. FCC, Measuring Broadband America Fixed Broadband Report at 1.C (2023), [https://www.fcc.gov/reports-research/reports/measuring-broadband-america/measuring-fixed-broadband-twelfth-report~:text=The%20Twelfth%20Measuring%20Broadband%20America,Broadband%20America%20\(MBA\)%20\(Twelfth%20Measuring%20Broadband%20America%20Report\)](https://www.fcc.gov/reports-research/reports/measuring-broadband-america/measuring-fixed-broadband-twelfth-report~:text=The%20Twelfth%20Measuring%20Broadband%20America,Broadband%20America%20(MBA)%20(Twelfth%20Measuring%20Broadband%20America%20Report).). By consistency of speed, we refer to the extent to which the speed received by a consumer fluctuates over a period of time. See *Twelfth Measuring Broadband America Report* at 2.C.

³⁵⁶ See, e.g., *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17698, para. 96 (2011); 47 CFR § 54.805(a); 47 CFR § 54.1507(a).

³⁵⁷ For a wide-ranging discussion of various potential measures of latency, see generally Taht/Bufferbloat Comments.

³⁵⁸ See, e.g., *Connect America Fund*, WC Docket No. 10-90, Order, 33 FCC Rcd 6509, 6510-11, para. 4 (WCB/WTB/OET 2018) (*First Performance Measures Order*); 47 CFR § 54.805(b)(4)(i); 47 CFR § 54.1507(c)(1).

³⁵⁹ NTIA BEAD NOFO at 64-65. The NTIA BEAD NOFO also specifies that locations are considered "underserved" if they do not meet download/upload speeds of at least 100/20 and have a latency above 100 milliseconds. *Id.* at 16.

³⁶⁰ *Notice*, at 12-13,15, paras. 27-28, 35.

³⁶¹ ASSIA Comments at 4, 5; Dave Taht Comments at 3-5; ADTRAN Comments at Introduction, Hawkins Comments at 1-2; ASSIA Comments at 3; ADTRAN Comments at 16,17; Miss. Center for Justice Reply at 4.

³⁶² Benton Institute Comments at 2-3; Hawkins Comments at 1.

³⁶³ Dave Taht Comments at 10.

³⁶⁴ USTelecom Comments at 4, 5; WISPA Reply at 7-8.

100 milliseconds or less during at least 95% of tested measurements;³⁶⁵ or that the analysis should be consistent with language in the Infrastructure Act.³⁶⁶

120. Fixed broadband providers are required to include a latency flag in their BDC submissions, indicating whether the offered service is low latency, defined as having a round-trip latency of less than or equal to 100 milliseconds.³⁶⁷ Figure 24 shows the overall service availability of fixed terrestrial services, further broken down into households with access to low latency services and those without access to these services, as of December 2022. As seen in Figure 24, almost all households with access to fixed terrestrial broadband services had access to low latency services.

Fig. 24

Service Availability (Millions) of Fixed Terrestrial Services by Speed and Latency (December 2022)

| | 25/3 Mbps | | 100/20 Mbps | | 940/500 Mbps | |
|--|-----------|--------|-------------|--------|--------------|--------|
| | Pop. | % | Pop. | % | Pop. | % |
| Overall | 318.921 | 95.7% | 309.107 | 92.7% | 134.617 | 40.4% |
| Low Latency Service Available | 318.786 | 95.6% | 309.019 | 92.7% | 134.447 | 40.3% |
| Low Latency Service Not Available | 0.135 | 0.0% | 0.088 | 0.0% | 0.170 | 0.1% |
| Excluding Fixed Wireless | | | | | | |
| Overall | 305.478 | 91.7% | 301.531 | 90.5% | 132.059 | 39.6% |
| Low Latency Service Available | 305.441 | 91.6% | 301.486 | 90.5% | 131.972 | 39.6% |
| Low Latency Service Not Available | 0.037 | 0.0% | 0.046 | 0.0% | 0.086 | 0.0% |
| Pop. Evaluated | 333.288 | 100.0% | 333.288 | 100.0% | 333.288 | 100.0% |

Source: FCC BDC data; Staff Block Estimates.

121. Although we find the data described above instructive, it is not comprehensive. We intend to revisit this issue in future inquiries as we learn more about, and potentially develop access to, additional data.

122. *Consistency of Service.* Both the Commission, with respect to high-cost USF recipients, and NTIA, with respect to BEAD recipients, also impose standards for consistency of service.³⁶⁸ This service quality metric concerns the percentage of performance test measurements, conducted under defined conditions, that demonstrate both download and upload speeds are being provided at a particular percentage of the “required” speed a particular percentage of the time.³⁶⁹ In the case of the Commission’s performance requirements for USF high-cost recipients and NTIA’s performance requirements for BEAD recipients, this threshold is 80% of measurements in each direction reflecting at least 80% of the “required” speed, otherwise known as “80/80.”³⁷⁰ It may be possible to operationalize this consistency measurement by, for instance, not considering service to be “available” pursuant to the distinct availability goal unless it meets this 80/80 standard – which, in the case of 100/20 Mbps would be 80/16 Mbps at least 80% of the time. Measuring Broadband America (MBA) tests broadband service speeds at

³⁶⁵ WISPA Comments at 5-6.

³⁶⁶ *Id.*

³⁶⁷ FCC, *Broadband Data Collection: Data Specifications for Biannual Submission of Subscription, Availability, and Supporting Data* (March 4, 2022), <https://www.fcc.gov/sites/default/files/bdc-availability-data-specifications-03042022.pdf>. More specifically, for purposes of the BDC, low latency services are defined as having a round-trip latency of less than or equal to 100 milliseconds based on the 95th percentile of measurements.

³⁶⁸ See *First Performance Measures Order*, 33 FCC Rcd at 6529-30, para. 51; BEAD NOFO at 64-65 & n.80.

³⁶⁹ *First Performance Measures Order*, 33 FCC Rcd at 6529-30, para. 51.

³⁷⁰ *Id.*; BEAD NOFO at 64-65 & n.80.

both 80/80 and 90/90 consistency standards.³⁷¹ We acknowledge, however, that at present, MBA is not a comprehensive source of data and we are not currently aware of a more comprehensive data source.³⁷² We intend to revisit this issue in future inquiries.

123. *Other Aspects of Availability.* We acknowledge there are additional areas and measurements other than latency and consistency of service that are likely relevant to the universal service goal of availability. These include other metrics such as service outages and access to inside wiring. At present, we do not have comprehensive sources of data, but intend to revisit this issue in future inquiries.

E. Equitable Access

124. In the *Future of USF Report*, the Commission stated it could “measure progress” of the universal service goal of equitable access to broadband through its implementation of the Infrastructure Act’s directive to take action to prevent and identify necessary steps to eliminate digital discrimination of access.³⁷³ However, we have only just begun the process of implementing our digital discrimination of access rules, and the standards and metrics for determining compliance with those rules will be highly context specific. In light of these considerations, with regard to equitable access, we limit our discussion of equitable access in this Report solely to presenting, for informational purposes, the demographic analysis required by section 706(c).³⁷⁴

125. As we compile a list of geographical areas that are not served by any provider of advanced telecommunications capability and, to the extent that data from the Census Bureau are available, we determine, for each unserved area, the population, the population density, and the average per capita income.³⁷⁵ We include a demographic data analysis below,³⁷⁶ and show the service availability of advanced telecommunications capability on a county-by-county basis with demographic information in Appendix B-12. Our analysis considers options to consumers for fixed terrestrial services meeting the fixed speed benchmark of 100/20 Mbps—and using the Census data and ACS demographic data,³⁷⁷ we also analyze the demographics of areas where consumers have access to multiple broadband providers.³⁷⁸

³⁷¹ FCC, Measuring Broadband America Fixed Broadband Report at 2.C (2023), <https://www.fcc.gov/reports-research/reports/measuring-broadband-america/measuring-fixed-broadband-twelfth-report> (*Twelfth Measuring Broadband America Report*).

³⁷² *Twelfth Measuring Broadband America Report*. The participants for the most recent report were Altice Optimum, CenturyLink, Charter, Cincinnati Bell, Comcast, Cox, Frontier, Mediacom, Verizon (fiber), and Windstream. *Id.* at 2.A. AT&T no longer participates in the program. *Id.*

³⁷³ *Future of USF Report*, 37 FCC Rcd at 10049-50, para. 20.

³⁷⁴ 47 U.S.C. § 1302(c).

³⁷⁵ *Id.*

³⁷⁶ ADTRAN argues that it is unclear the extent to which the Commission can reliably draw conclusions from demographic data as the number of providers could be the result of the local government encouraging (or discouraging) additional entry through policies such as easing (or tightening) the permitting process, rather than reflecting the effect of demographics. ADTRAN, Inc. Comments at 18-19. OTI suggests comparing and contrasting data revealed in the National Broadband Map with other federal data, including maps of high-income and low-income areas, to see whether there are differences in adoption for higher speed services between higher income and lower income areas. OTI also suggests comparing collected data to demographic data, making it public, and asking providers to explain discrepancies in deployment based on this information. OTI Comments at 10. We need not address these concerns because our discussion is based on straightforward data analysis and examination of trends, although we will take these suggestions under advisement in future inquiries.

³⁷⁷ For this analysis, we examine population density, the number of households, and median household income. We rely upon the 2018-2022 ACS 5-Year Estimates for median household income (in 2022 inflation-adjusted dollars) reported at the census block group level. See U.S. Census Bureau, 2022 Data Release New and Notable, <https://www.census.gov/programs-surveys/acs/news/data-releases/2022/release.html> (last visited Jan. 2, 2024).

126. Figure 25 presents a demographic analysis of the average percentage of households with coverage by zero, one, two, and three or more providers at the speed benchmark of 100/20 Mbps,³⁷⁹ broken out by population density quartile, median household income quartile, and household count quartile.³⁸⁰ We observe that the number of provider options increases with the number of housing units in the census block group, population density, and median household income. In general, the census block groups in rural areas will tend to have the lowest population density and the lowest number of households and are likely to have the largest percentage of the households with zero provider options, that is, no service availability of the reported service.

Fig. 25

Average Percentage of Households with Zero, One, Two, or at Least Three Provider Options for 100/20 Mbps Fixed Terrestrial Services by Census Block Group (December 31, 2022)

| | Zero | One | Two | At Least Three |
|---|-------|-------|-------|----------------|
| Population Density | | | | |
| First Quartile (Lowest Population Density) | 27.7% | 47.8% | 19.5% | 4.9% |
| Second Quartile | 3.6% | 41.8% | 39.6% | 15.0% |
| Third Quartile | 1.7% | 33.5% | 43.4% | 21.4% |
| Fourth Quartile (Highest Population Density) | 1.5% | 26.2% | 43.3% | 29.0% |
| Population Density - Excluding Fixed Wireless | | | | |
| First Quartile (Lowest Population Density) | 35.2% | 51.4% | 12.6% | 0.8% |
| Second Quartile | 4.7% | 56.0% | 35.6% | 3.6% |
| Third Quartile | 2.2% | 47.7% | 43.4% | 6.6% |
| Fourth Quartile (Highest Population Density) | 2.1% | 41.5% | 47.6% | 8.8% |
| Median Household Income | | | | |
| First Quartile (Lowest Median H/hold Income) | 10.5% | 42.0% | 32.9% | 14.6% |
| Second Quartile | 11.2% | 39.8% | 33.7% | 15.3% |
| Third Quartile | 8.2% | 37.0% | 36.8% | 18.0% |
| Fourth Quartile (Highest Median H/hold Income) | 3.5% | 30.7% | 43.2% | 22.6% |

(Continued from previous page)

³⁷⁸ As noted above, if a provider indicates in the FCC Form 477 data that it provides service in a census block, this does not mean that the provider can provision services to all locations in the census block or that it can provide the speed to all locations in the census block. Accordingly, for the years 2018 to 2021, the number of providers does not necessarily reflect the number of choices available to a particular household and does not purport to measure actual head-to-head competition. This caveat does not apply to the BDC data used for the 2022 analysis.

³⁷⁹ Appx. B-21 and Appx. B-22 show corresponding tables using 25/3 Mbps and 940/500 Mbps.

³⁸⁰ We include only the areas for which we have complete data. We aggregate households within a census block group by provider count category; that is, we group households within a census block group by the number of providers and then sum the households by provider count category. The households within a census block group are aggregated by the number of competing providers offering a particular category of service (zero, one, two, and at least three). The census block group is the smallest geographic area for which income data are available. We use the 2018-2022 ACS 5-Year Estimates for income measures for census block groups. Median household income is based on 2022 data and is measured in 2022 inflation-adjusted dollars. Population density is the total population residing in the census block group as of 2022 divided by the square miles of land in the census block group, with the estimate of land area based on the 2020 Census. Household count is the number of households in the census block group.

| | Zero | One | Two | At Least Three |
|---|-------|-------|-------|----------------|
| Median Household Income - Excluding Fixed Wireless | | | | |
| First Quartile (Lowest Median H/hold Income) | 12.6% | 55.7% | 28.4% | 3.3% |
| Second Quartile | 14.3% | 51.2% | 30.5% | 4.1% |
| Third Quartile | 11.3% | 48.1% | 35.4% | 5.2% |
| Fourth Quartile (Highest Median H/hold Income) | 5.0% | 42.0% | 45.8% | 7.2% |
| Household Count | | | | |
| First Quartile (Lowest H/hold Count) | 9.9% | 36.1% | 37.0% | 17.0% |
| Second Quartile | 9.3% | 37.2% | 36.3% | 17.1% |
| Third Quartile | 8.7% | 38.3% | 35.8% | 17.1% |
| Fourth Quartile (Highest H/hold Count) | 6.4% | 37.7% | 36.7% | 19.1% |
| Household Count - Excluding Fixed Wireless | | | | |
| First Quartile (Lowest H/hold Count) | 12.6% | 46.6% | 36.0% | 4.8% |
| Second Quartile | 11.9% | 48.3% | 35.1% | 4.7% |
| Third Quartile | 11.2% | 50.4% | 33.7% | 4.7% |
| Fourth Quartile (Highest H/hold Count) | 8.6% | 51.4% | 34.5% | 5.5% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022.

127. In Figure 26, we present demographic data with our service availability analysis. Figure 26 depicts how the average proportion of the population with coverage by fixed terrestrial services by speed tier varies with median household income, population density, and household poverty rate at the census block group level. On average, service availability is highest in census blocks with the highest median household incomes, the highest population densities, and the lowest household poverty rates.

Fig. 26

Average Percentage of Population With Fixed Terrestrial Services at Different Speed Tiers by Census Block Group (December 31, 2022)

| | 25/3 Mbps | 100/20 Mbps | 940/500 Mbps |
|---|-----------|-------------|--------------|
| Median Household Income | | | |
| First Quartile (Lowest Median H/hold Income) | 93.4% | 89.7% | 31.9% |
| Second Quartile | 93.4% | 89.0% | 35.5% |
| Third Quartile | 95.5% | 92.0% | 39.8% |
| Fourth Quartile (Highest Median H/hold Income) | 98.2% | 96.7% | 50.1% |
| Population Density | | | |
| First Quartile (Lowest Population Density) | 82.9% | 72.4% | 23.8% |
| Second Quartile | 98.3% | 96.7% | 37.4% |
| Third Quartile | 99.2% | 98.6% | 45.7% |
| Fourth Quartile (Highest Population Density) | 99.2% | 98.6% | 49.4% |
| Household Poverty Rate | | | |
| First Quartile (Lowest H/hold Poverty Rate) | 96.1% | 93.5% | 44.6% |
| Second Quartile | 95.4% | 91.9% | 40.1% |
| Third Quartile | 93.9% | 90.0% | 37.2% |
| Fourth Quartile (Highest H/hold Poverty Rate) | 94.2% | 90.9% | 34.4% |
| Median Household Income - Excluding Fixed Wireless | | | |

| | 25/3 Mbps | 100/20 Mbps | 940/500 Mbps |
|--|-----------|-------------|--------------|
| First Quartile (Lowest Median H/hold Income) | 89.1% | 87.6% | 30.6% |
| Second Quartile | 87.7% | 86.0% | 34.7% |
| Third Quartile | 90.2% | 88.9% | 39.2% |
| Fourth Quartile (Highest Median H/hold Income) | 95.9% | 95.2% | 49.7% |
| Population Density - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 68.8% | 64.9% | 23.0% |
| Second Quartile | 96.5% | 95.6% | 36.6% |
| Third Quartile | 98.4% | 98.1% | 44.9% |
| Fourth Quartile (Highest Population Density) | 98.2% | 98.0% | 48.7% |
| Household Poverty Rate - Excluding Fixed Wireless | | | |
| First Quartile (Lowest H/hold Poverty Rate) | 92.3% | 91.3% | 44.0% |
| Second Quartile | 90.5% | 89.1% | 39.4% |
| Third Quartile | 88.9% | 87.3% | 36.5% |
| Fourth Quartile (Highest H/hold Poverty Rate) | 90.2% | 88.8% | 33.3% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022.

128. Figure 27 presents a demographic analysis of the percentage of the population served by fixed terrestrial services with speeds of at least 100/20 Mbps and 5G-NR broadband with a minimum speed of 35/3 Mbps; broken out by population density quartile, median household income quartile, and household count quartile.³⁸¹ We observe that, on average, the percentage of population served increases as population density and median income increases. On average, as the poverty rate increases, fixed terrestrial service adoption declines, but mobile 5G-NR adoption decreases from first quartile to the third quartile before increasing in the highest quartile.

Fig. 27
Average Percentage of Population with Fixed Terrestrial Services at 100/20 Mbps
and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps
by Census Block Group (December 31, 2022)

| | Fixed Terrestrial 100/20 Mbps | Mobile 5G-NR 35/3 Mbps | Both Fixed and Mobile 5G-NR 35/3 Mbps |
|--|-------------------------------|------------------------|---------------------------------------|
| Median Household Income | | | |
| First Quartile (Lowest Median Household Income) | 89.7% | 88.6% | 82.9% |
| Second Quartile | 89.0% | 85.4% | 79.7% |
| Third Quartile | 92.0% | 89.1% | 84.4% |
| Fourth Quartile (Highest Median Household Income) | 96.7% | 94.5% | 92.1% |
| Population Density | | | |
| First Quartile (Lowest Population Density) | 72.4% | 64.6% | 50.8% |

³⁸¹ Appx. B-23 and Appx. B-24 show corresponding tables using fixed terrestrial services with speeds of at least 100/20 Mbps and mobile speeds at a minimum of 5G-NR 7/1 Mbps and 4G LTE 5/1 Mbps, respectively. Appx. B-25, Appx. B-26, and Appx. B-27 show corresponding tables using in-vehicle mobile speeds at a minimum of 5G-NR 35/3 Mbps and 7/1 Mbps as well as 4G LTE 5/1 Mbps.

| | Fixed Terrestrial 100/20 Mbps | Mobile 5G-NR 35/3 Mbps | Both Fixed and Mobile 5G-NR 35/3 Mbps |
|---|-------------------------------|------------------------|---------------------------------------|
| Second Quartile | 96.7% | 95.2% | 92.2% |
| Third Quartile | 98.6% | 98.8% | 97.4% |
| Fourth Quartile (Highest Population Density) | 98.6% | 99.7% | 98.3% |
| Household Poverty Rate | | | |
| First Quartile (Lowest Household Poverty Rate) | 93.5% | 92.2% | 87.8% |
| Second Quartile | 92.0% | 88.4% | 84.0% |
| Third Quartile | 90.0% | 87.1% | 81.8% |
| Fourth Quartile (Highest Household Poverty Rate) | 90.8% | 90.4% | 85.1% |
| Median Household Income - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 87.6% | 88.6% | 81.3% |
| Second Quartile | 86.0% | 85.4% | 77.7% |
| Third Quartile | 88.9% | 89.1% | 82.2% |
| Fourth Quartile (Highest Median Household Income) | 95.2% | 94.5% | 90.8% |
| Population Density - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 64.9% | 64.6% | 45.9% |
| Second Quartile | 95.6% | 95.2% | 91.2% |
| Third Quartile | 98.1% | 98.8% | 96.9% |
| Fourth Quartile (Highest Population Density) | 98.0% | 99.7% | 97.7% |
| Household Poverty Rate - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 91.3% | 92.2% | 86.1% |
| Second Quartile | 89.2% | 88.4% | 82.1% |
| Third Quartile | 87.4% | 87.1% | 79.9% |
| Fourth Quartile (Highest Household Poverty Rate) | 88.8% | 90.4% | 83.5% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022.

129. Figure 28 shows the demographic characteristics of areas that are served and unserved for fixed terrestrial services with speeds of at least 100/20 Mbps and 5G-NR broadband with a minimum speed of 35/3 Mbps.³⁸² On average, served areas have higher population densities, per capita incomes, and median household incomes.

³⁸² To present demographic data and compare the demographic data between areas where services are and are not deployed, we aggregate the service availability data up to the census block group level, the lowest aggregation level for which demographic information is available. This unavoidable aggregation leads to areas with differing characteristics being grouped together. In the case of differing levels of deployment, we designate a census block group as without deployment if more than 5% of the population in the census block group is without services, regardless of the level of deployment in any particular census block in the group. We use the most recently available Census Bureau's ACS Five-Year Estimates 2018-2022 for income and poverty measures. Per capita income and median household income are based on 2022 data and are measured in 2022 inflation-adjusted dollars. Appx. B-28 and Appx. B-29 show corresponding tables using fixed terrestrial services with speeds of at least 100/20 Mbps and mobile speeds at a minimum of 5G-NR 7/1 Mbps and 4G LTE 5/1 Mbps. Appx. B-30, Appx. B-31, and Appx. B-32 show corresponding tables using in-vehicle mobile speeds at a minimum of 5G-NR 35/3 Mbps and 7/1 Mbps as well as 4G LTE 5/1 Mbps.

Fig. 28
Comparison of Demographic Data Between Areas With and Without
Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a
Minimum Speed of 35/3 Mbps (December 31, 2022)³⁸³

| | Population | Population Density | Per Capita Income | Median Household Income | Household Poverty Rate |
|--|------------|--------------------|-------------------|-------------------------|------------------------|
| United States - Including Fixed Wireless | | | | | |
| Served | 1,434.6*** | 8,654.5*** | \$42,618.35*** | \$87,884.47*** | 13.2%*** |
| Unserved | 1,325.9 | 1,649.7 | \$38,888.83 | \$78,041.37 | 12.9% |
| Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,284.5*** | 666.6*** | \$36,404.44 | \$77,294.00*** | 12.2% |
| Unserved | 1,235.7 | 142.9 | \$36,068.45 | \$73,387.11 | 12.3% |
| Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,439.5** | 8,915.1*** | \$42,820.18 | \$88,232.20*** | 13.2%*** |
| Unserved | 1,451.9 | 3,753.9 | \$42,881.83 | \$84,777.72 | 13.7% |
| Tribal Areas - Including Fixed Wireless | | | | | |
| Served | 1,278.8*** | 2,525.0*** | \$33,414.49*** | \$66,259.87*** | 16.1%*** |
| Unserved | 1,207.6 | 309.8 | \$30,023.03 | \$60,101.33 | 18.1% |
| Tribal Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,148.8 | 485.5*** | \$28,628.78 | \$58,997.52 | 17.2% |
| Unserved | 1,185.1 | 123.5 | \$29,458.85 | \$59,602.46 | 18.2% |
| Tribal Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,303.7 | 2,915.9*** | \$34,323.78 | \$67,607.25 | 15.9% |
| Unserved | 1,315.2 | 1,203.5 | \$32,726.49 | \$62,499.12 | 17.8% |
| United States - Excluding Fixed Wireless | | | | | |
| Served | 1,434.6*** | 8,654.5*** | \$42,618.35*** | \$87,884.47*** | 13.2%*** |
| Unserved | 1,325.9 | 1,649.7 | \$38,888.83 | \$78,041.37 | 12.9% |
| Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,284.5*** | 666.6*** | \$36,404.44 | \$77,294.00*** | 12.2% |
| Unserved | 1,235.7 | 142.9 | \$36,068.45 | \$73,387.11 | 12.3% |
| Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,439.5** | 8,915.1*** | \$42,820.18 | \$88,232.20*** | 13.2%*** |
| Unserved | 1,451.9 | 3,753.9 | \$42,881.83 | \$84,777.72 | 13.7% |
| Tribal Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,278.8*** | 2,525.0*** | \$33,414.49*** | \$66,259.87*** | 16.1%*** |
| Unserved | 1,207.6 | 309.8 | \$30,023.03 | \$60,101.33 | 18.1% |
| Tribal Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,148.8 | 485.5*** | \$28,628.78 | \$58,997.52 | 17.2% |
| Unserved | 1,185.1 | 123.5 | \$29,458.85 | \$59,602.46 | 18.2% |
| Tribal Urban Areas - Excluding Fixed Wireless | | | | | |

³⁸³ Appx. B-33 shows the demographic characteristics of areas that are served and unserved for fixed terrestrial services with speeds of at least 100/20 Mbps and 5G-NR broadband with a median speed of 35/3 Mbps based on Ookla Speedtest data. It shows the same results: on average, served areas have higher population densities, per capita incomes, and median household incomes. Appx. B-34 and Appx. B-35 also show corresponding tables using fixed terrestrial services with speeds of at least 100/20 Mbps and mobile broadband with a median speed of 7/1 Mbps and 10/3 Mbps based on Ookla Speedtest data.

| | Population | Population Density | Per Capita Income | Median Household Income | Household Poverty Rate |
|----------|------------|--------------------|-------------------|-------------------------|------------------------|
| Served | 1,303.7 | 2,915.9*** | \$34,323.78 | \$67,607.25 | 15.9% |
| Unserved | 1,315.2 | 1,203.5 | \$32,726.49 | \$62,499.12 | 17.8% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022.

Note: We test for a statistical difference in the reported means between areas with and without deployment of these services. The level of statistical significance is indicated by the number of stars. The absence of a star indicates no statistical difference between the reported figures. * signifies statistical significance at a 90% level of confidence, ** signifies statistical significance at a 95% level of confidence, and *** signifies statistical significance at a 99% level of confidence.

F. School and Classroom Access

130. As part of its inquiry under section 706, the Commission is also required to assess the deployment and service availability of advanced telecommunications capability to “elementary and secondary schools and classrooms.”³⁸⁴ During the course of the global COVID-19 pandemic, access to broadband became even more critical in ensuring that American schoolchildren do not fall behind. Especially during the first year of the pandemic, many students were forced to stay at home, which further exposed the gaps in connectivity as some students lacking access to fixed broadband service were prevented from keeping pace with students who have access to such service.³⁸⁵ Accordingly, teachers and administrators were forced to take extraordinary measures—including purchasing cellular data for students with phones or tablets, and setting up hotspots and outdoor work areas on school grounds so students could download lesson materials and upload homework assignments—to ensure that students were able to participate in remote instruction.³⁸⁶ Even though in-person schooling has resumed, many students still lack connections at home, making it difficult to complete homework.³⁸⁷ It is imperative that schools have the speed and bandwidth required to adequately educate America’s children both in schools and at home.

131. We conclude that it is time for the Commission to update the benchmarks set in 2015 that have been used to measure deployment to schools. Since 2015, the Commission has used the following benchmarks for deployment to schools: (1) a short-term speed benchmark of 100 Mbps per 1,000 students and staff, and (2) a long-term speed benchmark of 1 Gbps per 1,000 students and staff.³⁸⁸ The short-term goal was met within a few years of its adoption, as evidenced by the *2019 State of the States*

³⁸⁴ 47 U.S.C. § 1302(b).

³⁸⁵ See Monica Chin, *America’s Internet Wasn’t Prepared For Online School: Distance learning shows how badly rural America needs broadband*, The Verge (Oct. 7, 2020), <https://www.theverge.com/21504476/online-school-covid-pandemic-rural-low-income-internet-broadband>; *What COVID-19 Underscores About How Broadband Connectivity Affects Educational Attainment: Johannes Bauer of the Quello Center for Media & Information Policy discusses what leaders can do to prepare for long-term remote learning*, The Pew Charitable Trusts (Dec. 7, 2020), <https://www.pewtrusts.org/en/research-and-analysis/articles/2020/12/08/what-covid-19-underscores-about-how-broadband-connectivity-affects-educational-attainment>.

³⁸⁶ See Alice Opalka et al., *Rural school districts can be creative in solving the internet connectivity gap—but they need support*, Brookings (Aug. 10, 2020), <https://www.brookings.edu/blog/brown-center-chalkboard/2020/08/10/rural-school-districts-can-be-creative-in-solving-the-internet-connectivity-gap-but-they-need-support/> (noting that, in order to help students participate in remote instruction, some rural school districts have been forced to map locations in the community that offer free Internet access, purchase cellular data for students who have phones or tablets, connect families with companies that offer free or low-cost Internet, and set up hotspots and outdoor work areas on school grounds so students can download materials and upload assignments).

³⁸⁷ See, e.g., FCC, Homework Gap and Connectivity Divide, <https://www.fcc.gov/about-fcc/fcc-initiatives/homework-gap-and-connectivity-divide> (last visited Feb. 14, 2024).

³⁸⁸ See *2015 Report*, 30 FCC Rcd at 1410, para. 62.

Report, finding 99% of school districts had met the 100 Mbps goal.³⁸⁹ In fact, the successor report to the State of the States Report, the Connect K-12 Report, does not even present data on the 100 Mbps per 1,000 students and staff goal.³⁹⁰

132. We adopt our previous long-term goal of 1 Gbps per 1,000 students and staff as our new short-term speed benchmark.³⁹¹ We believe that using an already well-understood benchmark for our short-term goal is administratively efficient and note that, as discussed below, the nation is already well on its way to meeting this new short-term goal. No party opposed increasing this benchmark and the only party suggesting an alternative, the Mississippi Center for Justice, suggests that this bandwidth to student/staff ratio be stated with respect to every 500 rather than 1,000 students/staff (which would be 500 Mbps per 500 students/staff) to better reflect the size of rural schools.³⁹² While we are sensitive to this concern, we believe that stating the bandwidth to student/staff ratio with respect to 1,000 students/staff allows for and easier comparison to past data as well as uniformity with past reporting.

133. According to the *2023 Connect K-12 Report*, the most recent comprehensive data available, 74% of school districts currently meet our new short-term goal.³⁹³ This is over a 57% increase since 2020.³⁹⁴ Further, more than 80% of school districts in 15 states met this goal in 2023, compared to 9 states in 2020.³⁹⁵

134. We recognize that increasing our short-term goal in this manner invites the possibility of establishing a new long-term goal. The Mississippi Center for Justice proposed that rather than adopt a speed goal, we establish a goal of fiber-based service to every school.³⁹⁶ We find this to be a worthy suggestion, but note that our traditional source of data about schools connectivity, Connected Nation, currently does not publish statistics in this regard.³⁹⁷ Similarly, Connected Nation does not publish statistics regarding connection speeds greater than 1 Gbps per 1000 students/staff. In light of this lack of data, at present, we do not establish a new long-term goal. We intend to work with potential sources of

³⁸⁹ See EducationSuperHighway, 2019 State of the States Report, at 7-8 (2019), <https://s3-us-west-1.amazonaws.com/esh-sots-pdfs/2019%20State%20of%20the%20States.pdf> (2019 State of the States Report). EducationSuperHighway reports the Commission's short-term goal in terms of 100 kbps per user, rather than 100 Mbps per 1,000 users, and reports the long-term goal in terms of 1 Mbps per user, rather than 1 Gbps per 1,000 users. See *id.* at 7, 13; *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8870, 8885, para. 34 (2014) (2014 First E-rate Order).

³⁹⁰ With respect to the relationship between the State of the States and Connect K-12 Reports, see Connected Nation, Report on School Connectivity for Funding Year 2021 at 13 (2022) (*Connect K-12 Funding Year 2021 Report*), https://www.fundsforlearning.com/wp-content/uploads/2022/01/Connect_K12_Connectivity_Report_2021.pdf; 2021 Report, 36 FCC Rcd at 853-54, para. 31). With respect to the lack of reporting on the previous short-term goal, see, e.g. generally *Connect K-12 Funding Year 2021 Report*; Connected Nation, 2023 Report on School Connectivity at 14 (2023) (2023 *Connect K-12 Report*), https://connectk12.org/static/media/Connect_K12_Connectivity_Report_2023_FINAL.dfc96770.pdf.

³⁹¹ See Notice, FCC 23-89, at 21, para. 50.

³⁹² Miss. Center for Justice Reply at 4. NTCA supported increasing the short-term goal as proposed in the *Notice of Inquiry*. NTCA Comments at 11.

³⁹³ 2023 *Connect K-12 Report* at 3.

³⁹⁴ *Id.*

³⁹⁵ *Id.*

³⁹⁶ Miss. Center for Justice Reply at 4-6.

³⁹⁷ See generally 2023 *Connect K-12 Report*. We note that the BDC currently does not collect information about broadband service available to schools.

data to determine what can be realistically measured and to determine whether a new long-term goal can be established for our next report.

135. We agree with the Mississippi Center for Justice that ensuring students' access to broadband at home is an important goal.³⁹⁸ We acknowledged the importance of such connectivity and students' ability to access the Internet outside of school in the *Notice*,³⁹⁹ a matter that the Commission more recently discussed at greater length in the *Homework Gap Notice*.⁴⁰⁰ In recent years, the demand for connectivity beyond school and library buildings became a crisis when the COVID-19 pandemic disrupted operations and caused schools and libraries across the country to temporarily close their doors.⁴⁰¹ Millions of students caught in the "Homework Gap"—that is, students unable to *fully* participate in educational opportunities because they lack broadband connectivity in their homes—suddenly found themselves unable to participate in education *at all*.⁴⁰² Library patrons who relied on their local libraries for remote learning opportunities and Internet access suddenly experienced a loss of these critical services when most, if not all, library buildings closed their doors by the summer of 2020.⁴⁰³ However, even before the COVID-19 pandemic, the Homework Gap affected somewhere between 8.5 to 16 million K-12 students, leaving 15% of U.S. households with children ages six to seventeen lacking a high-speed Internet connection at home and approximately one in four households without high-speed Internet access.⁴⁰⁴ To address this longstanding critical need, Congress created the Emergency Connectivity Fund (ECF), which allowed the Commission to create the nation's first ever federal program designed to address the Homework Gap by providing funding for connected devices, Wi-Fi hotspot devices,

³⁹⁸ Miss. Center for Justice Reply at 6.

³⁹⁹ *Notice*, FCC 23-89, at 20, para. 49.

⁴⁰⁰ *Addressing the Homework Gap through the E-Rate Program*, WC Docket No. 21-31, Notice of Proposed Rulemaking, FCC 23-91 (Nov. 8, 2023).

⁴⁰¹ Colleen McClain et al., *Parents, their children and school during the pandemic* (Sept. 1, 2021), <https://www.pewresearch.org/internet/2021/09/01/parents-their-children-and-school-during-the-pandemic/> (finding that 93% of families with children in grades K-12 reported shifting to online learning during the pandemic).

⁴⁰² See Common Sense Media, *Closing the K-12 Digital Divide in the Age of Distance Learning* (2020), https://www.common Sense Media.org/sites/default/files/featured-content/files/common_sense_media_report_final_7_1_3pm_web.pdf (*Common Sense 2020 Report*) (highlighting that before the pandemic, there were approximately 16 million students nationwide that lived in homes without a broadband connection).

⁴⁰³ See, e.g., Lisa Guernsey, Sabia Prescott, & Claire Park, *Public Libraries and the Pandemic* (Feb. 25, 2021), <https://www.newamerica.org/education-policy/reports/public-libraries-and-the-pandemic/> (describing how the closure of public library buildings by the summer of 2020 hastened the transition to virtual library services for most public libraries); Gretchen Corsillo, *COVID-19: The Impact On Public Libraries* (Mar. 30, 2020), <https://publiclibrariesonline.org/2020/03/covid-19-its-impact-on-public-libraries/> (explaining that "[b]ecause libraries play such a vital role in keeping their patrons educated, connected, and entertained, librarians nationwide have been working around the clock to find ways to keep services going despite being closed to the public"); Frank Catalano, *How Library Closures Hurt Adult Learners as Kids Doubled Down on Digital Reading* (Mar. 8, 2021), <https://www.edsurge.com/news/2021-03-08-how-library-closures-hurt-adult-learners-as-kids-doubled-down-on-digital-reading> (reporting that "15 percent of U.S. adults lost their main source of internet access as libraries started to shut down in March 2020").

⁴⁰⁴ See Catherine McNally, *Nearly 1 in 4 Households Don't Have Internet—and a Quarter Millions Still Use Dial-up* (Aug. 17, 2021), <https://www.reviews.org/internet-service/how-many-us-households-are-without-internet-connection/>; Amanda Litvinov, *Coronavirus Brings 'Homework Gap' to the Forefront* (May 4, 2020), <https://www.nea.org/advocating-for-change/new-from-nea/coronavirus-brings-homework-gap-forefront> (providing data from research conducted in 2017 and 2018); Pew Research Center, *Nearly One-In-Five Teens Can't Always Finish Homework Because of the Digital Divide at 2* (2018), https://internet.psych.wisc.edu/wp-content/uploads/532-Master/532-UnitPages/Unit-11/Anderson_Pew_2018.pdf (providing an analysis based on 2015 U.S. Census Bureau data); *Common Sense 2020 Report*.

broadband connections, and other eligible equipment and services for students, school staff, and library patrons in need for use at locations that included locations outside of their school or library.⁴⁰⁵ We are currently considering our proposal to modify the E-Rate program to better meet the needs of off-premises students, school staff, and library patrons.

IV. COMMISSION ACTIONS ALREADY TAKEN TO PROMOTE UNIVERSAL SERVICE GOALS FOR ADVANCED TELECOMMUNICATIONS CAPABILITY

A. Measuring Broadband Deployment and Policy Development and Coordination

136. *Broadband Data Collection and National Broadband Map.* The Commission has continued to make extensive progress in implementing the requirements of the Broadband DATA Act by establishing the iterative data collection and challenge processes envisioned by the Broadband DATA Act through the Broadband Data Collection. In January 2021, the Commission released the *BDC Third Report and Order*, which specified which fixed and mobile broadband Internet access service providers are required to report broadband service availability data and expanded the reporting and certification requirements for certain fixed and mobile broadband filers in order to ensure that Commission staff have the necessary tools to assess the quality and accuracy of the Commission's broadband coverage maps.⁴⁰⁶ The Commission also adopted in the *BDC Third Report and Order* standards for verifying mobile data and collecting verified broadband data from state, local, and Tribal entities and certain third parties and adopted processes for submitting challenges to fixed and mobile service availability data along with processes for providers to respond to such challenges.⁴⁰⁷ Further, the Commission also established a process for stakeholders to submit challenges to the location data in the Fabric.

137. Since the *BDC Third Report and Order*, the Commission has continued to develop and refine the BDC and provide guidance regarding the collection requirements, including through the release of a number of items that furthered the Commission's ongoing effort to improve broadband service availability data. In February 2021, the Broadband Data Task Force (Task Force) was formed to coordinate the Commission's broadband mapping and data collection efforts across the agency expert teams including staff from several of the Bureaus and Offices. Each of these teams contributes an essential part of the effort to ensure the Commission, state and local governments, Tribal entities, and consumers have access to granular nationwide information on the service availability and quality of broadband services.⁴⁰⁸

138. In March 2022, the Task Force, together with the Wireless Telecommunications Bureau (WTB), the Office of Economics and Analytics (OEA), and Office of Engineering and Technology (OET), released an Order adopting technical requirements to implement the BDC mobile challenge,

⁴⁰⁵ See American Rescue Plan Act, 2021, Pub. L. No. 117-2, tit. VII, § 7402(a), (c), 135 Stat. 4, 109 (2021), available at <https://www.congress.gov/117/plaws/publ2/PLAW-117publ2.pdf>.

⁴⁰⁶ *BDC Third Report and Order*.

⁴⁰⁷ *Id.* at 1127, para. 2.

⁴⁰⁸ Commission staff have held numerous briefing sessions with interested stakeholders from federal and state legislators, state, local, and Tribal governments, other federal and state agencies, consumers, and industry to seek input and address concerns and interests, and to keep all stakeholders informed of the Commission's plans and progress. Moreover, to support stakeholder participation in the BDC, the Commission launched an online help center (help.bdc.fcc.gov) and other new resources including video tutorials, knowledge base articles, and an option to request additional technical assistance. The FCC continues to regularly update the online help center with additional resources, including information for challengers, consumers, and other stakeholders. The BDC Help Center offers both Tier 1 and Tier 2 support to entities seeking to file availability data or challenges including GIS support. Over 8,000 technical assistance requests from internet providers and challengers have been processed to date. In addition, we maintain an on-demand library of video tutorials at <https://www.fcc.gov/BroadbandData/resources>.

verification, and crowdsourcing processes.⁴⁰⁹ The *Mobile Technical Requirements Order* adopted processes and methodologies for collecting mobile challenge data and determining when a mobile service availability challenge is “cognizable,” as well as processes for mobile providers to respond to challenges.⁴¹⁰ The *Mobile Technical Requirements Order* also adopted processes for determining when the Commission staff would initiate a verification inquiry for a service provider’s reported data and requirements for governmental entities and other third parties submitting verified mobile broadband service availability data.⁴¹¹

139. In September 2022, the Task Force, together with WTB, OET, and OEA, released a Public Notice establishing procedures for mobile wireless broadband service providers, governmental entities, and other third parties that use their own hardware and software to submit on-the-ground speed test data as part of the mobile challenge and verification processes as part of the BDC.⁴¹² The Commission has also contracted for the development of additional functionality for the FCC Speed Test application to be used for the mobile challenge and crowdsource processes to enable broad public participation in the BDC.⁴¹³ The Task Force has released extensive additional guidance for mobile and terrestrial fixed wireless providers to enable them to efficiently collect and submit their service availability data into the BDC.⁴¹⁴ The Task Force has provided similar guidance to other stakeholders.⁴¹⁵

140. The Commission released a pre-production draft of the FCC National Broadband Map in November 2022, showing broadband service availability based on provider reported data as-of June 30, 2022, and opened the fixed and mobile service availability challenge processes, as well as the Fabric location challenge process.⁴¹⁶ In May 2023, the Commission released the second iteration of the FCC

⁴⁰⁹ *Establishing the Digital Opportunity Data Collection*, WC Docket No. 19-195, Order, 37 FCC Rcd 3007, 3008, para. 1 (WTB/OEA/OEA 2022).

⁴¹⁰ *Id.* at 3008, para. 2.

⁴¹¹ *Id.*

⁴¹² *Broadband Data Task Force Establishes Process for Entities to Use Their Own Software and Hardware to Collect On-The-Ground Mobile Speed Test Data as Part of the Broadband Data Collection*, WC Docket No. 19-195, Public Notice, 37 FCC Rcd 10628 (WTB/OEA/OET 2022). This Public Notice followed-on from an earlier Public Notice in which the Task Force and OET announced procedures for third-party mobile speed test applications to seek approval for use in the BDC mobile challenge and verification processes. *See Broadband Data Task Force and Office of Engineering and Technology Announce Procedures for Third-Party Mobile Speed Test Applications Seeking Approval for Use in the FCC’s Broadband Data Collection*, WC Docket No. 19-195; ET Docket No. 22-152, Public Notice, 37 FCC Rcd 5004 (2022).

⁴¹³ *See e.g.*, Press Release, FCC, FCC Encourages Public to Use its Speed Test App to Measure their Broadband Speeds (Apr. 12, 2021).

⁴¹⁴ *See e.g.*, Broadband Data Collection, Data Specifications for Provider Infrastructure Data in the Challenge, Verification, and Audit Processes, November 30, 2023, <https://us-fcc.app.box.com/v/bdc-infrastructure-spec> (last visited Jan. 9, 2024) (BDC Infrastructure Data Specifications). The BDC Infrastructure Data Specifications also contain clarifications of the supporting data specifications for mobile service providers that were previously published.

⁴¹⁵ As one example, the Task Force issued a detailed Public Notice explaining how state, local, and Tribal governmental entities primarily responsible for mapping or tracking broadband Internet access service coverage in their jurisdictions can submit verified broadband availability data as part of the BDC. *See Broadband Data Task Force Issues Guidance to State, Local, and Tribal Governmental Entities for Filing Verified Broadband Availability Data as Part of the Broadband Data Collection*, WC Docket Nos. 19-195 & 11-10, Public Notice, 37 FCC Rcd 5080 (2022).

⁴¹⁶ *Broadband Data Task Force Releases Pre-Production Draft of the National Broadband Map; Announces the Start of the Broadband Availability Challenge Processes*, WC Docket Nos. 11-10, 19-195, Public Notice, 37 FCC Rcd 13348 (WCB/WTB/OEA 2022). The launch of the pre-production draft of the National Broadband Map marked the start of the broadband availability challenge processes, as well as the ability for consumers to submit

(continued....)

National Broadband Map based on data as-of December 31, 2022.⁴¹⁷ In November 2023, the third iteration of the Commission's National Broadband Map was publicly released.⁴¹⁸

141. *Interagency Information Sharing and Coordination.* In early 2021, the Commission, NTIA and USDA/RUS began regular meetings to facilitate coordination as they implemented the existing broadband funding programs, as well as new funding programs established by Congress in the Consolidated Appropriation Act, 2021.⁴¹⁹ The Consolidated Appropriations Act, 2021 included the Broadband Interagency Coordination Act of 2020, which required the Commission, USDA, and NTIA to enter into an interagency agreement to coordinate for the distribution of funds for broadband deployment and to share information about existing or planned projects receiving funding in their respective programs.⁴²⁰ In June 2021, the Commission entered into the required agreement with USDA and NTIA to share information about, and coordinate the distribution of, federal broadband deployment funds (Interagency Agreement).⁴²¹ Specifically, under the agreement, the agencies will consult with one another and share information about the distribution of new funds from the Commission's high-cost programs that support broadband buildout in rural areas, the RUS grant and loan programs, and programs administered or coordinated by NTIA. Recognizing the importance of a comprehensive approach to federal broadband funding, in May 2022, the Commission, USDA, and NTIA entered into a Memorandum of Understanding with the U.S. Department of Treasury (Treasury) to share information about, and collaborate regarding, the collections and reporting of certain data and metrics relating to broadband deployment, including deployment funded by Treasury-administered programs.⁴²² This Memorandum of Understanding provides that the agencies will consult with one another and share information on data collected from programs administered by the Commission and the USDA's Rural Utilities Service, programs administered or coordinated by NTIA, and Treasury's Coronavirus Capital Projects Fund and the

(Continued from previous page)

individual challenges to the location data in the Fabric. *Id.* The process for entities to submit bulk challenges to the Fabric began earlier, on September 12, 2022. *Broadband Data Task Force, Wireline Competition Bureau, and Office of Economics and Analytics Announce Start of Fabric Bulk Challenge Process*, WC Docket Nos. 19-195, 11-10, Public Notice, 37 FCC Rcd 10140 (BDTF/WCB/OEA 2022). Shortly after the first iteration of the map was released, the Commission sunset the collection of broadband deployment data through the FCC Form 477. *2022 Form 477 Order.* The Commission clarified that it will continue to collect broadband and voice subscription data using the FCC Form 477, but filers will submit their data through the BDC system. *Id.* 37 FCC at 14957, para. 1.

⁴¹⁷ See Chairwoman Rosenworcel Note, *National Broadband Map: It Keeps Getting Better*, <https://www.fcc.gov/national-broadband-map-it-keeps-getting-better> (May 30, 2023).

⁴¹⁸ See Chairwoman Rosenworcel Note, *National Broadband Map 3.0: Thankful for Continued Improvements*, <https://www.fcc.gov/news-events/notes/2023/11/17/national-broadband-map-30-thankful-continued-improvements> (Nov. 17, 2023).

⁴¹⁹ See, e.g., Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, div. N, tit. IX, § 905(c) (establishing the Tribal Broadband Connectivity Program) and § 905(d) (establishing the Broadband Infrastructure Program), 134 Stat. 1182, 2138, 2139 (2020)). The Commission and the U.S. Department of Agriculture's (USDA) Rural Utilities Service (RUS) began coordinating on broadband funding as early as 2014, when the agencies entered into a Memorandum of Understanding that governs sharing information on their respective funding programs. Pursuant to the 2014 Memorandum of Understanding, the Commission and RUS have maintained an ongoing dialogue at the staff- and leadership levels to avoid duplication and coordinate their broadband funding efforts.

⁴²⁰ *Id.*, 134 Stat. at 3214, div. FF, tit. IX, § 904.

⁴²¹ Interagency Agreement Between the Federal Communications Commission, U.S. Department of Agriculture, and the National Telecommunications and Information Administration of the U.S. Department of Congress (June 25, 2021), <https://www.fcc.gov/document/fcc-ntia-usda-sign-interagency-pact-broadband-funding-deployment>.

⁴²² Memorandum of Understanding Regarding Information Sharing, dated as of May 9, 2022, between the Federal Communications Commission, U.S. Department of Agriculture, the National Telecommunications and Information Administration of the U.S. Department of Commerce, and the U.S. Department of the Treasury (May 11, 2022), <https://docs.fcc.gov/public/attachments/DOC-383278A1.pdf>.

Coronavirus State and Local Fiscal Recovery Funds.

142. In February 2023, after soliciting and reviewing public comment, the Commission sent a report to Congress assessing the effectiveness of the Interagency Agreement, as required by the Consolidated Appropriations Act.⁴²³ The report concluded that the Interagency Agreement has been effective in facilitating the exchange of information and prevention of, or limiting, overlap and duplication among the signatory agencies' broadband deployment funding.⁴²⁴ The report also acknowledged that while certain challenges remain, such as statutorily prescribed differences in programs, the Interagency Agreement has enabled the agencies to avoid, limit, or unwind duplication to a significant degree.⁴²⁵ Where it has not been possible to do so, the data sharing and dialogues fostered by the Interagency Agreement have given the agencies the resources to make informed funding decisions, and the agencies continue to develop and refine a common process that respects each agency's resources, statutory obligations, and leadership preferences.⁴²⁶

143. On May 15, 2023, the Commission released the Broadband Funding Map, pursuant to section 60105 of the Infrastructure Act,⁴²⁷ containing data received from the USDA, NTIA, and the Department of Treasury, as well as the Commission's own data.⁴²⁸ Funding data that are submitted to the Commission by other federal agencies in the future will be added to the map as part of regular updates the Commission will make to the map in accordance with the Infrastructure Act.

144. The Broadband Funding Map allows users to identify, search, and filter federal funding programs by the Internet Service Provider receiving funding, the duration timeline, the number of locations included in the project, and the download and upload speeds. In addition to depicting where broadband funding exists, the Broadband Funding Map contains broadband service availability data from the National Broadband Map. As the Commission releases more recent service availability data on the National Broadband Map, the Broadband Funding Map is also updated.

145. The Commission has also engaged in interagency coordination relating to spectrum. In November 2022, the Commission and the Departments of the Interior and Commerce entered into a Memorandum of Understanding to advance electromagnetic spectrum access opportunities and the deployment of broadband and other wireless services on Tribal lands.⁴²⁹

146. *Future of the USF Report.* As directed by Congress in Section 60104(c) of the Infrastructure Act, the Commission released a report on August 15, 2022 evaluating the implications of federal investments in broadband in the Infrastructure Act and other recent legislation on how the

⁴²³ Wireline Competition Bureau, Report on the Effectiveness of the Broadband Interagency Coordination Agreement Pursuant to § 1308 of the Broadband Interagency Coordination Act (2023), <https://docs.fcc.gov/public/attachments/DOC-391167A1.pdf> (*FCC BICA Report*); Consolidated Appropriations Act, 2021, div. FF, tit. IX, § 904(b)(4), 134 Stat. at 3214.

⁴²⁴ *FCC BICA Report* at 4-7.

⁴²⁵ *Id.* at 7.

⁴²⁶ *Id.*

⁴²⁷ Infrastructure Act, div. F, tit. I, § 60105 (requiring the Commission "to establish an online mapping tool to provide a locations overview of the overall geographic footprint of each broadband infrastructure deployment project funded by the Federal Government.").

⁴²⁸ The Broadband Funding Map can be found at <https://fundingmap.fcc.gov/home>.

⁴²⁹ Memorandum of Understanding to Advance Electromagnetic Spectrum Access Opportunities and the Deployment of Broadband and Other Wireless Services on Tribal Lands, Among the U.S. Department of the Interior and the Federal Communications Commission and the U.S. Department of Commerce, National Telecommunications and Information Administration (effective November 23, 2022), https://www.bia.gov/sites/default/files/dup/inline-files/mou_esb46-009818_doi-fcc-ntia_electromagnetic_spectrum_on_tribal_lands_2022-11-23_final_fcc_ntia_doi_signed_508.pdf.

Commission should achieve its universal service goals for broadband.⁴³⁰ In the *Future of the USF Report*, the Commission established the goals of universal deployment, affordability, adoption, availability, and equitable access to broadband throughout the United States.⁴³¹ The Commission also made recommendations for further actions by the Commission and Congress to improve the ability of the Commission to achieve its universal service goals⁴³² and addressed arguments concerning the lawfulness of the USF.⁴³³

147. *Precision Agriculture Connectivity Task Force.* The Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States (Precision Agriculture Connectivity Task Force) continued its work since January 2021 by providing advice and recommendations for the FCC on how to assess and advance deployment of broadband Internet access service on unserved agriculture land to promote precision agriculture for both cropping and husbandry.⁴³⁴ The Precision Agriculture Connectivity Task Force met six times in 2021.⁴³⁵ In November 2021, the Precision Agriculture Connectivity Task Force submitted a report to the Commission including recommendations that the Commission and USDA: (1) improve federal broadband maps and consistently validate user experiences through crowd sourcing, on-the-ground testing, and independent data verification; (2) increase incentives and subsidies through federal broadband programs to increase

⁴³⁰ *Future of the USF Report*.

⁴³¹ *Id.*, 37 FCC Rcd at 10046-48, paras. 11-16.

⁴³² *Id.* at 10042-94, paras. 27-111. Specifically in regard to its goal of affordability, the Commission made recommendations for further actions by the Commission and Congress related to the Lifeline program and the Affordable Connectivity Program. *Id.* at 10069-80, paras. 55-74.

⁴³³ *Id.* at 10094-98, paras. 112-19.

⁴³⁴ See *FCC Announces the Establishment of the Task Force for Reviewing Connectivity and Technology Needs of Precision Agriculture in the United States and Seeks Nominations for Membership*, Public Notice, 34 FCC Rcd 5057 (WCB 2019) (announcing the 2019-20 charter); *FCC Announces the Membership and First Meeting of the Re-chartered Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States*, GN Docket No. 19-329, Public Notice, 36 FCC Rcd 16828 (WCB Dec. 9, 2021) <https://docs.fcc.gov/public/attachments/DA-21-1532A1.pdf> (2021-22 Precision Agriculture Connectivity Task Force Re-Charter Public Notice); *FCC Announces the Membership and First Meeting of the Re-Chartered Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States*, GN Docket No. 19-329, Public Notice, DA 24-53 (WCB Jan. 17, 2024) (2023-25 Precision Agriculture Connectivity Task Force Re-Charter Public Notice); see also Agriculture Improvement Act of 2018, Pub. L. No. 115-334, 132 Stat. 4490, § 12511(b)(2) (2018 Farm Bill) (establishing the Task Force and setting forth its duties and obligations). The Precision Agriculture Connectivity Task Force will perform duties and submit reports consistent with section 12511 of the 2018 Farm Bill and in consultation with the Department of Agriculture in successive terms until the Task Force ends on January 1, 2025. *Id.* § 12511(b)(3), (6).

⁴³⁵ See *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on March 21, 2021*, GN Docket No. 19-329, Public Notice, 36 FCC Rcd 4165 (WCB 2021); *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on July 8, 2021*, GN Docket No. 19-329, Public Notice, 36 FCC Rcd 9440 (WCB 2021); *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on August 19, 2021*, GN Docket No. 19-329, Public Notice, 36 FCC Rcd 11399 (WCB 2021); *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on September 14, 2021*, GN Docket No. 19-329, Public Notice, 36 FCC Rcd 12777 (WCB 2021); *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on October 14, 2021*, GN Docket No. 19-329, Public Notice, 36 FCC Rcd 13875 (WCB 2021); *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on November 10, 2021*, GN Docket No. 19-329, Public Notice, 36 FCC Rcd 12777 (WCB Oct. 20, 2021), <https://docs.fcc.gov/public/attachments/DA-21-1314A1.pdf>.

adoption of precision agriculture and build out a robust infrastructure that will support precision agriculture networks and operations; (3) enhance high-speed standards to meet technology needs in agriculture; (4) improve collaboration between federal agencies and remove regulatory impediments; and (5) increase digital access to education and training for individuals engaged in farming.⁴³⁶

148. In December 2021, the Commission re-chartered the Precision Agriculture Connectivity Task Force for a second two-year term.⁴³⁷ The Precision Agriculture Connectivity Task Force met five times in 2022⁴³⁸ and adopted interim reports submitted by each of its four working groups in December 2022.⁴³⁹ In 2023, the Precision Agriculture Connectivity Task Force met three times⁴⁴⁰ and adopted a final report at its November 6, 2023 meeting.⁴⁴¹ The report made various recommendations in the following four categories: (1) mapping and analyzing connectivity on agricultural lands, where Precision Agriculture Connectivity Task Force recommendations include improving the National Broadband Map by improving the usability for precision agriculture;⁴⁴² (2) examining current and future connectivity demand, where Precision Agriculture Connectivity Task Force recommendations include prioritizing deployment of broadband infrastructure to agricultural lands, raising the current standard for upload and download speeds, making sufficient spectrum available, and addressing certain technology limitations;⁴⁴³

⁴³⁶ Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States, Report adopted as of November 10, 2021 at 4 (2021), <https://www.fcc.gov/sites/default/files/precision-ag-report-11102021.pdf>.

⁴³⁷ Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States Charter (filed Dec. 2, 2021), <https://www.fcc.gov/sites/default/files/precision-ag-task-force-charter-12022021.pdf>; see also *2021-22 Precision Agriculture Connectivity Task Force Re-Charter Public Notice*.

⁴³⁸ *2021-22 Precision Agriculture Connectivity Task Force Re-Charter Public Notice* (setting Jan. 13, 2022 as the date of the second term's first meeting); *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on March 21, 2022*, GN Docket No. 19-329, Public Notice, 37 FCC Rcd 2828 (WCB Mar. 3, 2022); *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on July 21, 2022*, GN Docket No. 19-329, Public Notice, 37 FCC Rcd 7526 (WCB June 23, 2022); *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on October 5, 2022*, GN Docket No. 19-329, Public Notice, 37 FCC Rcd 10663 (WCB Sept. 16, 2022); *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on December 2, 2022*, GN Docket No. 19-329, Public Notice, 37 FCC Rcd 13152 (WCB Nov. 8, 2022).

⁴³⁹ See FCC, *Precision Ag Connectivity Task Force Meeting – December 2022*, <https://www.fcc.gov/news-events/events/2022/12/precision-ag-connectivity-task-force-meeting-december-2022> (last visited Jan. 14, 2024). As in the first two terms, four working groups are assisting the Task Force in carrying out its work: (1) Mapping and Analyzing Connectivity on Agricultural Lands; (2) Examining Current and Future Connectivity Demand for Precision Agriculture; (3) Encouraging Adoption of Precision Agriculture and Availability of High-Quality Jobs on Connected Farms; and (4) Accelerating Broadband Deployment on Unserved Agricultural Lands.

⁴⁴⁰ *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on March 28, 2023*, GN Docket No. 19-329, Public Notice, 38 FCC Rcd 1626 (WCB Mar. 7, 2023); *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on July 11, 2023*, GN Docket No. 19-329, Public Notice, DA 23-516 (WCB June 15, 2023); *FCC Announces Next Meeting of the Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States on November 6, 2023*, GN Docket No. 19-329, Public Notice, DA 23-923 (WCB Oct. 3, 2023).

⁴⁴¹ Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States, Report adopted as of November 6, 2023 (2023), <https://www.fcc.gov/sites/default/files/2024-Report-PrecisionAg-Task-Force-without-Signatures.pdf>.

⁴⁴² *Id.* at 3-4, 12-17.

⁴⁴³ *Id.* at 4-6, 18-31.

(3) accelerating broadband deployment on unserved agricultural lands, where Precision Agriculture Connectivity Task Force recommendations include harmonizing the definition and standards of broadband used by all federal agencies for funding decisions,⁴⁴⁴ prioritizing grant applications that include wide-area coverage to agricultural acreage, incentivizing connectivity to rural agricultural land headquarters, dedicating low-cost terrestrial spectrum for precision agriculture, and providing funding for build-out and operation of last-acre networks;⁴⁴⁵ and (4) encouraging adoption and availability of high-quality jobs, where Precision Agriculture Connectivity Task Force recommendations include considering precision agriculture connectivity as a critical component of our Nation’s food and homeland security, pivoting USDA’s ReConnect program to prioritizing on-farm connectivity, and making FCC, NTIA, and USDA reporting metrics and survey requirements consistent to identify broadband development and precision agriculture adoption.⁴⁴⁶ On November 29, 2023, the Commission re-chartered the Precision Agriculture Connectivity Task Force for its third term that will end January 1, 2025, consistent with section 12511(b)(6) of the 2018 Farm Bill.⁴⁴⁷ The Precision Agriculture Connectivity Task Force held its first meeting of the new term on January 31, 2024⁴⁴⁸ and is expected to adopt its final report for the third and concluding term by January 1, 2025.

149. *Native Nations Communications Task Force.* The Native Nations Communications Task Force continued its work in 2022 and 2023. In February of 2022, eight new Tribal members were appointed to the Native Nations Communications Task Force.⁴⁴⁹ In June of the same year, the Native Nations Communications Task Force posted a Handbook in Infrastructure Deployment on Tribal Lands that was adopted by the Tribal members of the Task Force.⁴⁵⁰ This Handbook is intended to bring awareness of the various steps involved in broadband deployment, including developing networks, forming partnerships, establishing sound regulatory policies and practices, and creating sustainable business models.⁴⁵¹ The Handbook also provides guidance related to assessing current and future needs and designing systems to meet those needs either through a third party or by directly by a Tribe.⁴⁵² Most recently, the Commission sought nominations and recommitment letters for membership on a renewed Native Nations Communications Task Force for 2024.⁴⁵³

150. *Connect2Health^{FCC} Task Force.* The Connect2Health^{FCC} Task Force,⁴⁵⁴ charged with exploring the intersection of and relationship between broadband, advanced technology, and health,

⁴⁴⁴ We note that Commission does not have a definition of broadband, but rather various benchmarks and standards used for various purposes, such as those discussed in this Report.

⁴⁴⁵ *Id.* at 7-8, 32-41.

⁴⁴⁶ *Id.* at 8-11, 42-55.

⁴⁴⁷ Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States Charter (filed Nov. 29, 2023), <https://www.fcc.gov/sites/default/files/precision-ag-task-force-charter-11292023.pdf>.

⁴⁴⁸ *2023-25 Precision Agriculture Connectivity Task Force Re-Charter Public Notice*, DA 24-53, at 1.

⁴⁴⁹ *Chairwoman Rosenworcel Announces New Appointments to the Native Nations Communications Task Force*, Public Notice, 37 FCC Rcd 1069 (2022).

⁴⁵⁰ *Native Nations Communication Task Force, Handbook on Infrastructure Deployment on Tribal Lands 1* (2022), https://www.fcc.gov/sites/default/files/nncf_infrastructure_handbook_adopted_05.16.22.pdf.

⁴⁵¹ *Id.*

⁴⁵² *Id.*

⁴⁵³ *FCC Extends Current Native Nations Communications Task Force and Seeks Nominations for Tribal Government Representatives to Serve on Renewed Task Force Beginning in 2024*, Public Notice, DA 23-982 (Oct. 16, 2023); *FCC Extends Deadline to December 29, 2023, to Submit Nominations and Recombitment Letters for Membership on the Native Nations Communications Task Force*, Public Notice, DA 23-1124 (Nov. 30, 2023).

⁴⁵⁴ Recognizing that technology innovations in clinical practice and care delivery are poised to fundamentally change the face of health care, in 2014 the Commission created the Connect2Health^{FCC} Task Force—a senior-level, (continued....)

continued its work in 2023, reflecting the Commission’s commitment to leveraging broadband connectivity to improve health and healthcare for all Americans. The Task Force updated the *Mapping Broadband Health in America* platform—a data visualization tool that intersects broadband and health data and allows users to generate customizable maps to assess areas where the lack of broadband access and Internet adoption could impact health and health outcomes or exacerbate the broadband health gap. Specifically, in response to the *Data Mapping to Save Moms’ Lives Act*,⁴⁵⁵ the Commission, in consultation with the Centers for Disease Control and Prevention,⁴⁵⁶ released a maternal health module in June 2023 that allows policymakers, state, local, and tribal governments, advocacy organizations, and service providers to identify and prioritize the communities with lower connectivity resources and higher maternal health need.⁴⁵⁷ In October 2023, the Commission initiated a proceeding on future refinements and improvements to the mapping platform and sought to understand the current landscape and barriers to widespread use of broadband-enabled health solutions and services.⁴⁵⁸ Most recently, in November 2023, the Commission, in partnership with the U.S. Department of Health and Human Services, convened policymakers, grassroots organizations, telecommunications and public health experts, researchers, and clinicians to explore how advancing digital equity—including increased access to reliable, high-speed broadband and broadband-enabled health technologies—improves maternal health equity.⁴⁵⁹

B. Removing Barriers to and Encouraging Broadband Investment

151. *Multiple Tenant Environments.* Millions of people work and live in multiple tenant environments (MTEs), with a third of Americans residing in apartments, condominiums, or other multiunit buildings. A disproportionate number of residents in these MTEs are lower-income and

(Continued from previous page)

multi-disciplinary internal team, housed in the Office of General Counsel—to help the agency move the needle on broadband and advanced health care technologies. See FCC, Connect2Health^{FCC}, <https://www.fcc.gov/about-fcc/fcc-initiatives/connect2healthfcc> (last accessed Feb. 27, 2024). On behalf of the agency, the Task Force charts the broadband future of health and care through its various projects and initiatives and advises and provides recommendations to the Commission on matters concerning broadband and health.

⁴⁵⁵ Data Mapping to Save Moms’ Lives Act, Pub. L. No. 117-247, 136 Stat. 2347 (2022). In adopting the Act, Congress determined that “[b]roadband mapping could lead to better maternal health outcomes,” S. Rep. No. 117-65, at 2 (2022), and identified the Commission’s *Mapping Broadband Health in America* platform as the tool to chart which areas of the country are most in need of critical broadband-enabled health resources.

⁴⁵⁶ See Letter from Jessica Rosenworcel, Chairwoman, FCC, to Dr. Rochelle P. Walensky, Director, CDC (Apr. 11, 2023), <https://www.fcc.gov/document/chairwoman-letter-cdc-director-maternal-health-collaboration>.

⁴⁵⁷ See Press Release, FCC, FCC Explores Role of Broadband Connectivity in Maternal Health Outcomes (June 20, 2023), <https://www.fcc.gov/document/fcc-explores-broadband-connectivity-role-maternal-health-outcomes>. Planned future work—including the integration of additional broadband and health data—will allow users to visualize patterns, possible disparities, and areas where broadband deployment and Internet adoption could create the greatest impact in health.

⁴⁵⁸ *Broadband Connectivity and Maternal Health—Implementation of the Data Mapping to Save Moms’ Lives Act*, GN Docket No. 23-309, Notice of Inquiry, FCC 23-85 (Oct. 20, 2023). Commenters generally agreed that access to affordable high-speed broadband remains one of the primary barriers to universal adoption of broadband-enabled health solutions, and one commenter emphasized that broadband speeds of 25/3 Mbps are insufficient for connected health technologies. See Next Century Cities Comments, GN Docket No. 23-309, at 7-8 (rec. Nov. 20, 2023).

⁴⁵⁹ *Federal Communications Commission and U.S. Department of Health and Human Services Announce Agenda for Maternal Health and Broadband Roundtable on November 17, 2023*, GN Docket No. 23-309, Public Notice, DA 23-1083 (OGC Nov. 15, 2023). The Roundtable engaged a wide cross-section of thought leaders, advocacy groups, entrepreneurs, and policymakers to explore the intersection of broadband connectivity and maternal health, the role of broadband as a social determinant of health, and the implications of that framework for improving maternal health outcomes and informing broadband and health policies. A full recording of the Roundtable is available at <https://www.fcc.gov/news-events/events/2023/11/maternal-health-roundtable>.

associated with marginalized communities.⁴⁶⁰ To ensure competitive choice of communications services for those living and working in MTEs, and to address practices that undermine longstanding rules promoting competition in MTEs, on February 15, 2022, the Commission took three specific actions.⁴⁶¹ First, the Commission adopted new rules prohibiting providers from entering into certain types of revenue sharing agreements that are used to evade the Commission's existing rules.⁴⁶² Second, the Commission adopted new rules requiring providers to disclose the existence of exclusive marketing arrangements in simple, easy-to-understand language.⁴⁶³ Third, the Commission clarified that existing Commission rules regarding cable inside wiring prohibit so-called "sale-and-leaseback" arrangements, which effectively deny access to alternative providers.⁴⁶⁴ In taking these actions, the Commission sought to promote tenant choice and competition in the provision of communications services to the benefit of those who live and work in MTEs.⁴⁶⁵

152. *Pole Attachments.* On December 15, 2023, the Commission released a Fourth Report and Order, Declaratory Ruling, and Third Further Notice of Proposed Rulemaking to further the Commission's efforts to reform its pole attachment rules and policies to promote faster and more cost effective broadband deployment.⁴⁶⁶ These reforms will speed the pole attachment dispute resolution process by establishing a new intra-agency rapid response team – the Rapid Broadband Assessment Team (RBAT) – to provide coordinated review and assessment of pole attachment disputes and recommend effective dispute resolution procedures, adopting specific criteria for the RBAT to use when considering whether a complaint (or portion thereof) should be included on the Commission's Accelerated Docket. The new rules will also increase transparency for new broadband buildouts by amending the Commission's pole attachment make-ready rules to require utilities to provide to potential attachers, upon request, the information contained in the utilities' most recent cyclical pole inspection reports, or any intervening, periodic reports created before the next cyclical inspection, for the poles covered by a submitted attachment application.⁴⁶⁷ In the Declaratory Ruling, the Commission clarified that for purposes of the Commission's pole replacement policies, a "red tagged" pole is one that the utility has identified as needing replacement for any reason other than the pole's lack of capacity to accommodate a new attachment, provided additional examples for when a pole replacement is not "necessitated solely" as a result of a third party's attachment or modification request when a pole already requires replacement at the time that the new attacher's request is made, clarified attachers' right to access documentation regarding utility easements, and clarified that the first 3,000 poles in an attachment application are subject to the pre-existing processing timeline in the Commission's rules.⁴⁶⁸ In the Further Notice, the Commission seeks comment on whether the Commission should take further action to facilitate the processing of pole attachment applications that are submitted in large numbers, whether the Commission should modify its self-help rules to enable prospective attachers to access poles more quickly, and the effect of contractor availability when attachers seek to use their own contractors when conducting self-

⁴⁶⁰ *Id.*

⁴⁶¹ *Improving Competitive Broadband Access to Multiple Tenant Environments*, GN Docket 17-142, Report and Order and Declaratory Ruling, 37 FCC Rcd 2448 (2022).

⁴⁶² *Id.* at 2456-61, paras. 16-26.

⁴⁶³ *Id.* at 2464-69, paras. 33-42.

⁴⁶⁴ *Id.* at 2471-76, paras. 47-60.

⁴⁶⁵ *Id.* at 2450, para. 2.

⁴⁶⁶ *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84, Fourth Report and Order, Declaratory Ruling, And Third Further Notice of Proposed Rulemaking, FCC 23-109, 4-5, para. 7 (Dec. 15, 2023) (*2023 Wireline Infrastructure Order*).

⁴⁶⁷ *Id.* at 5-12, paras. 8-22.

⁴⁶⁸ *Id.* at 24-30, paras. 39-47; 47 CFR § 1.1411(g)(3).

help or one-touch make-ready for surveys and make-ready work.⁴⁶⁹

153. *Open Radio Access Networks*. In March 2021, the Commission adopted a Notice of Inquiry which sought comment on the potential of open and virtualized Radio Access Networks (Open RANs) in securing America's wireless networks and communications supply chain, and in driving 5G innovation.⁴⁷⁰ The Commission sought comment on the current status of Open RAN development, the role of established manufacturers and of new entrants in setting standards for this new network architecture, challenges or other considerations related to the testing, deployment, and integration of Open RAN systems, the costs and benefits associated with Open RAN development and deployment, and what steps, if any, the Commission should take to accelerate the development and deployment of Open RAN.⁴⁷¹

C. Improving Access to Spectrum

154. *Terrestrial Wireless Service*. The Commission has continued its efforts to expand access to spectrum to support 5G and other advanced wireless services. Spectrum is an important component of all wireless services, and making additional spectrum available ensures that wireless providers are able to deploy 5G networks expeditiously. The Commission has pursued a comprehensive strategy to make additional high-band, mid-band, and low-band spectrum available through initial licensing and also through other innovative means, including secondary market transactions. However, until Congress reauthorizes the Commission's spectrum auction authority, which expired for the first time in agency history in March 2023, the Commission is unable to make new spectrum available through its auction process.

155. Recognizing that mid-band spectrum is particularly well suited for 5G deployment because of its favorable characteristics, the Commission has continued to work towards making more mid-band spectrum available. In 2015, the Commission established the Citizens Broadband Radio Service, making 150 megahertz of mid-band spectrum available for shared commercial use in the 3550-3700 MHz band (3.5 GHz band).⁴⁷² The Citizens Broadband Radio Service includes two tiers of commercial service: Priority Access and General Authorized Access (GAA).⁴⁷³ Starting in March 2021, the Wireless Telecommunications Bureau began granting Priority Access Licenses (PALs) in the 3.5 GHz band in the wake of the successful Auction 105, which concluded in August 2020. Auction 105 was the first 5G mid-band spectrum auction. It raised a total of \$4.5 billion dollars and made available the

⁴⁶⁹ 2023 *Wireline Infrastructure Order*, FCC 23-109, 31-33, paras. 49, 51-54.

⁴⁷⁰ *Promoting the Deployment of 5G Open Radio Access Networks*, GN Docket No. 21-63, Notice of Inquiry, 36 FCC Rcd 5947 (2021).

⁴⁷¹ *Id.*; see also Press Release, FCC, FCC Seeks Comment on Open Radio Access Networks (March 17, 2021), <https://www.fcc.gov/document/fcc-seeks-comment-open-radio-access-networks>; see also *5G Fund FNPRM*, FCC 23-74 at 28-30, paras. 53-54 (seeking comment on whether and how the 5G Fund proceeding should promote the continued deployment of Open RAN technologies).

⁴⁷² See *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, GN Docket No. 12-354, Report and Order and Second Further Notice of Proposed Rulemaking, 30 FCC Rcd 3959, 3961-62, paras. 1-4 (2015) (*3.5 GHz Order/Second FNPRM*); see also *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, GN Docket No. 12-354, Order on Reconsideration and Second Report and Order, 31 FCC Rcd 5011 (2016); *Promoting Investment in the 3550-2700 MHz Band*, GN Docket No. 17-258, Report and Order, 33 FCC Rcd 10598 (2018).

⁴⁷³ See *3.5 GHz Order/Second FNPRM*, 30 FCC Rcd at 3962, para. 4. Access and operations within the band are managed by automated frequency coordinators known as Spectrum Access Systems. 47 CFR § 96.63; *3.5 GHz Order/Second FNPRM*, 30 FCC Rcd at 3985-87, paras. 80-86. The GAA tier is licensed-by-rule to permit open, flexible access to the band for the widest possible group of potential users. 47 CFR §§ 96.33, 96.35; *3.5 GHz Order/Second FNPRM*, 30 FCC Rcd at 3962, para. 4. GAA users must not cause harmful interference to, and must accept harmful interference from, higher tier users. 47 CFR §§ 96.33, 96.35; *3.5 GHz Order/Second FNPRM*, 30 FCC Rcd at 3962, para. 4.

greatest number of spectrum licenses ever in a single FCC auction.⁴⁷⁴ To date, WTB has granted more than 20,500 PALs to nearly 230 entities.⁴⁷⁵

156. Auction 107, the record-breaking auction for new flexible-use overlay licenses in the 3.7-3.98 GHz band, was completed in February 2021, with net winning bids exceeding \$81.1 billion, and 21 bidders winning all of the available 5,684 licenses.⁴⁷⁶ Through the repacking of existing satellite operations into the upper 200 megahertz of the C-band, the Commission made a significant amount of spectrum available for flexible terrestrial use throughout the contiguous United States in a manner that ensures continuous and uninterrupted delivery of the incumbent services offered in the band.⁴⁷⁷ WTB granted 3.7 GHz licenses in July 2021 and April 2022.⁴⁷⁸

157. In March 2021, the Commission adopted an order that advanced the Commission's goals of making more mid-band spectrum available for 5G.⁴⁷⁹ The order adopted a framework that will enable full-power commercial use of the 3.45 GHz band and require that future licensees deploy their networks quickly.⁴⁸⁰ In January 2022, bidding in Auction 110 concluded.⁴⁸¹ The net proceeds of Auction 110 exceeded \$22.4 billion, with 23 bidders winning a total of 4,041 licenses.⁴⁸² WTB has now granted all

⁴⁷⁴ See Press Release, FCC, *FCC Concludes First 5G Mid-Band Spectrum Auction*, Aug. 25, 2020.

⁴⁷⁵ See *Wireless Telecommunications Bureau Grants Auction 105 Priority Access Licenses*, Auction No. 105, Public Notice, 36 FCC Rcd 4926 (WTB 2021); *Wireless Telecommunications Bureau Grants Additional Auction 105 Priority Access Licenses*, Auction No. 105, Public Notice, 36 FCC Rcd 7633 (WTB 2021); *Wireless Telecommunications Bureau Grants Additional Auction 105 Priority Access Licenses*, Auction No. 105, Public Notice, 36 FCC Rcd 10886 (WTB 2021); *Wireless Telecommunications Bureau Grants Additional Auction 105 Priority Access Licenses*, Auction No. 105, Public Notice, 36 FCC Rcd 16811 (WTB 2021); *Wireless Telecommunications Bureau Grants Additional Auction 105 Priority Access Licenses*, Auction No. 105, Public Notice, 37 FCC Rcd 8709 (WTB 2022); *Wireless Telecommunications Bureau Grants Additional Auction 105 Priority Access Licenses*, Auction No. 105, Public Notice, 37 FCC Rcd 11387 (WTB 2022).

⁴⁷⁶ *Auction of Flexible-use Service Licenses in the 3.7-3.98 GHz Band Closes; Winning Bidders Announced for Auction 107*, AU Docket No. 20-25, Public Notice, 36 FCC Rcd 4318, 4318, para. 1 (OEA/WTB 2021); FCC, Press Release, First Phase of Record-Breaking 5G Spectrum Auction Concludes (Jan. 15, 2021), <https://docs.fcc.gov/public/attachments/DOC-369265A1.pdf>.

⁴⁷⁷ *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, GN Docket No. 18-122, Report and Order and Order of Proposed Modification, 35 FCC Rcd 2343, 2345, para. 4 (2020).

⁴⁷⁸ *Wireless Telecommunications Bureau Grants Auction 107 Licenses*, Auction No. 107, Public Notice, DA 21-839 (WTB July 23, 2021); *Wireless Telecommunications Bureau Grants Additional Auction 107 Licenses*, Auction No. 107, Public Notice, 37 FCC Rcd 4505 (WTB 2022).

⁴⁷⁹ *Facilitating Shared Use in the 3100-3550 MHz Band*, WT Docket No. 19-348, Second Report and Order, Order on Reconsideration, and Order of Proposed Modification, 36 FCC Rcd 5987 (2021). The order continued the implementation of the Beat China by Harnessing Important, National Airwaves for 5G Act of 2020, Pub. L. 116-260, Division FF, Title IX, Sec. 905, which required the Commission to commence an auction to grant new initial licenses subject to flexible use in the 3450-3550 MHz (3.45 GHz) band by the close of 2021.

⁴⁸⁰ *Facilitating Shared Use in the 3100-3550 MHz Band*, WT Docket No. 19-348, Second Report and Order, Order on Reconsideration, and Order of Proposed Modification, 36 FCC Rcd 5988, 5988, para. 1 (2021) (*3.45 GHz Second Report and Order*).

⁴⁸¹ *Auction of Flexible-Use Service Licenses in the 3.45-3.55 GHz Band Closes; Winning Bidders Announced for Auction 110*, AU Docket No. 21-62, Public Notice, 37 FCC Rcd 308 (OEA/WTB 2022) (*Auction 110 Closing Public Notice*).

⁴⁸² *Auction 110 Closing Public Notice*, 37 FCC Rcd 308, 308, para. 1.

3.45 GHz licenses.⁴⁸³ Collectively, the 3.45 GHz band and the neighboring 3.5 GHz and 3.7 GHz bands will offer 530 megahertz of contiguous mid-band spectrum for 5G services.⁴⁸⁴

158. WTB and the Public Safety and Homeland Security Bureau (PSHSB) released a Public Notice in August 2021 providing guidance regarding the adoption of new rules for the 5.850-5.925 GHz (5.9 GHz) band.⁴⁸⁵ In particular, WTB and PSHSB provided guidance to intelligent transportation system (ITS) licensees seeking waivers of the Commission's rules to operate roadside units with cellular vehicle to everything (C-V2X)-based technology in the upper 30 megahertz (5.895-5.925) portion of the 5.9 GHz band, prior to adoption of final rules providing for such use, as well as guidance for waivers associated with equipment certifications and on-board units.⁴⁸⁶ In April 2023, PSHSB, OET, and WTB granted a joint request filed by a group of automakers, state departments of transportation, and equipment manufacturers requesting waiver of the Commission's rules applicable to ITS operations to allow deployment of C-V2X technology in the upper 30 megahertz portion of the 5.9 GHz band.⁴⁸⁷ In August and October 2023, PSHSB, OET, and WTB issued additional waiver orders granting similar requests from public and private stakeholders seeking to deploy C-V2X technology in the band.⁴⁸⁸

159. Auction 108, the auction of flexible-use overlay licenses in the 2.5 GHz band, was completed in August 2022, with 63 bidders winning 7,872 licenses, and gross bids totaling \$427,789,670.⁴⁸⁹ This auction offered county-sized licenses for the remaining spectrum in this band, making more valuable mid-band spectrum available for advanced wireless services, including 5G, particularly in rural areas.⁴⁹⁰ As of March 8, 2024, WTB granted all of the 2.5 GHz band licenses from Auction 108, in addition to 336 licenses granted thus far to Tribal Nations and Tribal entities in connection with the 2.5 GHz Rural Tribal Priority Window which preceded Auction 108.⁴⁹¹

⁴⁸³ *Wireless Telecommunications Bureau Grants Auction 110 Licenses*, Auction No. 110, Public Notice, 37 FCC Rcd 551 (WTB 2022).

⁴⁸⁴ *3.45 GHz Second Report and Order*, 36 FCC Rcd at 5988, para. 1

⁴⁸⁵ *Wireless Telecommunications Bureau and Public Safety and Homeland Security Bureau Provide Guidance for Waiver Process to Permit Intelligent Transportation System Licensees to Use C-V2X Technology in the 5.895-5.925 GHz Band*, ET Docket No. 19-138, Public Notice, 36 FCC Rcd 12406 (WTB/PSHSB 2021) (*5.9 GHz Waiver Public Notice*).

⁴⁸⁶ *Id.*, 36 FCC Rcd at 12406-08.

⁴⁸⁷ *Request for Waiver of 5.9 GHz Band Rules to Permit Initial Deployment of Cellular Vehicle-to-Everything Technology*, Order, ET Docket No. 19-138, DA 23-343 (PSHSB/OET/WTB Apr. 24, 2023). The Bureau conditioned the waiver grant on certain technical and operational parameters, and further modified those conditions by a waiver modification order in July 2023. *See Request to Modify April 24, 2023 Waiver Order of 5.9 GHz Band Rules to Permit Initial Deployment of Cellular Vehicle-to-Everything Technology*, Order, ET Docket No. 19-138, DA 23-586 (PSHSB/OET/WTB Jul. 5, 2023).

⁴⁸⁸ *Requests for Waiver of 5.9 GHz Band Rules to Permit Initial Deployment of Cellular Vehicle-to-Everything Technology*, Letter Order, ET Docket No. 19-138 (Aug. 16, 2023); *Requests for Waiver of 5.9 GHz Band Rules to Permit Initial Deployment of Cellular Vehicle-to-Everything Technology*, Letter Order, ET Docket No. 19-138, DA 23-1048 (PSHSB/OET/WTB Oct. 31, 2023).

⁴⁸⁹ *Auction of Flexible-Use Licenses in the 2.5 GHz Band Closes; Winning Bidders Announced for Auction 108*, AU Docket No. 20-429, Public Notice, 37 FCC Rcd 10117, 10117, para. 1 (2022); *see also Transforming the 2.5 GHz Band*, WT Docket No. 18-120, Report and Order, 34 FCC Rcd 5446, 5450, 5463-69, paras. 13, 46-65 (2019) (modified by Erratum, 34 FCC Rcd 10386 (WTB 2019)) (*2.5 GHz Report and Order*) (establishing a pre-auction priority window for Tribal Nations to apply to obtain the unassigned spectrum on rural Tribal lands to address the needs of their communities).

⁴⁹⁰ *2.5 GHz Report and Order*, 34 FCC Rcd at 5450, para. 13.

⁴⁹¹ *Wireless Telecommunications Bureau Grants Auction 108 Licenses*, Auction No. 108, Public Notice, 37 FCC Rcd 14020 (WTB 2022); *Wireless Telecommunications Bureau Grants Auction 108 Licenses*, Auction No. 108,

(continued....)

160. In 2002, the Commission allocated 50 megahertz of spectrum in the 4940-4990 MHz band (4.9 GHz band) for fixed and mobile services, except aeronautical mobile service, and designated this band for use in support of public safety.⁴⁹² The Commission has reexamined the rules governing the 4.9 GHz band several times in the intervening years, and in January 2023, adopted a Seventh Report and Order and Ninth Further Notice of Proposed Rulemaking whereby it established a new framework for the 4.9 GHz band, under which a nationwide Band manager would be responsible both for overseeing public safety operations in the band and for authorizing secondary non-public safety operations.⁴⁹³ The Commission in the *Ninth FNPRM* sought comment on a number of implementation issues related to the Band Manager framework.⁴⁹⁴

161. In March 2023, the Commission adopted a Notice of Proposed Rulemaking to facilitate the integration of satellite and terrestrial networks by proposing a new regulatory framework for Supplemental Coverage from Space (SCS).⁴⁹⁵ The Commission proposed a novel framework that would allow satellite operators collaborating with terrestrial service providers to obtain Commission authorization to operate space stations on currently licensed, flexible-use spectrum allocated to terrestrial services. If the Commission were to act on this proposal, SCS would enable expanded coverage for the terrestrial licensee's subscribers, especially in remote, unserved, and underserved areas, and would support the availability of emergency communications.⁴⁹⁶

162. In May 2023, the Commission released a combined item which took a holistic approach to expanding use of over 1 gigahertz of prime mid-band spectrum in the 12 GHz band, from 12.2 to 13.25 GHz, by ensuring stable spectrum access for current and next-generation satellite broadband operations while also empowering advance terrestrial wireless services such as 6G.⁴⁹⁷ The Commission is thus on a path to expand the beneficial use of up to 1,050 megahertz of mid-band spectrum by a diverse set of terrestrial and satellite communications systems.⁴⁹⁸ The Commission took steps to ensure current and future satellite services are preserved and protected in the 12.2-12.7 GHz band (12.2 GHz band) while continuing to develop a pipeline of mid-band spectrum for mobile broadband or other expanded uses essential for connecting everyone, everywhere in the 12.7-13.25 GHz band (12.7 GHz band).⁴⁹⁹

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Public Notice, 38 FCC Rcd 41 (WTB 2023); *Wireless Telecommunications Bureau Grants Auction 108 Licenses*, Auction No. 108, Public Notice, 38 FCC Rcd 1327 (WTB 2023); *Wireless Telecommunications Bureau Grants Auction 108 Licenses*, Auction No. 108, Public Notice, DA 24-89 (WTB Feb. 1, 2024); *Wireless Telecommunications Bureau Grants Auction 108 Licenses*, Auction No. 108, Public Notice, DA 24-183 (WTB Feb. 29, 2024). See FCC, *Rural Tribal Window Updates*, <https://www.fcc.gov/25-ghz-rural-tribal-application-details>.

⁴⁹² See *The 4.9 GHz Band Transferred from Federal Government Use*, WT Docket No. 00-32, Second Report and Order and Further Notice of Proposed Rulemaking, 17 FCC Rcd 3955 (2002).

⁴⁹³ *Amendment of Part 90 of the Commission's Rules*, WP Docket No. 07-100, Seventh Report and Order and Ninth Further Notice of Proposed Rulemaking, 38 FCC Rcd 704 (2023) (*Seventh Report and Order and Ninth FNPRM*).

⁴⁹⁴ See, e.g., *id.*, 38 FCC Rcd at 733, paras. 71-72.

⁴⁹⁵ *Single Network Future: Supplemental Coverage from Space; Space Innovation*, GN Docket No. 23-65 et al., Notice of Proposed Rulemaking, 38 FCC Rcd 2790 (2023).

⁴⁹⁶ See Public Release, *Single Network Future: Supplemental Coverage from Space; Space Innovation*; GN Docket No. 23-65, IB Docket No. 22-271, Report and Order and Further Notice of Proposed Rulemaking, FCC 24-XX (rel. Feb. 22, 2024).

⁴⁹⁷ *Expanding Flexible Use of the 12.2-12.7 GHz Band*, WT Docket No. 20-443 et al., Report and Order and Further Notice of Proposed Rulemaking and Notice of Proposed Rulemaking and Order, FCC 23-36 (May 19, 2023) (*12 GHz Order*); Press Release, FCC, *FCC Moves Forward on 12 GHz Proceeding* (May 18, 2023), <https://docs.fcc.gov/public/attachments/DOC-393504A1.pdf>.

⁴⁹⁸ *12 GHz Order* at 2, para. 1.

⁴⁹⁹ *Id.*

163. In October 2023, the Commission adopted rules to support new Wi-Fi applications and services using spectrum in the 6 GHz band.⁵⁰⁰ The new rules authorize very low power operations in the U-NII-5 and U-NII-7 portions of the 6 GHz band totaling 850 megahertz of spectrum. Operations at power levels significantly lower than other unlicensed 6 GHz devices can occur anywhere, indoors or outdoors, without requiring a frequency coordination system.⁵⁰¹ The mix of capacity and wide channels offers the unique potential for augmented and virtual reality applications.

164. The Commission has made efforts to enable innovative commercial uses of the 71-76 GHz, 81-86 GHz, 92-24 GHz, and 94.1-95 GHz bands (collectively, the 70/80/90 GHz bands), including provision of wireless backhaul for 5G and delivery of broadband connectivity to ships and aircraft. In June 2020, the Commission began a proceeding to consider potential changes to the rules governing the 70/80/90 GHz bands.⁵⁰² In October 2021 and October 2023, WTB released Public Notices seeking additional comment on the potential new uses of the 70/80/90 GHz bands.⁵⁰³ In January 2024, the Commission adopted a *Report and Order and Further Notice of Proposed Rulemaking* authorizing certain point-to-point links to endpoints in motion in the 70 GHz and 80 GHz bands for aeronautical and maritime use; providing for smaller, lower-cost antennas to facilitate backhaul service in those bands; and adopting changes to the link registration process. The item also sought comment on the potential inclusion of ship-to-aerostat operations as part of maritime operations, and adding Fixed Satellite Service earth stations in the light-licensing regime for the 70 GHz and 80 GHz bands.⁵⁰⁴

165. The Commission also furthered the efficient use of available spectrum. In July 2022, the Commission adopted a Report and Order establishing the Enhanced Competition Incentive Program (ECIP) to provide incentives for wireless licensees to make underutilized spectrum available to small carriers, Tribal Nations, and entities serving rural areas.⁵⁰⁵ The *ECIP Report and Order* was intended to build upon the goals expressed by Congress in the Making Opportunities for Broadband Investment and Limiting Excessive and Needless Obstacles to Wireless Act (MOBILE NOW Act) by considering steps to “increase the diversity of spectrum access” and the “availability of advanced telecommunications services

⁵⁰⁰ *Unlicensed Use of the 6 GHz Band*, ET Docket No. 18-295, et al., Second Report and Order, Second Further Notice of Proposed Rulemaking, and Memorandum Opinion and Order on Remand, FCC 23-86 (Nov. 1, 2023); Press Release, FCC, FCC Permits Very Low Power Device Operations in 6 GHz Band (Oct. 19, 2023) (6 GHz Press Release). See also *Unlicensed Use of the 6 GHz Band; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 23 GHz*, ET Docket No. 18-295, GN Docket No. 17-183, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 3852, 3853, para. 1 (2020) (In April 2020, the Commission opened up the entire 6 GHz band (5.925-7.125 GHz) for unlicensed indoor lower power access points. The Commission determined these access points to be ideal for connecting devices, in homes and businesses, such as smartphones, tablet devices, laptops, and Internet-of-Things devices, to the Internet.).

⁵⁰¹ 6 GHz Press Release at 1.

⁵⁰² *Modernizing and Expanding Access to the 70/80/90 GHz Bands, et al.*, WT Docket No. 20-133, et al., Notice of Proposed Rulemaking and Order, 35 FCC Rcd 6039 (2020).

⁵⁰³ *Wireless Telecommunications Bureau Seeks to Supplement the Record on 70/80/90 GHz Notice of Proposed Rulemaking*, WT Docket No. 20-133, Public Notice, 36 FCC Rcd 14375 (WTB 2021); *Wireless Telecommunications Bureau Seeks to Refresh the Record in 70/80/90 GHz Bands Proceeding*, WT Docket No. 20-133, Public Notice, DA 23-988 (WTB Oct. 18, 2023).

⁵⁰⁴ *Modernizing and Expanding Access to the 70/80/90 GHz Bands*, WT Docket No. 20-133, Report and Order and Further Notice of Proposed Rulemaking, DA 24-16 (WTB Jan. 26, 2024).

⁵⁰⁵ *Partitioning, Disaggregation, and Leasing of Spectrum*, WT Docket No. 19-38, Report and Order and Second Further Notice of Proposed Rulemaking, 37 FCC Rcd 8825 (2022) (*ECIP Report and Order*); see also Press Release, FCC, FCC Establishes Enhanced Competition Incentive Program for Wireless Radio Services: Expanding Opportunities for Small Carriers, Tribal Nations, and Rural Wireless Entities (July 14, 2022) (*ECIP Press Release*).

in rural areas” and to facilitate transactions that will benefit the public interest.⁵⁰⁶ Under ECIP, any covered geographic licensee may offer spectrum to an unaffiliated eligible entity through partition and/or disaggregation, and any covered geographic licensee eligible to lease in an included service may offer spectrum to an unaffiliated eligible entity through a long-term leasing arrangement.⁵⁰⁷ ECIP encourages licensees to partition, disaggregate, or lease spectrum to better align available spectrum resources with entities seeking to provide services to underserved communities.⁵⁰⁸ Independent of the ECIP, the Report and Order reduces regulatory burdens by allowing reaggregation of geographic licenses.⁵⁰⁹ The *Second Further Notice* sought comment on whether to expand ECIP eligibility to allow non-common carriers serving non-rural areas to be eligible to participate in the program, and whether to adopt alternative construction requirements for wireless radio licensees generally, including a safe harbor.⁵¹⁰ In February 2024, the Wireless Telecommunications Bureau launched ECIP by beginning to accept assignment and lease applications to participate in the program.⁵¹¹

166. In August 2023, the Commission released a Notice of Inquiry exploring potential avenues to advance understanding of non-Federal spectrum usage through new data sources, technologies, and methods.⁵¹² Leveraging today’s tools to understand tomorrow’s commercial spectrum usage can help identify new opportunities to facilitate more efficient spectrum use, including new spectrum sharing techniques and approaches to enable co-existence among users and services. The *Spectrum Usage NOI* undertook a technical inquiry on how to obtain more sophisticated knowledge of non-Federal spectrum usage, and how the Commission could take advantage of modern capabilities for doing so in a cost-effective, accurate, scalable, and actionable manner.

167. The Commission continues to work to ensure that its policies and rules facilitate access to spectrum. In September 2023, WTB and OEA released a Public Notice that sought comment on the petition for rulemaking filed by AT&T in 2021 seeking Commission action on such matters as the proposed establishment of a mid-band spectrum screen and other changes to its mobile spectrum holdings policies and rules.⁵¹³

168. The Commission has also continued to take steps to foster growth of the white space ecosystem promoting innovative and efficient uses of spectrum. In January 2022, the Commission adopted two orders that resolved pending issues associated with white space devices and the white spaces

⁵⁰⁶ *ECIP Report and Order*, 37 FCC Rcd at 8826, para. 1; Consolidated Appropriations Act, Pub. L. No. 115-141, Division P (RAY BAUM’S Act of 2018), Title VI (MOBILE NOW Act), § 601 et seq. (2018) (codified at 47 U.S.C. §§ 1501-1512).

⁵⁰⁷ *ECIP Report and Order*, 37 FCC Rcd at 8830-31, para. 18; *ECIP Press Release* at 1.

⁵⁰⁸ *ECIP Report and Order*, 37 FCC Rcd at 8826, para. 2. *ECIP Press Release* at 1.

⁵⁰⁹ *ECIP Report and Order*, 37 FCC Rcd at 8826, para. 3.

⁵¹⁰ *Id.* at 8826, para. 3.

⁵¹¹ *WTB Launches Enhanced Competition Incentive Program Beginning February 15, 2024*, WT Docket No. 19-38, Public Notice, DA 24-141 (WTB Feb. 15, 2024); *see also* Press Release, FCC, FCC Launches Enhanced Competition Incentive Program for Wireless Radio Services: Expands Spectrum Opportunities for Small Carriers, Tribal Nations, and Rural Wireless Entities (Feb. 15, 2024).

⁵¹² *Advancing Understanding of Non-Federal Spectrum Usage*, WT Docket No. 23-232, Notice of Inquiry, FCC 23-63 (Aug. 4, 2023) (*Spectrum Usage NOI*).

⁵¹³ *Wireless Telecommunications Bureau and Office of Economics and Analytics Seek Comment on AT&T Petition for Rulemaking and Mobile Spectrum Holdings Policies*, WT Docket No. 23-319, Public Notice, DA 23-891 (WTB/OEA Sept. 22, 2023); AT&T Petition for a Rulemaking to Establish a Mid-Band Spectrum Screen (filed Sept. 1, 2021).

databases.⁵¹⁴ These Commission actions will provide white space device users, manufacturers, and database administrators with additional certainty and enable unlicensed white space devices to operate efficiently and protect other spectrum users.⁵¹⁵

169. *Satellite Service.* Since 2021, the Commission has taken numerous actions to implement a Space Innovation agenda. Specifically, the agency has established a new Space Bureau, increased the number of staff working on satellite and earth station applications, created new opportunities for competition in the delivery of satellite broadband services, and modernized spectrum policy to better meet the needs of the next generation Space Age. As the agency promotes Space Innovation, it also has taken action to advance space safety and responsibility, including the adoption of new rules for deorbiting satellites to mitigate orbital debris risks. These actions foster a regulatory environment that enables the deployment of high-speed, high-bandwidth broadband services to hard-to-reach remote areas of the country.

170. On August 3, 2022, the Commission adopted new rules permitting use of the 17.3-17.7 GHz band for geostationary satellite (GSO) fixed satellite service (FSS) downlinks on a co-primary basis with incumbent services and use of the 17.7-17.8 GHz band for GSO FSS downlinks on a unprotected basis with respect to fixed service operations, thereby creating a contiguous band for fixed-satellite downlink operations, and enabling greater flexibility and efficiency.⁵¹⁶ The Commission also defined an extended Ka-band, thus streamlining the licensing of FSS earth stations in a harmonized regulatory framework for similar FSS transmissions in the conventional and extended Ka-bands.⁵¹⁷ In addition, the Commission sought comment on whether to allow operations of non-geostationary orbit (NGSO) systems in the FSS (space-to-Earth) in the 17.3-17.8 GHz band and the appropriate technical rules and standards.⁵¹⁸

171. On August 5, 2022, in an effort to promote United States leadership in the emerging space economy, the Commission voted to open a proceeding on the economic potential and policy questions related to servicing, assembly, and manufacturing (ISAM) taking place beyond the earth's atmosphere.⁵¹⁹ The Commission examined the opportunities and challenges of space missions like

⁵¹⁴ *Amendment of Part 15 of the Commission's Rules for Unlicensed Operations in the Television Bands, Repurposed 600 MHz Band, 600 MHz Guard Bands and Duplex Gap, and Channel 37, et al.*, ET Docket No. 14-165, et al., Second Order of Reconsideration, Further Notice of Proposed Rulemaking, and Order, 37 FCC Rcd 1384, 1385, para. 1 (2022) (*White Space Devices Order*); see also *Unlicensed White Space Device Operations in the Television Bands*, ET Docket No. 20-36, Report and Order, 35 FCC Rcd 12603 (2020) (revising rules to facilitate the development of new and innovative narrowband Internet of Things devices in TV white spaces and expand the ability of unlicensed white space devices to deliver wireless broadband services in rural areas and areas where fewer broadcast stations are on the air).

⁵¹⁵ *White Space Devices Order*, 37 FCC Rcd at 1385, para. 1.

⁵¹⁶ *Amendment of Parts 2 and 25 of the Commission's Rules to Enable GSO Fixed-Satellite Service (Space-to-Earth) Operations in the 17.3-17.8 GHz Band, to Modernize Certain Rules Applicable to 17/24 GHz BSS Space Stations, and to Establish Off-Axis Uplink Power Limits for Extended Ka-Band FSS Operations; Amendment of Parts 2 and 25 of the Commission's Rules to Enable NGSO Fixed-Satellite Service (Space-to-Earth) Operations in the 17.3-17.8 GHz Band, IB Docket Nos. 20-330 and 22-273*, Report and Order and Notice of Proposed Rulemaking, FCC 22-63 (Aug. 3, 2022).

⁵¹⁷ *Id.* at 2, para. 2.

⁵¹⁸ *Id.* at 2, para. 3.

⁵¹⁹ *Space Innovation; Facilitating Capabilities for In-space Servicing, Assembly, and Manufacturing*, Notice of Inquiry, 37 FCC Rcd 10022 (2022). ISAM refers to a set of capabilities used on-orbit, on the surface of space objects and celestial bodies, and in transit. The "servicing" aspect of ISAM includes activities such as the in-space inspection, life extension, repair, refueling, or alteration of a spacecraft after its initial launch. The term "servicing" is also used to describe transport of a spacecraft from one orbit to another, as well as debris collection and removal.

(continued...)

satellite refueling, inspecting and repairing in-orbit spacecraft, capturing and removing debris, and transforming materials through manufacturing while in space.⁵²⁰

172. On September 30, 2022, the Commission shortened the 25-year benchmark for post-mission disposal of NGSO space stations to five years for space stations in low Earth orbit.⁵²¹ Growth in space activity has heightened concerns about the risks of orbital debris, and post-mission disposal of spacecraft is a necessary part in the mitigation of orbital debris, with orbital lifetime a crucial element affecting collision risk.⁵²² Post-mission disposal and orbital lifetime are crucial factors in the mitigation of orbital debris, as they not only affect the collision risk of a space station or system, but also affect spacecraft that are unable to complete post-mission disposal, particularly when left at higher altitudes where they may persist indefinitely, will contribute to the growing congestion in the space environment over the long-term, and increase risks to space operations.⁵²³

173. On December 22, 2022, the Commission issued a Notice of Proposed Rulemaking that sought comment broadly on changes to the Commission's rules, policies, or practices to facilitate the acceptance for filing of space and earth station applications under Part 25.⁵²⁴ In particular, the Commission proposed to remove a procedural rule that formally prevents consideration of waiver requests for operations not in conformance with the International Table of Frequency Allocations.⁵²⁵ The Commission also sought comment on whether the limits on applications for NGSO systems and unbuilt NGSO systems should be amended, and whether the Commission should provide greater transparency or certainty with respect to its expected application processing timelines.⁵²⁶

174. On April 11, 2023, the Commission created a new Space Bureau.⁵²⁷ In making this structural change to create a Bureau specifically focused on satellite and space policy, the Commission seeks to keep pace with the needs of space innovation, including the deployment of broadband to hard-to-reach remote locations. The Space Bureau's mission is to promote a competitive and innovative global communications marketplace by leading policy and licensing matters related to satellite and space-based communications and activities. Among its responsibilities, the Space Bureau leads complex policy

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“Assembly” refers to the construction of a space system using pre-manufactured components, and “manufacturing” is the transformation of raw or recycled materials into components, products, or infrastructure in space.

⁵²⁰ *Id.*

⁵²¹ *Space Innovation: Mitigation of Orbital Debris in the New Space Age*, Second Report and Order, 37 FCC Rcd 11818 (2022).

⁵²² Previously, on April 24, 2020, the Commission comprehensively updated the Commission's rules regarding orbital debris mitigation. *Orbital Debris in the New Space Age*, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 4156 (2020). The updated regulations were designed to ensure that the Commission's actions concerning radio communications, including licensing U.S. spacecraft and granting access to the U.S. market for non-U.S. spacecraft, mitigate the growth of orbital debris, while at the same time not creating undue regulatory obstacles to new satellite ventures. *Id.* at 4157, para. 2.

⁵²³ *Id.*

⁵²⁴ *Expediting Initial Processing of Satellite and Earth Station Applications*, *Space Innovation*, IB Docket Nos. 22-411 & 22-271, Notice of Proposed Rulemaking, 37 FCC Rcd 15167, 15167, para. 1 (2022).

⁵²⁵ See 47 CFR § 2.106(a), (b).

⁵²⁶ On September 21, 2023, the Commission issued a Report and Order (discussed below) adopting many of these proposals. See *Expediting Initial Processing of Satellite and Earth Station Applications*; *Space Innovation*, IB Docket Nos. 22-411, 22-271, Report and Order and Notice of Proposed Rulemaking, FCC 23-73 (Sept. 22, 2023).

⁵²⁷ See *Establishment of the Space Bureau and the Office of International Affairs and Reorganization of the Consumer and Governmental Affairs Bureau and the Office of the Managing Director*, MD Docket No. 23-12, Order, FCC 23-1, para. 4 (Jan. 9, 2023); *FCC Space Bureau & Office of International Affairs to Launch Next Week*, Press Release (Apr. 7, 2023).

analysis and rulemakings; authorizes satellite and earth station systems used for space-based services; streamlines regulatory processes to provide maximum flexibility for operators to meet customer needs; and fosters the efficient use of scarce spectrum and orbital resources. The Space Bureau also serves as the Commission's focal point for coordination with other U.S. government agencies on matters of space policy and governance, and collaborate with the Office of International Affairs for consultations with other countries, international and multilateral organizations, and foreign government officials that involve satellite and space policy matters.

175. On April 20, 2023, the Commission granted in part SpaceX's Petition for Rulemaking seeking to update the spectrum sharing rules among how NGSO FSS licensees, focusing on spectrum sharing among systems approved in *different* processing rounds.⁵²⁸ The new rules set forth important reforms that will govern how NGSO FSS systems will function in a shared spectrum environment.⁵²⁹ These new rules provide clarity regarding spectrum sharing between systems licensed in different processing rounds, granting primary spectrum access to systems approved earlier, while enabling new entrants to participate in an established, cooperative spectrum sharing structure.⁵³⁰ This action continues the Commission's recent efforts to update and refine its rules governing NGSO FSS systems.⁵³¹ Constellations of NGSO FSS satellites traveling in low- and medium-Earth orbit may provide broadband services to industry, enterprise, and residential customers with lower latency and wider coverage than has previously been available via satellite.⁵³² The number of applications filed in recent years for NGSO FSS system authorizations, and the number of satellites launched, are unprecedented.⁵³³ These updates will provide certainty for operators and facilitate innovation in system design, which will ultimately benefit broadband users.

176. On September 21, 2023, as part of a Report and Order and Further Notice of Proposed Rulemaking, the Commission adopted new rules that take concrete steps to expedite the initial processing of applications for authority to operate space and earth stations under part 25 of the Commission's rules.⁵³⁴ In the Report and Order, the Commission established timeframes for placing space and earth station applications on notice for public comment, permits applicants to apply for authority to operate in frequencies in bands where there is not already an international allocation for the satellite services to be provided, provides flexibility for NGSO licensees to have more than one unbuilt system without facing potential dismissal of their applications, and streamlines processing of earth station requests to add space

⁵²⁸ *Revising Spectrum Sharing Rules for Non-Geostationary Orbit, Fixed-Satellite Service Systems*, IB Docket No. 21-456, Report and Order and Notice of Proposed Rulemaking, FCC 23-29 (Apr. 21, 2023).

⁵²⁹ *Id.* at 4-19, paras. 9-37.

⁵³⁰ *Id.*

⁵³¹ *Revising Spectrum Sharing Rules for Non-Geostationary Orbit, Fixed-Satellite Service Systems*, IB Docket Nos. 21-456 and 22-271, Order and Further Notice Of Proposed Rulemaking, 36 FCC Rcd 17871 (2021); *see also Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, IB Docket No. 16-408, Report and Order, 32 FCC Rcd 7809 (2017), *pets. for recon. pending*.

⁵³² *See generally, e.g., 2022 Communications Marketplace Report*, 37 FCC Rcd at 15517, para. 6 (approximately 98% of all satellite launches in 2021 were deployed into low-Earth orbit to provide internet connectivity).

⁵³³ *See generally, Mitigation of Orbital Debris in the New Space Age*, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 4156, 4158, para. 3 (2020); *see also, e.g., 2022 Communications Marketplace Report*, 37 FCC Rcd at 15517, para. 6 (noting SpaceX (Starlink) had launched more than 3,350 of its satellites); Letter from Blake Wiles, Market Access Manager, North America, OneWeb, to Marlene H. Dortch, Secretary, FCC, IBFS File No. SAT-MPL-20200526-00062 (filed Jan. 20, 2023) (noting OneWeb had launched 544 of its satellites).

⁵³⁴ *Expediting Initial Processing of Satellite and Earth Station Applications; Space Innovation*, IB Docket Nos. 22-411, 22-271, Report and Order and Further Notice of Proposed Rulemaking, FCC 23-73 (Sept. 22, 2023).

stations as points of communication.⁵³⁵ The Commission also announced the Space Bureau’s new Transparency Initiative, which is providing information and guidance, in a variety of forms, to potential applicants in order to prepare them to successfully obtain authorizations for space and earth stations—that is, satellites and the ground-based transmitters communicating with them.⁵³⁶ This initiative will reduce administrative burdens on both applicants and Commission staff and further expedite the processing of applications.⁵³⁷

177. The Commission in the Further Notice of Proposed Rulemaking proposed to eliminate the procedural burden of printing and maintaining a paper copy of a license, and change the default status of space and earth station proceedings to permit-but-disclose.⁵³⁸ The Commission also asked whether a process can be implemented for operators of non-U.S. licensed space stations that is similar to current special temporary authority (STA) application process.⁵³⁹ In addition, the Commission also sought comment in the Further Notice on other updates to our processes for STA applications, whether to consider a “Permitted List” type of process for NGSO operators, and whether to expand the window for operators to file renewal applications for existing licenses.⁵⁴⁰ Further, the Commission sought additional comment on establishing timeframes or shot clocks for action on the merits of applications.⁵⁴¹ Finally, the Commission sought comment on updating processes to avoid potentially duplicative coordination procedures, and whether the Commission can expand the new auto-granted process for adding satellite points of communication to earth station licenses.⁵⁴²

178. On January 25, 2024, the Commission adopted an Order on Reconsideration which provides greater clarity and guidance to the space industry actors regarding on compliance with the Commission’s orbital debris mitigation rules.⁵⁴³ One of the biggest threats to new spaced-based innovation and services is the presence of orbital debris that can collide with the satellites on which we rely for critical service. The clarifications provided by the Commission related to satellite maneuverability disclosure requirements regarding satellite maneuverability, and the use of “free-flying” deployment devices. Additionally, the Commission provided additional guidance for satellite operators on methods for conducting a re-contact risk analysis. The Commission also clarified the applicability of the 0.99 disposal reliability goal for large satellite systems. The Commission further specified requirements for assessing and limiting the release of persistent liquids in space, and how the Commission’s orbital debris rules apply to non-U.S.-licensed space stations.

179. On February 16, 2024, the Commission proposed a framework for licensing ISAM activities under its part 25 rules.⁵⁴⁴ ISAM activities are an area of rapidly accelerating innovation and economic activity. Space capabilities are expanding, opening economic and scientific opportunities, and providing new tools for the sustainable use of space, including by large satellite broadband constellations. Effective and efficient use of radiofrequency communications will enable these new capabilities. As the

⁵³⁵ *Id.* at 7-39, paras. 16-87.

⁵³⁶ *Id.* at 5-7, paras. 10-14.

⁵³⁷ *Id.*

⁵³⁸ *Id.* at 49-50, paras. 112-13.

⁵³⁹ *Id.* at 42-43, para. 95.

⁵⁴⁰ *Id.* at 45, para. 101.

⁵⁴¹ *Id.* at 43-44, paras. 98-99.

⁵⁴² *Id.* at 47, paras. 107-108.

⁵⁴³ *Mitigation of Orbital Debris in the New Space Age*, IB Docket No. 18-313, Order on Reconsideration, FCC 24-6 (Jan. 26, 2024).

⁵⁴⁴ *Space Innovation; Facilitating Capabilities for In-space Servicing, Assembly, and Manufacturing*, IB Docket Nos. 22-271, 22-272, Notice of Proposed Rulemaking, FCC 24-21 (Feb. 16, 2024).

ISAM industry continues to develop, the Commission envisions taking additional steps as needed to foster innovation and growth in this field.

D. Supporting Affordability, Adoption, and Reasonable Access

180. *Affordable Connectivity Program (ACP) and Emergency Broadband Benefit (EBB) Program.* At Congress's direction, the Commission established programs designed to offer discounted broadband service and connected devices to help low-income households get connected and stay connected to work, school, healthcare, family, and social services. The ACP, which was launched two years ago, delivers discounted Internet service to approximately 23 million low-income households, benefiting both rural and urban households.⁵⁴⁵ However, due to the projected depletion of funding for the ACP anticipated in April 2024, the Commission has begun the process of winding down the program, absent further congressional funding to continue this program.⁵⁴⁶

181. At the end of 2020 and during the COVID-19 pandemic, Congress charged the Commission with building a new initiative, the EBB Program, to provide discounted Internet service and connected devices to low-income households.⁵⁴⁷ The Commission adopted the rules and policies creating and governing the EBB Program on February 25, 2021.⁵⁴⁸ On May 12, 2021, the Commission launched the EBB Program,⁵⁴⁹ with a \$3.2 billion appropriation through the Consolidated Appropriations Act, 2021.⁵⁵⁰

182. Through the EBB Program, participating broadband providers offered eligible households a monthly discount of up to \$50 off the standard rate of broadband service, or up to \$75 on Tribal lands.⁵⁵¹ Participating providers could also offer an eligible household a connected device (a laptop, desktop computer, or tablet) at a discounted price and receive a reimbursement of up to \$100, provided that the eligible household was charged a co-payment of more than \$10 but less than \$50 toward the purchase of the device.⁵⁵²

183. Just six months after the launch of the EBB Program, Congress created the ACP as part of its investment in broadband affordability, deployment, and access in the November 2021 Infrastructure Act.⁵⁵³ In establishing the ACP, Congress made several changes to the EBB Program to transform it from an emergency program designed to respond to a public health crisis to a longer-term broadband

⁵⁴⁵ See Universal Service Administrative Service Company, *ACP Enrollment and Claims Tracker* (Feb. 13, 2024), <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#total-enrolled> (Total Households at Enrollment Freeze); *More Than 20 Million Households Enroll in Nation's Largest Broadband Affordability Program*, Fact Sheet (Aug. 14, 2023), <https://docs.fcc.gov/public/attachments/DOC-396000A1.pdf>.

⁵⁴⁶ See generally *ACP Wind-Down Order*.

⁵⁴⁷ Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, div. N, tit. IX, § 904(i), 134 Stat. 1182, 2135 (2020); *Emergency Broadband Benefit Program*, WC Docket No. 20-445, Report and Order, 36 FCC Rcd 4612, 4613, para. 1 (2021) (*EBB Program Report and Order*); see also Pew Pandemic Research Report at 5-6.

⁵⁴⁸ *EBB Program Report and Order*.

⁵⁴⁹ *Wireline Competition Bureau Announces Emergency Broadband Benefit Program Launch Date*, WC Docket. No. 20-445, Public Notice, 36 FCC Rcd 7614 (WCB 2021) (*EBB Launch Date Public Notice*). The Commission established the EBB Program rules in the *EBB Program Report and Order*.

⁵⁵⁰ Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, div. N, tit. IX, § 904(i)(2), 134 Stat. 1182, 2135 (2020), <https://www.congress.gov/bill/116th-congress/house-bill/133/text> (Consolidated Appropriations Act).

⁵⁵¹ *EBB Program Report and Order*, 36 FCC Rcd at 4614, para. 4.

⁵⁵² *Id.* at 4614, para. 5.

⁵⁵³ Infrastructure Act, div. F, tit. V, § 60502, 135 Stat. at 1238; *Affordable Connectivity Program; Emergency Broadband Benefit Program*, WC Docket Nos. 21-450, 20-445, Report and Order and Further Notice of Proposed Rulemaking, 37 FCC Rcd 484, 486, para. 2 (2022) (*ACP Report and Order and Further Notice*).

affordability program, and appropriated to the Commission an additional \$14.2 billion for the ACP.⁵⁵⁴ Under the ACP, eligible households can receive a discount of up to \$30 per month off the price of broadband service, with an enhanced benefit of up to a \$75 monthly discount available for eligible consumers on qualifying Tribal lands. Like the EBB Program, the ACP provides a one-time discount of up to \$100 for a laptop, desktop, or tablet per household, provided that the household contributes more than \$10 but less than \$50 toward the cost of the device.⁵⁵⁵ As with the EBB Program, a household qualifies for the ACP if a member of the household (1) qualifies for Lifeline (household income is at or below 135% of the federal poverty guidelines or a household member participated in the Supplemental Nutrition Assistance Program, Medicaid, Supplemental Security Income, Federal Public Housing Assistance, Veterans Pension/Survivors Benefit, or certain Tribal assistance programs); (2) had applied for and been approved to receive benefits under the free and reduced price lunch program or the school breakfast program; (3) had received a Federal Pell Grant in the current award year; or (4) meets the eligibility criteria for a participating provider's existing low-income program, subject to approval by the Commission.⁵⁵⁶ The Infrastructure Act further expanded eligibility to those households with a member that receives assistance through the Special Supplemental Nutritional Program for Woman, Infants, and Children (WIC) and those households with an income below 200% of the Federal Poverty Guidelines.⁵⁵⁷

184. Since launching the ACP, the Commission has undertaken a number of initiatives to promote awareness and increase enrollment in the program among eligible households.⁵⁵⁸ Recognizing the importance of effective outreach to eligible households from trusted messengers to historically underserved communities, Congress authorized the Commission to provide grants to outreach partners.⁵⁵⁹ Pursuant to that authority, the Commission established the Affordable Connectivity Outreach Grant Program, composed of four complementary sub-programs: the National Competitive Outreach Grant Program (NCOP), the Tribal Competitive Outreach Program (TCOP), the Your Home, Your Internet Outreach Grants (YHYI Outreach Grants), and the ACP Navigator Pilot Program Outreach Grants (NPP Outreach Grants). The BHYI Outreach Grants and the NPP Outreach Grants support the work of the Your Home, Your Internet Pilot Program and the ACP Navigator Pilot Program, respectively, which are one-year pilot programs designed to increase awareness of and facilitate enrollment in the Affordable Connectivity Program and to provide assistance with ACP applications. On August 5, 2022, the Commission adopted rules establishing the Affordable Connectivity Outreach Grant Program and the Your Home, Your Internet Pilot Program, both of which are designed to increase awareness of the ACP, specifically among recipients of federal housing assistance.⁵⁶⁰

185. As directed by Congress in section 60502(c) of the Infrastructure Act,⁵⁶¹ the Commission adopted the *ACP Fourth Report and Order* on November 15, 2022 establishing rules for the ACP Transparency Data Collection, which requires all participating providers to annually submit data on the

⁵⁵⁴ *ACP Report and Order and Further Notice* at 485-86, para. 1.

⁵⁵⁵ 47 U.S.C. § 1752(b)(5); *ACP Report and Order and Further Notice* at 548, para. 136.

⁵⁵⁶ *ACP Report and Order and Further Notice* at 26, para. 49.

⁵⁵⁷ *Id.*

⁵⁵⁸ In addition to the actions to promote and increase enrollment in the ACP, as a response to catastrophic weather events, the Commission temporarily waived certain deadlines and rules for ACP participants in affected areas to ensure that they did not lose access to vital services when they needed them the most. *See, e.g., Affordable Connectivity Program et al.*, WC Docket No. 21-450 et al., Order, DA 23-805 (WCB Sept. 1, 2023); *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6 et al., Order, 37 FCC Rcd 11310 (WCB 2022).

⁵⁵⁹ *See* 47 U.S.C. § 1752(b)(10)(C)(ii)(IV).

⁵⁶⁰ *ACP Second Report and Order*; *ACP Third Report and Order*.

⁵⁶¹ Infrastructure Act, div. F, tit. V, § 60502(c), 135 Stat. at 1243.

price and subscription rates of Internet service offerings received by households enrolled in the ACP.⁵⁶² Participating providers were required to submit data for the collection by November 30, 2023, based on a reference or snapshot date of August 1, 2023.⁵⁶³ In 2024, the Commission will evaluate the submissions and make certain information publicly available, as set forth in the *ACP Fourth Report and Order*.⁵⁶⁴

186. On March 10, 2023, the Commission announced target funding allocations for NCOP and TCOP.⁵⁶⁵ The Commission selected 197 applicants representing 50 states and territories to pursue a broad range of outreach projects for a combined targeted funding allocation of \$66 million.⁵⁶⁶ On March 15, 2023, the Commission announced target funding allocations for the Your Home, Your Internet Outreach Grants and the ACP Navigator Outreach Grants, selecting 31 pilot participants for a combined target funding allocation totaling approximately \$7.4 million.⁵⁶⁷ On March 13, 2023, the Commission adopted a Report and Order securing additional funding of up to \$10 million for the National Competitive Outreach Grant Program and the Tribal Competitive Outreach Grant Program.⁵⁶⁸ This funding comes from a combination of: (a) previously allocated unspent funding and (2) funding that had not yet been allocated to specific outreach efforts.⁵⁶⁹ On August 17, 2023, and September 6, 2023, the Commission announced it had selected 17 applicants for this second round of grant funding, with target funding allocations totaling over \$5.5 million.⁵⁷⁰

187. On August 4, 2023, the Commission released a Report and Order establishing a mechanism by which a participating provider in the ACP can apply to offer an enhanced monthly discount of up to \$75 for broadband services to ACP-enrolled households in a high-cost area, upon the provider's showing of a particularized economic hardship.⁵⁷¹ The Commission's Wireline Competition Bureau (WCB) provided additional information on the application process for this high-cost area benefit on November 1, 2023.⁵⁷²

⁵⁶² *Affordable Connectivity Program*, WC Docket No. 21-450, Fourth Report and Order and Further Notice of Proposed Rulemaking, 37 FCC Rcd 13773 (2022) (*ACP Fourth Report and Order*).

⁵⁶³ *Wireline Competition Bureau Announced Completion of OMB Review and Key Dates for Affordable Connectivity Program Transparency Data Collection*, WC Docket No. 21-450, Public Notice, DA 23-683 (WCB Aug. 11, 2023); *Affordable Connectivity Program Transparency Data Collection Deadline Extended to November 30, 2023*, WC Docket No. 21-450, Public Notice, DA 23-1066 (WCB Nov. 9, 2023).

⁵⁶⁴ *ACP Fourth Report and Order*, 37 FCC Rcd at 13805-16, paras. 67-92.

⁵⁶⁵ Consumer and Governmental Affairs Bureau Announces ACP Outreach Grant Program Target Funding, WC Docket No. 21-450, Public Notice, DA 23-194 (CGB Mar. 10, 2023).

⁵⁶⁶ Press Release, FCC, *FCC Announces \$66 Million in Outreach Grants to Fund Projects to Expand Participation in Affordable Connectivity Program* (Mar. 10, 2023), <https://docs.fcc.gov/public/attachments/DOC-391570A1.pdf>.

⁵⁶⁷ *Consumer and Governmental Affairs Bureau and Wireline Competition Bureau Announce ACP Pilot Program Grants Target Funding*, WC Docket No. 21-450, Public Notice, 38 FCC Rcd 1938 (CGB/WCB 2023).

⁵⁶⁸ *Affordable Connectivity Program*, WC Docket No. 21-450, Fifth Report and Order, 38 FCC Rcd 2546 (2023) (*ACP Fifth Report and Order*).

⁵⁶⁹ *Id.* at 2546, para. 1.

⁵⁷⁰ *Consumer and Governmental Affairs Bureau Announces Second Round of ACP Outreach Grant Program Awards*, WC Docket No. 21-450, Public Notice, DA 23-7171 (Aug. 17, 2023); *Consumer and Governmental Affairs Bureau Announces Second Round of ACP Tribal Outreach Grant Program Awards*, WC Docket No. 21-450, Public Notice, DA 23-815 (Sept. 6, 2023).

⁵⁷¹ *Affordable Connectivity Program*, WC Docket No. 21-450, Sixth Report and Order, FCC 23-62 (Aug. 4, 2023).

⁵⁷² *Wireline Competition Bureau Announces Affordable Connectivity Program High-Cost Area Benefit Application Submission Timing and Processes*, WC Docket No. 21-450, Public Notice, DA 23-1034 (WCB Nov. 1, 2023). On January 11, 2024, due to the depletion in funding and enrollment freeze, the Bureau announced that USAC would no longer begin accepting provider applications to offer the high-cost area benefit. The Wireline Competition Bureau

(continued...)

188. The Commission also used multiple media outlets to promote the ACP.⁵⁷³ Paid media consultants targeted certain locations with large low-income populations, certain demographics, and specific cities and counties (including both rural and urban areas) throughout the United States to increase awareness of the ACP through print and radio campaigns. The campaign included print media, earned media (radio and satellite radio tours), mobile display banners, paid search tactics, local newspaper, out-of-home placements (at grocery stores, gas stations, pharmacies, etc.), mailers, and digital video ads. Paid media outreach was conducted in English and Spanish, with application support made available in over 10 languages. This campaign launched in Spring 2023 and continued throughout that year.

189. The Commission also deployed multiple enhancements throughout 2023 to simplify the application and enrollment process for eligible households.⁵⁷⁴ This work responded in part to a January 2023 GAO report regarding the ACP, which included nine recommendations, including: (1) establishing quantifiable and measurable program performance goals; (2) improving program outreach by addressing outreach translation issues and developing an educational plan consistent with leading practices; and (3) taking steps to improve program integrity efforts. The Commission was able to address all of the GAO recommendations and submitted documents to GAO to close-out all nine recommendations by the end of 2023.⁵⁷⁵ As of December 31, 2023, the FCC had submitted proposals to close-out all nine recommendations to GAO. As of the publication of this document, the GAO has officially closed out six recommendations and is actively working with the FCC to close out the final three recommendations.⁵⁷⁶

190. As described above, the Commission began taking steps to wind down the ACP, which included the need to stop accepting new enrollments and announcing that the final month of the program will be April 2024.⁵⁷⁷ At the time the Commission stopped accepting new enrollments in the ACP, there were over 23 million households enrolled in the program.⁵⁷⁸ The Commission is dedicated to providing ACP households an orderly transition out of the program and to keeping as many ACP households as

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will re-evaluate the status of the ACP high-cost area benefit provider applications if the ACP receives additional funding. *ACP Wind-Down Order*, DA 24-23, at 13, para 33.

⁵⁷³ The Infrastructure Act expressly authorized the Commission to use ACP funds to conduct outreach to encourage households to enroll in the ACP by engaging in paid media campaigns. *ACP Fifth Report and Order*, 38 FCC Rcd at 1940, para. 6 (*citing* 47 U.S.C. § 1752(b)(10)(C)(ii)(I)-(IV)). Accordingly, the Commission set aside funding for its own ACP outreach efforts. *Id.* at 1941, n.30.

⁵⁷⁴ USAC, ACP National Verifier Enhancements, <https://www.usac.org/wp-content/uploads/about/documents/acp/bulletins/ACP-National-Verifier-Enhancements.pdf> (Feb. 14, 2024). *See generally* USAC, ACP Bulletins (<https://www.usac.org/about/affordable-connectivity-program/affordable-connectivity-program-learn/acp-bulletins>) (last visited Jan. 29, 2024).

⁵⁷⁵ FCC Could Improve Performance Goals and Measures, Consumer Outreach, and Fraud Risk Management (2023), <https://www.gao.gov/assets/d23/105399.pdf>.

⁵⁷⁶ *Affordable Broadband: FCC Could Improve Performance Goals and Measures, Consumer Outreach, and Fraud Risk Management*, <https://www.gao.gov/products/gao-23-105399>, (last visited Feb. 19, 2024) (The status of the recommendations is updated periodically at the bottom of this page.). In addition to the actions described above, as a response to catastrophic weather events, the Commission temporarily waived certain deadlines and rules for ACP participants in affected areas to ensure that they did not lose access to vital services when they needed them the most. *See, e.g., Affordable Connectivity Program et al.*, WC Docket No. 21-450 et al., Order, DA 23-805 (WCB Sept. 1, 2023); *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6 et al., Order, 37 FCC Rcd 11310 (WCB 2022).

⁵⁷⁷ *See ACP Wind-Down Order*, DA 24-23, at 8, para. 21; *see generally ACP Final Month Public Notice*.

⁵⁷⁸ Universal Service Administrative Service Company, *ACP Enrollment and Claims Tracker* (Feb. 13, 2024), <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#total-enrolled> (Total Households at Enrollment Freeze).

possible connected to broadband service after the end of the program.⁵⁷⁹

191. *Lifeline*. In addition to emergency support regulatory flexibility that the Commission has provided for the Lifeline program and the affordability aspects of our implementation of the Safe Connections Act discussed below, we have taken actions to ensure the Lifeline program remains responsive to low-income consumers' needs. For instance, on July 7, 2023, WCB adopted an order continuing the pause of the scheduled increase in the mobile broadband data capacity minimum service standard.⁵⁸⁰ These actions ensure that mobile data Lifeline subscribers have access to plans that are sufficiently robust without being forced to pay for expensive and excessive capacity.⁵⁸¹ Collectively, these actions reflect the Commission's commitment to ensuring that low-income consumers receive necessary support from the Lifeline program and that the support offered is adequate for changing consumer needs.⁵⁸²

192. *Supporting Survivors of Domestic Violence*. In July 2022, the Commission opened an inquiry to evaluate how the FCC's low-income programs might help survivors of domestic violence and other harmful abuse get access to connectivity services.⁵⁸³ Following passage of the Safe Connections Act of 2022, the Commission adopted a Notice of Proposed Rulemaking relating to the legislation and, later, in November 2023, the *Safe Connections Report and Order*.⁵⁸⁴ The rules adopted in the *Safe Connections Report and Order*, among other things, implement the requirement that mobile service providers separate the line of a survivor of domestic violence (and other related crimes and abuse), and any individuals in the care of the survivor, from a mobile service contract shared with an abuser within two business days after receiving a request from the survivor.⁵⁸⁵ The rules largely track the statutory language, with key additions and clarifications to address privacy, account security, fraud detection, and operational or technical infeasibility.⁵⁸⁶ Among other things, the Commission established requirements

⁵⁷⁹ *ACP Wind-Down Order*, DA 24-23, at 8, para. 20.

⁵⁸⁰ *Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42, Order, DA 23-589 (WCB July 7, 2023).

⁵⁸¹ *Id.* at 4-5, paras. 12, 15.

⁵⁸² In addition, the Commission took action in response to catastrophic weather events to temporarily waive certain deadlines and rules for Lifeline participants in affected areas to ensure access to vital services. *See, e.g., Affordable Connectivity Program et al.*, WC Docket No. 21-450 et al., Order, DA 23-805 (WCB Sept. 1, 2023); *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6 et al., Order, 37 FCC Rcd 11310 (WCB 2022); *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6 et al., Order, 36 FCC Rcd 13405 (WCB 2021). Furthermore, the Commission continued its response to the COVID pandemic, extending previous waivers of certain Lifeline program rules, notably recertification and reverification rules, to minimize de-enrollment during this period of high reliance on remote connectivity. *See Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42, Order, 36 FCC Rcd 4448 (WCB 2021); *Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42, Order, 36 FCC Rcd 10079 (WCB 2021); *Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42, Order, 36 FCC Rcd 13855 (WCB 2021); *Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42, Order, 36 FCC Rcd 18225 (WCB 2021); *Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42, Order, 37 FCC Rcd 4086 (WCB 2022); *Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42, Order, 37 FCC Rcd 7615 (WCB 2022); *Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42, Order, 37 FCC Rcd 11223 (WCB 2022); *Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42, Order, 38 FCC Rcd 1001 (WCB 2023).

⁵⁸³ *Lifeline and Link Up Reform and Modernization et al.*, WC Docket No. 11-42, Notice of Inquiry, 37 FCC Rcd 8964 (2022).

⁵⁸⁴ *Supporting Survivors of Domestic and Sexual Violence et al.*, WC Docket Nos. 22-238 et al., Notice of Proposed Rulemaking, 38 FCC Rcd 1768 (2023); *Supporting Survivors of Domestic and Sexual Violence et al.*, WC Docket Nos. 22-238 et al., Report and Order, FCC 23-96 (Nov. 16, 2023) (*Safe Connections Act Report and Order*).

⁵⁸⁵ Safe Connections Act of 2022, Pub. L. No. 117-223, 116 Stat. 2280, § 4 (adding section 345 to the Communications Act, 47 U.S.C. § 345).

⁵⁸⁶ *Safe Connections Act Report and Order*, FCC 23-96, at 4-59, paras. 6-104.

regarding the information that survivors must submit to request a line separation and the options providers must offer to survivors making a line separation request.⁵⁸⁷ The Commission also adopted requirements regarding communications with consumers and survivors and restrictions on various practices in connection with line separation requests.⁵⁸⁸ In addition, the Commission required covered providers to train employees who may interact with survivors on how to assist them or direct them to other employees who have received such training.⁵⁸⁹ The Commission also delineated the financial responsibilities for monthly service costs and mobile device following a line separation, and established a compliance date of July 14, 2024, six months after the effective date of the *Report and Order*.⁵⁹⁰ Further, the Commission designated the Lifeline program to support emergency communications service for survivors that have pursued the line separation process and are suffering a financial hardship.⁵⁹¹ The Commission directed USAC to develop processes to allow survivors experiencing financial hardship to apply for and enroll in the Lifeline program, and to transition survivors from emergency communications support at the end of the six-month emergency support period mandated by the Safe Connections Act.⁵⁹²

193. *SIM Swap Fraud*. In a *Report and Order* released November 16, 2023, the Commission adopted rules aimed at foreclosing the opportunistic ways in which bad actors take over customers' cell phone accounts.⁵⁹³ Specifically, the Commission revised its Customer Proprietary Network Information (CPNI) and Local Number Portability (LNP) rules to require wireless providers to adopt secure methods of authenticating a customer before redirecting a customer's phone number to a new device or provider.⁵⁹⁴ These rule revisions also require wireless providers to immediately notify customers whenever a SIM change or port-out request is made on customers' accounts, and take additional steps to protect customers from SIM swap and port-out fraud.⁵⁹⁵ In the accompanying Further Notice of Proposed Rulemaking, the Commission sought comment on whether to harmonize the existing requirements governing customer access to CPNI with the newly-adopted SIM change authentication and protection measures. The Commission also sought comment on what steps the Commission can take to harmonize government efforts to address SIM swap and port-out fraud.⁵⁹⁶

194. *Broadband Consumer Labels*. Consumer access to clear, easy-to-understand, and accurate information is central to a well-functioning marketplace that encourages competition, innovation, low prices, and high-quality services. Such access empowers consumers to choose services that best meet their needs and budgets and helps to ensure that consumers are not surprised by charges or service quality

⁵⁸⁷ *Id.* at 13-20, paras. 26-36.

⁵⁸⁸ *Id.* at 20-24, paras. 37-44.

⁵⁸⁹ *Id.* at 45-46, para. 79.

⁵⁹⁰ *Id.* at 50-53, paras. 89-95 and 102-104.

⁵⁹¹ *Id.* at 56-59, paras. 150-66.

⁵⁹² *Id.* at 85-88, paras. 167-73. In addition to these provisions, the Commission also considered matters relating to protecting the privacy of calls and text messages to domestic violence hotlines. In the *Safe Connections Report and Order*, the Commission required covered providers and wireline, fixed wireless, and fixed satellite providers of voice service to: (1) omit from consumer-facing logs of calls and text messages any records of calls or text messages to covered hotlines in the central database established by the Commission; and (2) maintain internal records of calls and text messages excluded from consumer-facing logs of calls and text messages. *Id.* at 59-76, paras. 105-49. Providers were generally given 12 months to comply with these requirements, except that small service providers were given 18 months. *Id.* at 70-74, paras. 137-44.

⁵⁹³ *Protecting Consumers from SIM Swap and Port-Out Fraud*, WC Docket No. 21-341, Report and Order and Further Notice of Proposed Rulemaking, FCC 23-95 (Nov. 16, 2023).

⁵⁹⁴ *Id.* at 2, para. 2.

⁵⁹⁵ *Id.*

⁵⁹⁶ *Id.* at 55-59, paras. 98-108.

that falls short of their expectations. In November 2022, as directed by the Infrastructure Act,⁵⁹⁷ the Commission adopted a Report and Order that requires ISPs to display certain information at the point of sale.⁵⁹⁸ Specifically, ISPs must display at the point of sale a label that discloses certain information about broadband prices, introductory rates, data allowances, and broadband speeds, and to include links to information about their network management practices, privacy policies, and the Commission's ACP.⁵⁹⁹ The Commission also adopted requirements for label format and display location to ensure that consumers can easily compare a provider's services and services among different providers.⁶⁰⁰ Modeled on labels the Commission approved for voluntary display several years ago, the Commission concluded that the label contains the key information consumers need to make smart choices without overwhelming them with information or unnecessarily burdening providers.⁶⁰¹ In an accompanying Further Notice of Proposed Rulemaking, the Commission sought comment on further steps it could take to ensure that consumers have the information they need to make informed broadband service purchasing decisions such as more comprehensive pricing information, bundled plans, label accessibility, performance characteristics, service reliability, cybersecurity, network management and privacy issues, the availability of labels in multiple languages, and whether the labels should be interactive or otherwise formatted differently so the information contained in them is clearer and conveyed more effectively.⁶⁰²

195. *Preventing Digital Discrimination.* One of the Commission's foremost goals is to ensure that every person in the United States has equal access to high-quality, affordable broadband Internet access service.⁶⁰³ Among many steps towards achieving that goal, in February 2022 Chairwoman Rosenworcel established the cross-agency Task Force to Prevent Digital Discrimination.⁶⁰⁴ On March 17, 2022, the Commission commenced a proceeding "to ensure that all people of the United States benefit from equal access to broadband internet access service," with the intention of preventing and identifying steps the Commission should take to eliminate "digital discrimination of access based on income level, race, ethnicity, color, religion, or national origin," pursuant to Congress's directive in section 60506 of the Infrastructure Act.⁶⁰⁵ Following a Notice of Inquiry and a later Notice of Proposed Rulemaking, the Commission adopted a Report and Order in November 2023 establishing a framework to facilitate equal access to broadband Internet access service as directed by Congress⁶⁰⁶ In the Report and Order, the Commission adopted a definition of "digital discrimination of access," as that term is used in section 60506 of the Infrastructure Act, that encompasses both intentionally discriminatory conduct as well as

⁵⁹⁷ Infrastructure Act, Pub. L. No. 117-58, § 60504(a), 135 Stat. at 1244.

⁵⁹⁸ *Empowering Broadband Consumers Through Transparency*, CG Docket No. 22-2, Report and Order and Further Notice of Proposed Rulemaking, 37 FCC Rcd 13686 (2022).

⁵⁹⁹ *Id.* at 13689-706, paras. 12-63. Due to the depletion of funding the Commission will no longer require ISPs to display information about the ACP. *ACP Final Month Public Notice*, 24-195, at 5.

⁶⁰⁰ *Id.* at 13706-18, paras. 64-99.

⁶⁰¹ *See id.* at 13689-706, paras. 12-63.

⁶⁰² *Id.* at 13728-33, paras. 131-52.

⁶⁰³ *Implementing the Infrastructure Investment and Jobs Act: Prevention and Elimination of Digital Discrimination*, GN Docket No. 22-69, Notice of Inquiry, 37 FCC Rcd 4198, para. 1 (2022) (*Digital Discrimination NOI*).

⁶⁰⁴ FCC, Press Release, Chairwoman Rosenworcel Announces Cross-Agency Task Force to Prevent Digital Discrimination (Feb. 8, 2022), <https://docs.fcc.gov/public/attachments/DOC-380060A1.pdf>.

⁶⁰⁵ *Digital Discrimination NOI*, 37 FCC Rcd at 4198-99, para. 2 (quoting the Infrastructure Act, Pub. L. No. 117-58, § 60506(b)(1), 135 Stat. 429, 1246 (2021)). Section 60506 of the Infrastructure Act is codified at 47 U.S.C. § 1754, *Digital Discrimination*.

⁶⁰⁶ *Digital Discrimination NOI; Implementing the Infrastructure Investment and Jobs Act: Prevention and Elimination of Digital Discrimination*, GN Docket No. 22-69, Notice of Proposed Rulemaking, 37 FCC Rcd 15274 (2022) (*Preventing Digital Discrimination NPRM*); *Preventing Digital Discrimination Report and Order*.

conduct that produces discriminatory effects; adopted and identified the contours of a specific carve out from that definition for policies and practices that are justified by genuine issues of technical and economic feasibility; adopted rules that prohibit digital discrimination of access as so defined; amended the Commission's enforcement rules so they specifically encompass investigations regarding digital discrimination of access; revised the Commission's informal consumer complaint process to, among other changes, provide a designated pathway for accepting complaints of digital discrimination of access; and adopted model policies and best practices for states, local and Tribal governments to support their efforts in preventing digital discrimination of access.⁶⁰⁷ In an accompanying Further Notice of Proposed Rulemaking, the Commission proposed that each ISP be required to submit annually a publicly available supplement to the BDC that describes, on a state-by-state or territory-by-territory basis, all major deployment, upgrade, and maintenance projects completed or substantially completed in the preceding calendar year; and proposed that each provider be required to establish and maintain a mandatory internal compliance program to ensure that the provider regularly assesses whether and how its policies and practices advance or impede equal access to broadband Internet service in its service areas.⁶⁰⁸ The Commission sought comment on these proposed measures as well as the merits of establishing an Office of Civil Rights within the Commission and the responsibilities that such an office might be assigned.⁶⁰⁹

196. *Open Internet.* On October 20, 2023, the Commission adopted a *Notice of Proposed Rulemaking* proposing to reestablish the Commission's authority over broadband Internet access service by classifying it as a telecommunications service under Title II of the Communications Act and providing the Commission with the authority necessary to safeguard the open Internet, advance national security, and protect public safety.⁶¹⁰ In that Notice of Proposed Rulemaking, the Commission tentatively concluded that reclassifying BIAS as a telecommunications service will help support the Commission's goals to facilitate broadband deployment, including by granting section 224 pole attachment rights to broadband-only providers.⁶¹¹ The NPRM also proposes to reestablish conduct rules for Internet service providers that would provide a national approach for safeguarding Internet openness, which ensures that consumers can obtain and use the content, applications and devices they want.⁶¹² The Commission's proposals to safeguard and secure the open Internet build on several other actions the Commission has taken since the onset of the COVID-19 pandemic to ensure that the public has access to broadband.⁶¹³

⁶⁰⁷ *Preventing Digital Discrimination Report and Order*, FCC 23-100, at 15-89, paras. 27-178.

⁶⁰⁸ *Id.* at 89-99, paras. 179-214.

⁶⁰⁹ *Id.* at 99, para. 215.

⁶¹⁰ *2023 Open Internet NPRM*.

⁶¹¹ *Id.* at 3, 13-15, paras. 4, 21-24. In 2015, the Commission noted that access to pole and conduit directly enables new entrants to deploy broadband facilities. *Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601, 5617, para. 56 (2015).

⁶¹² *2023 Open Internet NPRM*, FCC 23-83, 3, 13-15, paras. 4, 21-24.

⁶¹³ See, e.g., *Affordable Connectivity Program Emergency; Broadband Benefit Program*, WC Docket Nos. 21-450 and 20-445, Report and Order and Further Notice of Proposed Rulemaking, 37 FCC Rcd 484 (2022) (taking steps to ensure broadband connections were affordable through the Emergency Broadband Benefit Program and successor Affordable Connectivity Program, as directed by Congress); *Establishing Emergency Connectivity Fund to Close the Homework Gap*, Report and Order, 36 FCC Rcd 8696 (2021) (extending the benefits of broadband connections available to schools and libraries to students and patrons who needed connections at home through the Emergency Connectivity Fund); *Promoting Telehealth for Low-Income Consumers; COVID-19 Telehealth Program*, WC Docket Nos. 18-213 and 20-89, Report and Order, 35 FCC Rcd 3366 (2020) (*COVID-19 Telehealth Program Order*) (establishing the COVID-19 Telehealth Program to help health care providers provide connected care services to patients at their homes or mobile locations in response to the pandemic); *Improving Competitive Broadband Access to Multiple Tenant Environments*, WC Docket No. 17-142, Report and Order and Declaratory Ruling, 37 FCC Rcd 2448 (2022) (taking steps to ensure that consumers in multi-tenant environments can obtain

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E. Providing High Cost Universal Service Support

197. *Rural Digital Opportunity Fund.* The Rural Digital Opportunity Fund (RDOF) auction, a program aimed at expanding broadband in unserved rural areas, concluded on November 25, 2020.⁶¹⁴ The Commission started authorizing funding for winning bidders with approved long-form applications on September 15, 2021, and more than \$6.062 billion in RDOF auction support was authorized to be distributed for more than 3,458,000 estimated locations nationwide. RDOF is a 10-year support program, with support distributed in 120 monthly disbursements.⁶¹⁵ Authorized RDOF auction winners have committed to providing 1 Gbps/500 Mbps service to roughly 98% of locations being funded.⁶¹⁶

198. *Connect America Fund Phase II Auction.* In 2018, the Connect America Fund Phase II auction awarded \$1.488 billion over 10 years to 103 winning bidders to serve more than 713,000 rural homes and businesses.⁶¹⁷ The Commission began authorizing Phase II Auction funding in May 2019,⁶¹⁸ authorizing a total of 17 waves of support which concluded on November 17, 2022.⁶¹⁹ The Commission authorized a total of nearly \$1.5 billion in Phase II auction funding, which is expanding connectivity to over 708,000 homes and small businesses nationwide.⁶²⁰

199. *Bringing Puerto Rico Together and Connect USVI Funds.* In June 2021, the Commission authorized funding for the winning proposals from the Stage 2 of the Bringing Puerto Rico Together Fund and Connect USVI Fund competitive proposal processes—\$127.1 million and \$84.5 million, respectively.⁶²¹ This funding will provide support over a 10-year period for deployment of fixed voice

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broadband service offerings from competing providers); *Preventing Digital Discrimination NPRM* (exploring how to address digital discrimination to ensure every person has equal access to critical broadband connections).

⁶¹⁴ *Rural Digital Opportunity Fund Phase I Auction (Auction 904) Closes*, AU Docket No. 20-34, WC Docket Nos. 19-126 and 10-90, Public Notice, 35 FCC Rcd 13888, para. 1 (OEA/WCB 2020) (*Auction 904 Closing Public Notice*).

⁶¹⁵ *Rural Digital Opportunity Fund Support Authorized for 466 Winning Bids*, AU Docket No. 20-34, WC Docket Nos. 19-126 and 10-90, Public Notice, 36 FCC Rcd 13574 (OEA/WCB 2021); FCC, Auction 904: *Rural Digital Opportunity Fund*, <https://www.fcc.gov/auction/904/round-results> (Results Tab, “Authorized Auction 904 Long-Form Applicants (updated 1/13/2023)”) (last visited Jan. 3, 2024).

⁶¹⁶ See *id.*, Performance Tier and Latency tab.

⁶¹⁷ *Connect America Fund Phase II Auction Scheduled for July 24, 2018 Notice and Filing Requirements and Other Procedures for Auction 903*, AU Docket No. 17-182, WC Docket No. 10-90, Public Notice, 33 FCC Rcd 1428 (2018); *220 Applicants Qualified to Bid in the Connect America Fund Phase II Auction (Auction 903); Bidding to Begin on July 24, 2018*, AU Docket No. 17-182, WC Docket No. 10-90, Public Notice, 33 FCC Rcd 6171 (2018) (announcing the qualified bidders for the auction and confirming timing); *Connect America Fund Phase II Auction (Auction 903) Closes; Winning Bidders Announced*, AU Docket No. 17-182, WC Docket No. 10-90, Public Notice, 33 FCC Rcd 8257 (2018).

⁶¹⁸ Press Release, FCC, FCC Authorizes First Wave of Funding for Rural Broadband from Connect America Fund Auction (May 14, 2019), <https://docs.fcc.gov/public/attachments/DOC-357434A1.pdf>.

⁶¹⁹ *Connect America Fund Phase II Auction Support Authorized for 1 Winning Bid*, AU Docket No. 17-182, WC Docket No. 10-90, Public Notice (WCB Nov. 17, 2022); FCC, *Connect America Fund Phase II Auction (Auction 903)*, <https://www.fcc.gov/auction/903> (Data Tab, Authorized Auction 903 Long-Form Applicants (updated 4/4/2023)) (last visited Feb. 14, 2024).

⁶²⁰ *Id.*

⁶²¹ *Wireline Competition Bureau Authorizes Stage 2 Support for Puerto Rico Telephone Company and Liberty Communications of Puerto Rico*, WC Docket Nos. 18-143 and 10-90, Public Notice, 36 FCC Rcd 9914 (WCB, 2021) (*Bringing Puerto Rico Together Winning Applicant Announcement*); *Connect USVI Fund Stage 2 Support Authorized for Broadband VI*, WC Docket Nos. 18-143 and 10-90, Public Notice, 36 FCC Rcd 9405 (WCB 2021) (*USVI Fund Winning Applicant Announcement*).

and broadband services. Bringing Puerto Rico Together Stage 2 funding will support fixed deployment of service at a minimum speed of 100/20 Mbps, with service obligations at many funded locations of at least 1 Gbps/500 Mbps.⁶²² In the U.S. Virgin Islands, the Connect USVI Stage 2 support will result in fixed deployment of 1 Gbps/500 Mbps service to all funded locations.⁶²³ In July 2022, in consultation with WTB, WCB adopted a Declaratory Ruling clarifying that mobile high-cost Stage 2 funds may be used for deploying indoor distributed antenna systems (DAS) to public or publicly accessible facilities that aid disaster response where the market would not otherwise support DAS deployment.⁶²⁴

200. In April 2023, the Commission continued its efforts to bolster mobile and fixed voice and broadband services throughout Puerto Rico and the U.S. Virgin Islands. The Commission adopted an Order that provides transitional support for up to 24 months so that mobile carriers may continue to harden their networks while a long-term support mechanism is being considered for the territories,⁶²⁵

⁶²² See *Bringing Puerto Rico Together Winning Applicant Announcement*, 36 FCC Rcd at 9914, para. 1 (identifying Puerto Rico Telephone Co., Inc. (PRTC) and Liberty Communications of Puerto Rico (Liberty) as the winning applicants); PRTC Uniendo a Puerto Rico Fund Stage 2 Fixed Support Application Form, WC Docket Nos. 18-143 and 10-90, Initial Overview at 1 (filed June 22, 2021) (*PRTC Network Description*); Liberty Uniendo a Puerto Rico Fund Stage 2 Fixed Support Application Form, WC Docket Nos. 18-143 and 10-90, Initial Overview at 4 (filed June 22, 2021) (*Liberty Network Description*). We refer to the *Bringing Puerto Rico Together Winning Applicant Announcement*, *PRTC Network Description*, and *Liberty Network Description* together as the *Bringing Puerto Rico Together Broadband Speed Requirements*.

⁶²³ See *USVI Fund Winning Applicant Announcement*, 36 FCC Rcd at 9405, para. 1 (identifying Broadband VI as the winning applicant); Broadband VI Uniendo a Puerto Rico Fund Connect USVI Fund Stage 2 Fixed Support Application Form, WC Dockets Nos. 18-143 and WC 10-90, Initial Overview at 1 (filed June 11, 2021) (together with the *USVI Fund Winning Applicant Announcement*, the *USVI Fund Broadband Speed Requirements*). In June 2020, the Commission similarly authorized a total of \$258.8 million in funding to wireless carriers participating in Stage 2 of the Bringing Puerto Rico Together Fund and the Connect USVI Fund to facilitate the restoration, hardening, and expansion of mobile networks capable of providing 4G LTE and 5G-NR services over a three-year term. *Wireline Competition Bureau Authorizes Stage 2 Mobile Support for Certain Providers Participating in the Uniendo a Puerto Rico Fund and the Connect USVI Fund*, WC Docket Nos. 18-143 and 10-90, Public Notice, 35 FCC Rcd 6321, 6324, Attach. A (WCB 2020) (authorizing support for AT&T Mobility, PRTC, and T-Mobile in Puerto Rico, and AT&T Mobility in the U.S. Virgin Islands); *Wireline Competition Bureau Authorizes Stage 2 Mobile Support for T-Mobile in Puerto Rico*, WC Docket Nos. 18-143 and 10-90, Public Notice, 35 FCC Rcd 10303, 10305, Attach. A (WCB 2020) (authorizing additional mobile support in September 2020 for T-Mobile based on its acquisition of PR Wireless, LLC); *Wireline Competition Bureau Authorizes Stage 2 Mobile Support for Viya in the U.S. Virgin Islands*, WC Docket Nos. 18-143 and 10-90, Public Notice, 35 FCC Rcd 11555, 11557, Attach. A (WCB 2020) (authorizing support to Virgin Islands Telephone Corp. d/b/a Viya). Carriers must restore network coverage in the territories to at least pre-hurricane levels by the conclusion of the support period, providing outdoor transmission rates of at least 10 Mbps download and 1 Mbps upload speeds for 4G LTE and 35/3 Mbps for 5G-NR service. 47 CFR §§ 54.1509(c), 54.1514(b)(1). On October 28, 2022, in light of damage caused by hurricanes in the fall of 2022, the Commission released a Further Notice of Proposed Rulemaking proposing to extend by 24 months (until December 2025) the phase-down of frozen support for incumbent fixed providers in Puerto Rico and the U.S. Virgin Islands for the areas in which they were not awarded long-term support for broadband services, as well as the end of mobile support in Puerto Rico and the U.S. Virgin Islands. *The Uniendo a Puerto Rico Fund and the Connect USVI Fund; Connect America Fund*, WC Docket Nos. 18-143 and 10-90, Further Notice of Proposed Rulemaking, 37 FCC Rcd 13411 (2022).

⁶²⁴ *Uniendo a Puerto Rico Fund and the Connect USVI Fund; Connect America Fund*, WC Docket Nos. 18-143 and 10-90, Declaratory Ruling, 37 FCC Rcd 7779, 7781 & n. 12 (WCB 2022); see also Petition of T-Mobile USA, Inc. for Declaratory Ruling, WC Docket No. 18-143, at 1, 7 (filed Apr. 7, 2022) (seeking to have the Commission declare that Stage 2 funds could be used for DAS, which would provide mobile services solely within buildings).

⁶²⁵ *The Uniendo a Puerto Rico Fund and the Connect USVI Fund et al.*, WC Docket No. 18-143 et al., Report and Order and Order on Review, FCC 23-32, at 6-11, paras. 15-32 (Apr. 2023) (*PR-USVI Transitional Support Order*) (providing 50% of a carrier's Stage 2 monthly support amount during the first 12 months and 25% of the Stage 2 monthly support amount for months 13-24).

which may include transitioning the Territories to the Commission's 5G Fund.⁶²⁶ The Commission also extended the duration of phase-down frozen support until December 31, 2025, to allow incumbent fixed providers to continue hardening their networks and ensure continuous service as new, storm-hardened networks are deployed from Stage 2 of the Bringing Puerto Rico Together and the Connect USVI Funds.⁶²⁷

201. *Rural Broadband Accountability Plan.* The Rural Broadband Accountability Plan (RBAP) is an effort to monitor and ensure compliance for universal service high-cost programs, including the Rural Digital Opportunity Fund and Connect America Fund Phase II Auction.⁶²⁸ RBAP makes several changes and enhancements to existing audit and verification procedures, including significantly increasing the number of audits and verifications initiating verifications earlier in the deployment process, and conducting on-site engineering audits.⁶²⁹ The largest dollar recipients will be subject to an on-site audit in at least one state, and higher-risk recipients will be subject to additional audits and verifications.⁶³⁰ Results of verifications, audits, and speed and latency performance testing are publicly available.⁶³¹ The Commission established the RBAP as part of an ongoing effort to increase accountability and to build upon existing audit and verification processes performed by USAC.⁶³²

202. *Administrative Improvements to High-Cost Programs.* In October 2023, the Commission made certain administrative modifications to, and clarifications of, Commission rules to improve the administration of the high-cost program, including the reduction in duplicative filing requirements and the elimination of unnecessary optional filings, the modification of certain reporting deadlines, grace periods and associated support reductions to align the requirements more closely with the high-cost program, and the expansion of certain reporting requirements as necessary to improve Commission oversight.⁶³³ These changes do not alter providers' existing obligations.⁶³⁴

203. *Enhanced Alternative Connect America Cost Model Support.* In July 2023, the Commission adopted the Enhanced Alternative Connect America Cost Model (A-CAM) program as a voluntary path for supporting the widespread deployment of 100/20 Mbps broadband service throughout the rural areas served by carriers currently receiving A-CAM support and in areas served by legacy rate-of-return support recipients.⁶³⁵ In adopting this program, the Commission furthered the Commission's long-standing goals by promoting the universal availability of voice and broadband networks, while also

⁶²⁶ *Establishing a 5G Fund for Rural America*, GN Docket No. 20-32, Further Notice of Proposed Rulemaking, FCC 23-74, at 17-20, paras. 24-32 (Sept. 22, 2023).

⁶²⁷ *PR-USVI Transitional Support Order*, FCC 23-32, at 13-18, paras. 37-50.

⁶²⁸ FCC, *Rural Broadband Accountability Plan*, <https://www.fcc.gov/rbap> (last visited Feb. 14, 2024).

⁶²⁹ FCC, *FACT SHEET: Rural Broadband Accountability Plan*, <https://docs.fcc.gov/public/attachments/DOC-379729A1.pdf> (last visited Feb. 14, 2024).

⁶³⁰ *Id.*

⁶³¹ *Id.*

⁶³² *Id.*

⁶³³ *Connect America Fund – Alaska Plan et al.*, WC Docket No. 16-271 et al., Notice of Proposed Rulemaking and Report and Order, FCC 23-87, at 62-85, paras. 131-185 (Oct. 19, 2023).

⁶³⁴ As a response to catastrophic weather events, the Commission temporarily waived certain deadlines and rules for service provider high-cost USF program recipients, as well as service provider contributors, in affected areas. *See, e.g., Affordable Connectivity Program et al.*, WC Docket No. 21-450 et al., Order, DA 23-805 (WCB Sept. 1, 2023); *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6 et al., Order, 37 FCC Rcd 11310 (WCB 2022); *Schools and Libraries Universal Support Mechanism*, CC Docket No. 02-6 et al., Order, 36 FCC Rcd 13405 (WCB 2021).

⁶³⁵ *Connect America Fund, et al.*, WC Docket No. 10-90 et al., Report and Order, Notice of Proposed Rulemaking, and Notice of Inquiry, FCC 23-60, at paras. 37-114 (July 24, 2023) (*Enhanced A-CAM Order*).

taking measures to minimize the burden on the nation's ratepayers.⁶³⁶ The Commission also adopted requirements for the Enhanced A-CAM program to complement existing federal, state, and local funding programs, so that broadband funding can be used efficiently to maximize the deployment of high-quality broadband service across the United States.⁶³⁷ On August 30, 2023, WCB announced carrier-specific offers of Enhanced A-CAM support based on a revised version of the A-CAM to existing A-CAM carriers and carriers that are still receiving legacy support to fund the deployment of voice and broadband-capable networks in their service territories.⁶³⁸ On October 30, 2023, WCB announced that 368 rate-of-return companies had elected such offers, representing commitments to deploy at least 100/20 Mbps service to over 700,000 unserved locations and maintain or improve existing 100/20 Mbps service to approximately 2 million locations.⁶³⁹

204. *Legacy Rate-of-Return High-Cost Funding.* In a July 2023 Notice of Proposed Rulemaking, the Commission sought comment on how to address the immediate needs of legacy rate-of-return support mechanisms, while balancing the Commission's objectives of maintaining its commitment to supporting broadband at evolving levels of service and also avoiding unnecessary duplication of support in light of other available funding programs.⁶⁴⁰ The Commission released an order in December 2023 deferring the commencement of the next five-year deployment obligation term for legacy rate-of-return carriers receiving CAF Broadband Loop Support (BLS) in 2024 until January 1, 2025, while the Commission considers general program reforms in the ongoing Notice of Proposed Rulemaking proceeding.⁶⁴¹ Legacy carriers will remain subject to the Commission's rules, requiring the offering of broadband service at actual speeds of at least 25/3 Mbps to the previously determined number of unserved locations under the current five-year term that ends on December 31, 2023.⁶⁴² Additionally, on May 23, 2023, the Commission temporarily waived the application of the budget control mechanism for rate-of-return carriers that receive high-cost universal service support from legacy mechanisms.⁶⁴³ Instead, the Commission adopted a budget constraint of 0%, that is, a full waiver of the budget constraint, for the July 2023 to June 2024 tariff year.⁶⁴⁴ Absent a waiver, the projected budget control factor would exceed 18%, resulting in a substantial reduction in support for most legacy rate-of-return carriers at a time when they continue to face cash flow issues and increased expenses as they emerge from the pandemic.⁶⁴⁵

205. In July 2023, the Commission released a Notice of Inquiry seeking to build a record to help it explore methods for new USF high-cost support mechanism(s) to promote affordable and available broadband services in the years to come for fully deployed networks.⁶⁴⁶

⁶³⁶ *Id.*

⁶³⁷ *Id.*

⁶³⁸ *Wireline Competition Bureau Announces Enhanced Alternative Connect America Cost Model Support Amounts Offered to Rate-Of-Return Carriers to Expand Rural Broadband*, WC Docket No. 10-90, Public Notice, DA 23-779 (WCB Aug. 30, 2023).

⁶³⁹ *Wireline Competition Bureau Authorizes 368 Companies in 44 States to Receive Enhanced Alternative Connect America Cost Model Support to Expand Rural Broadband*, WC Docket No. 10-90, Public Notice, DA 23-1025 (WCB Oct. 30, 2023).

⁶⁴⁰ *Enhanced A-CAM Order*, FCC 23-60, at paras. 115-53.

⁶⁴¹ *Connect America Fund: A National Broadband Plan for our Future High-Cost Universal Service Support*, Second Report and Order, WC Docket No. 10-90, FCC 23-118 (Dec. 27, 2023).

⁶⁴² *Id.* at 3-4, para. 8.

⁶⁴³ *Connect America Fund*, WC Docket No. 10-90, Order, FCC 23-40, at 1, para. 1 (May 23, 2023).

⁶⁴⁴ *Id.*

⁶⁴⁵ *Id.* at 3, para. 8.

⁶⁴⁶ *Enhanced A-CAM Order*, FCC 23-60, at paras. 154-83.

206. *Alaska Plan.* The Commission has also continued its work to ensure that fixed and mobile providers meet their commitments to serve remote Alaska in exchange for receiving high-cost support under the Alaska Plan. Due to the unique challenges of providing communications services in remote Alaska, the Commission adopted the *Alaska Plan Report and Order* in 2016, as a ten-year plan to ensure eligible remote areas were able to receive advanced communications services.⁶⁴⁷ This order required fixed and mobile service provider participants to submit performance plans committing to cover a specific number of Alaskans by specified last-mile technology subject to the middle-mile technology available.⁶⁴⁸ The *Alaska Plan Report and Order* also required each service provider participant to certify that it met the obligations contained in its performance plan by the end of year five (ending December 31, 2021) and the end of year ten (ending December 31, 2026).⁶⁴⁹

207. *Alaska Connect Fund.* On October 19, 2023, the Commission adopted a Notice of Proposed Rulemaking and Report and Order addressing continued high-cost Universal Service support for Alaska.⁶⁵⁰ Through the Notice of Proposed Rulemaking, the Commission sought comment on how to determine the most effective and efficient future use of universal service funding for fixed and mobile service in Alaska, including the development, scope, and implementation of an Alaska Connect Fund (the next phase of the Alaska Plan)⁶⁵¹ to provide future support to fixed and mobile carriers in the provision of voice and broadband services in high-cost areas of Alaska.⁶⁵² This includes seeking comment on what changes the Commission should make to the performance plan requirements in light of the BDC specifications and reporting requirements superseding the previous FCC Form 477 reporting requirements nationwide as well as other federal programs supporting broadband deployment.⁶⁵³

208. *5G Fund for Rural America.* With new mobile coverage data acquired through the BDC and reflected in the National Broadband Map, the Commission continues to work towards the implementation of the 5G Fund for Rural America to ensure the deployment of high-speed, 5G mobile services in parts of the country where, without subsidies, it would continue to be lacking.⁶⁵⁴ In September 2023, the Commission released a narrowly tailored Further Notice of Proposed Rulemaking to seek comment on a limited set of issues critical to the success of the 5G Fund.⁶⁵⁵

209. *Other Federal Programs.* As discussed in a variety of contexts in this Report, the Commission's efforts to provide high-cost USF support for broadband deployment are part of, and conducted in concert (and coordination) with, a variety of other federal programs that provide financial

⁶⁴⁷ *Connect America Fund et al.*, WC Docket No. 16-271, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 10139, 10140, para. 1 (2016) (*Alaska Plan Report and Order and Further Notice*).

⁶⁴⁸ *Alaska Plan Report and Order and Further Notice*, 31 FCC Rcd at 10166, 10172-73, paras. 85, 102.

⁶⁴⁹ *Id.* at 10166-67, 10173, paras. 85, 103; *see also* 47 CFR § 54.321; *Connect America Fund—Alaska Plan*, WC Docket No. 16-271, Order and Request for Comment, 37 FCC Rcd 5882, 5884, 6, paras. 4, 9 (WTB 2022).

⁶⁵⁰ *Connect America Fund—Alaska Plan et al.*, WC Docket Nos. 16-271, 23-328 et al., Notice of Proposed Rulemaking and Report and Order, FCC 23-87 (Oct. 19, 2023).

⁶⁵¹ All references to the next phase or version of the Alaska Plan in the Notice of Proposed Rulemaking and Report and Order are references to Alaska Connect Fund or ACF. *Connect America Fund—Alaska Plan et al.*, WC Docket Nos. 16-271, 23-328 et al., Notice of Proposed Rulemaking and Report and Order, FCC 23-87, at 2, para. 1 n.1 (Oct. 19, 2023).

⁶⁵² *Connect America Fund—Alaska Plan et al.*, WC Docket Nos. 16-271, 23-328 et al., Notice of Proposed Rulemaking and Report and Order, FCC 23-87, at 31-60, paras. 63-127 (Oct. 19, 2023).

⁶⁵³ *Id.* at 52, para. 109 (Oct. 19, 2023).

⁶⁵⁴ *See generally Establishing a 5G Fund for Rural America*, GN Docket No. 20-32, Report and Order, 35 FCC Rcd 12174 (2020), modified by *Errata* released Nov. 10, 2020, Nov. 27, 2020, and Jan. 11, 2021 (*5G Fund Report and Order*).

⁶⁵⁵ *5G Fund FNPRM*, FCC 23-74 at 1-2, para. 1.

support for broadband deployment. The largest of these programs is NTIA's BEAD Program, for which Congress allocated \$42.45 billion in the Infrastructure Act to states for grants "to bridge the digital divide."⁶⁵⁶ NTIA approved the first state proposal to access BEAD funds near the end of last year.⁶⁵⁷ Once deployment goals are met, any remaining funding can be used on high-speed Internet adoption, training, and workforce development efforts, among other eligible uses.⁶⁵⁸ NTIA also administers the \$1 billion Enabling Middle Mile Broadband Infrastructure Program, also created by the Infrastructure Act, which funds middle mile infrastructure used to connect local, regional, and national networks, as well as anchor institutions such as schools, libraries, medical and healthcare providers, and various institutions of higher education.⁶⁵⁹ Further, NTIA administers the Tribal Broadband Connectivity Program, a program used for broadband deployment on tribal lands, as well as for telehealth, distance learning, broadband affordability, and digital inclusion recently funded through \$1 billion and \$2 billion appropriations in the Consolidated Appropriations Act, 2021, and Infrastructure Act, respectively.⁶⁶⁰

210. In addition to programs administered by NTIA, the U.S. Department of Treasury administers billion broadband infrastructure funding program,⁶⁶¹ which requires recipients to invest in projects designed to provide service to households and businesses with an identified need for additional broadband investment, including increasing access to high-speed broadband, increasing the affordability of broadband services, and improving the reliability of broadband service.⁶⁶² In addition to its historic grant and loan programs,⁶⁶³ the RUS administers the ReConnect Program, reauthorized by the Infrastructure Act,⁶⁶⁴ which provides loans, grants, and loan-grant combinations to bring high-speed internet to rural areas that lack sufficient access to broadband. ReConnect Program funds can be used to

⁶⁵⁶ Infrastructure Act, div. F, tit. I, § 60102(b)(1), 135 Stat. at 1184. On June 26, 2023, the BEAD Program allocations for all 50 states and the U.S. Territories were announced. National Telecommunications and Information Administration, U.S. Department of Commerce, *Biden-Harris Administration Announces State Allocations for \$42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda* (June 26, 2023), <https://www.ntia.gov/press-release/2023/biden-harris-administration-announces-state-allocations-4245-billion-high-speed>.

⁶⁵⁷ National Telecommunications and Information Administration, U.S. Department of Commerce, *Biden-Harris Administration Approves Louisiana's "Internet for All" Initial Proposal* (Dec. 15, 2023), <https://www.ntia.gov/press-release/2023/biden-harris-administration-approves-louisiana-s-internet-all-initial-proposal>.

⁶⁵⁸ *Id.*

⁶⁵⁹ See Infrastructure Act, div. F, tit. I, § 60401. For award routes and project information, see National Telecommunications and Information Administration, U.S. Department of Commerce, *Funding Recipients*, <https://broadbandusa.ntia.doc.gov/funding-programs/enabling-middle-mile-broadband-infrastructure-program/funding-recipients> (last visited Feb. 14, 2024).

⁶⁶⁰ See National Telecommunications and Information Administration, U.S. Department of Commerce, *Tribal Broadband Connectivity Program*, <https://broadbandusa.ntia.doc.gov/funding-programs/tribal-broadband-connectivity> (last visited Feb. 14, 2024); Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, div. N, tit. IX, § 905, 134 Stat. 1182, 2130, 2136; Infrastructure Act, div. F, tit. II, § 60201, 135 Stat. at 1208-09.

⁶⁶¹ See ARPA, tit. IX, § 9901(c)(1)(D) (codified at 42 U.S.C. § 802(c)(1)(D)), 135 Stat. at 226; 42 U.S.C. § 804(e) (funding level).

⁶⁶² See Coronavirus State and Local Fiscal Recovery Funds, Final Rule, 87 Fed. Reg. 4338, 4443 (Jan. 22, 2022), available at <https://www.govinfo.gov/content/pkg/FR-2022-01-27/pdf/2022-00292.pdf>.

⁶⁶³ See USDA, Rural Development, *Telecom Programs*, <https://www.rd.usda.gov/programs-services/telecommunications-programs> (last visited Feb. 14, 2024).

⁶⁶⁴ Infrastructure Act, div. J, tit. I, 135 Stat. at 1351.

fund the costs of construction, improvement, or acquisition of facilities and equipment needed to provide broadband service.⁶⁶⁵

F. Facilitating Access For Schools, Libraries, and Health Care

211. *E-Rate*. For over two decades, schools and libraries have relied on the Commission’s E-Rate program to secure affordable telecommunications and broadband services to provide connectivity for schools and libraries.⁶⁶⁶ At the same time, the Commission has been mindful of the need to protect limited E-Rate funds by requiring them to be used for eligible services and equipment provided to eligible entities, for eligible purposes, and in accordance with program rules.⁶⁶⁷ On December 16, 2021, the Commission proposed changes to the E-Rate program targeted at several goals: streamlining program requirements for applicants and service providers, strengthening program integrity, preventing improper payments, and decreasing the risk of fraud, waste, and abuse.⁶⁶⁸ Specifically, the Commission sought comment on a proposal to implement a central document repository through which service providers would be required to submit bids to the E-Rate program administrator, USAC, instead of directly to applicants.⁶⁶⁹

212. For far too long, Tribal libraries have been unable to participate fully in the E-Rate program.⁶⁷⁰ This situation has exacerbated enduring inequities, as Tribal libraries often serve as a critical source of Internet access in underserved areas across the nation.⁶⁷¹ In 2018, Congress acted to address this gap through passage of the Museum and Library Services Act of 2018, which amended the Library Services and Construction Act to explicitly include Tribal libraries in the definition of libraries.⁶⁷² Consistent with this legislation, on January 28, 2022, the Commission modified the definition of “library” in its E-Rate program rules to include Tribal libraries and clarify Tribal libraries are eligible to participate in the E-Rate program.⁶⁷³ The Commission also waived the E-Rate FCC Form 471 application filing deadline for new Tribal libraries applying for E-Rate support in funding year 2022 recognizing that special circumstances warranted additional flexibility for these applicants to complete their competitive

⁶⁶⁵ USDA, Rural Development, *ReConnect Loan and Grant Program*, <https://www.usda.gov/reconnect> (last visited Feb. 14, 2024).

⁶⁶⁶ See e.g., *Promoting Fair and Open Competitive Bidding in the E-Rate Program*, WC Docket No. 21-455, Notice of Proposed Rulemaking, 36 FCC Rcd 17892, at 17892, para. 1 (2021). In addition, the Commission took action in response to catastrophic weather events to temporarily waive certain deadlines and rules for E-Rate participants in affected areas. See, e.g., *Affordable Connectivity Program et al.*, WC Docket No. 21-450 et al., Order, DA 23-805 (WCB Sept. 1, 2023); *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6 et al., Order, 37 FCC Rcd 11310 (WCB 2022); *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6 et al., Order, 36 FCC Rcd 13405 (WCB 2021). Furthermore, the Commission continued its response to the COVID pandemic by continuing the waiver of the E-Rate gift rule and allow service providers to offer, and E-Rate Program participants to solicit and accept, improved broadband connections or equipment for remote learning during the pandemic. *Rural Health Care Universal Service Support Mechanism; Schools and Libraries Universal Service Support Mechanism*, WC Docket No. 02-60, Order, 36 FCC Rcd 14349 (WCB 2021).

⁶⁶⁷ See, e.g., *Promoting Fair and Open Competitive Bidding in the E-Rate Program*, WC Docket No. 21-455, Notice of Proposed Rulemaking, 36 FCC Rcd 17892, 17892-93, para. 2.

⁶⁶⁸ *Id.* at 17893, para. 3.

⁶⁶⁹ *Id.* at 17897905, paras. 11-36.

⁶⁷⁰ *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Report and Order, 37 FCC Rcd 1458, 1458, para. 1 (2022).

⁶⁷¹ *Id.* at 1458, para. 1.

⁶⁷² *Id.* at 1459-60, para. 5.

⁶⁷³ *Id.* at 1460-63, paras. 7-13.

bid processes and submit their applications.⁶⁷⁴ In furtherance of the E-Rate program and other broadband affordability initiatives, on June 24, 2022, the Commission also executed a Memorandum of Understanding (MOU) with the Institute of Museum and Library Services to jointly promote public awareness and facilitate the availability of federal funding opportunities for broadband.⁶⁷⁵ The partnership is focused on efforts to promote the availability of affordable broadband programs, in recognition of the significant role that libraries and other community anchor institutions play in promoting digital access and inclusion.⁶⁷⁶ The Commission's and Institute of Museum and Library Services's coordination will also focus on communities where broadband access has been especially challenging such as rural and Tribal areas.⁶⁷⁷

213. In July 2023, the Commission adopted a Report and Order providing Tribal libraries enhanced access to E-Rate funding, improved and simplified program rules.⁶⁷⁸ Among other things, the Commission updated its E-Rate program rules to allow Tribal college and university libraries that also serve as public libraries in their communities to apply for and receive E-Rate support; created an exemption to the competitive bidding requirements for all libraries seeking E-Rate support for category two services that total a pre-discount price of \$3,600 or less per library per funding year; and increased the maximum category two discount rate to 90% and the category two funding floor to \$55,000 for Tribal libraries.⁶⁷⁹ The Commission also amended the E-Rate program rules to add a Tribal community representative to the USAC Board of Directors and directed USAC to provide increased outreach and training to Tribal applicants.⁶⁸⁰ In an accompanying Notice of Proposed Rulemaking, the Commission sought comment on ways to further simplify the E-Rate program for all applicants.⁶⁸¹

214. In the fall of 2023, the Commission took two actions regarding the use of E-Rate funding to support Wi-Fi technologies on school buses and Wi-Fi hotspots so that schools and libraries can check them out to students and library patrons in need. Chairwoman Rosenworcel included these two actions as part of her "Learn Without Limits" initiative announced on June 26, 2023.⁶⁸² On October 19, 2023, the Commission clarified that the use of Wi-Fi, or other similar access point technologies, on school buses is an educational purpose, and the provision of such service, including the equipment needed to provide such service, is eligible for E-Rate funding, consistent with the Commission's past determinations regarding other eligible off-campus uses of E-Rate-supported services.⁶⁸³ The Commission directed WCB to seek comment on the specific services and equipment that would be eligible as part of the Funding

⁶⁷⁴ See *Request for Waiver by Alaska Federation of Natives*, CC Docket No. 02-6, Order, 37 FCC Rcd 289, 291-92, para. 8 (WCB 2022), (directing USAC to treat as timely filed all applications with a new Tribal library as a recipient of service that are filed within 65 days of the application filing window deadline, or by May 26, 2022).

⁶⁷⁵ FCC, Press Release, FCC and Institute of Museum and Library Services Sign Agreement to Promote Broadband Access (June 24, 2022), <https://docs.fcc.gov/public/attachments/DOC-384621A1.pdf>.

⁶⁷⁶ *Id.*; Infrastructure Act, § 60104(c).

⁶⁷⁷ FCC, Press Release, FCC and Institute of Museum and Library Services Sign Agreement to Promote Broadband Access (June 24, 2022), <https://docs.fcc.gov/public/attachments/DOC-384621A1.pdf>; Infrastructure Act, § 60104(c).

⁶⁷⁸ *Schools and Libraries Universal Service Support Mechanism et al.*, CC Docket No. 02-6 et al., Report and Order and Further Notice of Proposed Rulemaking, FCC 23-56 (July 21, 2023).

⁶⁷⁹ *Id.* at 6-16, paras. 11-30.

⁶⁸⁰ *Id.* at 16-20, paras. 31-39.

⁶⁸¹ *Id.* at 20-39, paras. 40-81.

⁶⁸² FCC, Press Release, Chairwoman Rosenworcel Announces 'Learn without Limits' Initiative (June 26, 2023), <https://docs.fcc.gov/public/attachments/DOC-394625A1.docx>.

⁶⁸³ *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Declaratory Ruling, FCC 23-84 (Oct. 25, 2023).

Year 2024 Eligible Services List proceeding.⁶⁸⁴ On October 25, 2023, WCB issued a supplemental Public Notice seeking additional comment for example, on the following questions: (1) what equipment is needed to provide Wi-Fi on school buses and whether the equipment should be eligible as a Category One or Category two service; (2) how to ensure the use of Wi-Fi equipment and services on school buses is consistent with E-Rate program rules and limitations; (3) how to ensure support is only provided for educational purposes consistent with E-Rate rules; and (4) what are the estimated costs for providing Wi-Fi on school buses.⁶⁸⁵ On December 15, 2023, WCB issued an order approving the Funding Year 2024 Eligible Services List and making the services and equipment necessary to provide Wi-Fi on school buses eligible for E-Rate support.⁶⁸⁶

215. On November 1, 2023, the Commission also adopted a Notice of Proposed Rulemaking initiating a proceeding to address the ongoing remote learning needs of today's students, school staff, and library patrons through the E-Rate program and to ensure the millions who have benefitted from ECF program support do not fall back onto the wrong side of the digital divide once the program ends.⁶⁸⁷ Specifically, the Commission proposed to permit eligible schools and libraries to receive E-Rate support for Wi-Fi hotspots and wireless Internet services that can be used off-premises, proposing to find that the off-premises use of Wi-Fi hotspots and Internet services by students, school staff, and library patrons for remote learning and the provision of virtual library services constitutes an educational purpose as defined by the Commission and enhances access to advanced telecommunications and information services for schools and libraries.⁶⁸⁸ The Commission also sought comment on how to adapt the E-Rate program to reflect the virtual nature of today's modern educational environment.⁶⁸⁹ Additionally, the Commission sought comment on the applicability of the Children's Internet Protection Act (CIPA) requirements to the off-premises use of E-Rate-supported hotspots and services.⁶⁹⁰

216. *Emergency Connectivity Fund (ECF)*. Pursuant to the American Rescue Plan Act of 2021, the Commission established the ECF program on May 10, 2021 to distribute up to \$7.171 billion to eligible schools and libraries for the purchases of Wi-Fi hotspot devices, modems, routers, devices that combine a modem and router, connected devices and broadband connections for use by students, school staff, and library patrons at locations that include locations other than the schools and libraries.⁶⁹¹ The ECF program reimburses 100% of the reasonable costs associated with the eligible broadband Internet services and equipment, and sets a maximum support cap of \$400 for connected devices (laptop and tablet computers) and a \$250 support cap for Wi-Fi hotspots provided to an individual student, school staff, or library patron.⁶⁹² This program allows students, school staff, and library patrons who do not have an Internet connecting device or service at home to be connected and gain educational resources online. USAC and the Commission have opened and closed three application filing windows, with the requests received totaling more than \$9.2 billion.⁶⁹³ As of December 14, 2023, total funding committed is nearly

⁶⁸⁴ See *id.* at 1, 8-9, paras. 2, 13.

⁶⁸⁵ *Wireline Competition Bureau Seeks Additional Comment on Adding Wi-Fi on School Buses to Proposed Eligible Services List for the E-Rate Program*, WC Docket 13-184, Public Notice, DA 23-1101 (WCB Oct. 25, 2023).

⁶⁸⁶ *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket 13-184, Order, DA 23-1171 (WCB Dec. 15, 2023).

⁶⁸⁷ *Addressing the Homework Gap through the E-Rate Program*, WC Docket No. 21-31, Notice of Proposed Rulemaking, FCC 23-91 (Nov. 8, 2023).

⁶⁸⁸ See *id.* at 12, 24-27, paras. 18, 45-50.

⁶⁸⁹ See *id.* at 27-28, paras. 51-52.

⁶⁹⁰ See *id.* at 28-31, paras. 53-58.

⁶⁹¹ *Establishing Emergency Connectivity Fund to Close the Homework Gap*, WC Docket No. 21-93, Report and Order, 36 FCC Rcd 8696, 8697-98, paras. 1, 3-4 (2021).

⁶⁹² *Id.* at 8730-31, 8734, paras. 69, 71, 78.

\$7.1 billion, and applications are continuing to be reviewed.⁶⁹⁴ On May 12, 2023, consistent with the intended emergency nature of the program and expiration of the public health emergency on May 11, 2023, WCB and the Office of the Managing Director announced the ECF program will sunset on June 30, 2024.⁶⁹⁵

217. *Rural Health Care Program.* On February 22, 2022, the Commission proposed and sought comment on several revisions to the Commission's Rural Health Care (RHC) Program rules designed to ensure that rural healthcare providers receive funding necessary for broadband and telecommunications services to provide vital healthcare services, while limiting costly inefficiencies and the potential for waste, fraud, and abuse.⁶⁹⁶ The RHC Program provides vital support to assist rural health care providers with the costs of broadband and other communications services.⁶⁹⁷ The Commission took this action in an effort to improve the accuracy and fairness of RHC Program support and increase the efficiency of program administration.⁶⁹⁸ In addition, WCB waived the mechanism for funding that was planned to go into effect out of concerns that the mechanism provided insufficient support.⁶⁹⁹

218. On January 27, 2023, the Commission released an Order on Reconsideration, Second Report and Order, Order, and Second Further Notice of Proposed Rulemaking that makes it easier for health care providers to receive support, reduce delays in funding commitments, and improve the overall

(Continued from previous page)

⁶⁹³ See FCC, Press Release, FCC Announces Over \$5 Billion in Funding Requests Received in the Emergency Connectivity Fund Program (Aug. 25, 2021), <https://www.fcc.gov/document/fcc-announces-over-5-billion-emergency-connectivity-fund-requests>; FCC, Press Release, FCC Announces Nearly \$1.3 Billion in Funding Requests Received in Emergency Connectivity Fund Program Second Application Filing Window (Oct. 25, 2021), <https://docs.fcc.gov/public/attachments/DOC-376868A1.pdf>; FCC, Press Release, FCC Announces Over \$2.8 Billion in Funding Requests for Final Window in Ongoing Work to Close the Homework Gap (May 25, 2022), <https://docs.fcc.gov/public/attachments/DOC-383685A1.pdf>. In addition, as a response to catastrophic weather events, the Commission temporarily waived certain deadlines and rules for ECF participants in affected areas. See, e.g., *Affordable Connectivity Program et al.*, WC Docket No. 21-450 *et al.*, Order, DA 23-805 (WCB Sept. 1, 2023); *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6 *et al.*, Order, 37 FCC Rcd 11310 (WCB 2022); *Schools and Libraries Universal Support Mechanism*, CC Docket No. 02-6 *et al.*, Order, 36 FCC Rcd 13405 (WCB 2021).

⁶⁹⁴ FCC, Press Release, FCC Announces Over \$450,000 in Emergency Connectivity Funding for Schools (Dec. 14, 2023), <https://docs.fcc.gov/public/attachments/DOC-399143A1.pdf>.

⁶⁹⁵ *Wireline Competition Bureau and Office of the Managing Director Provide Guidance on Emergency Connectivity Fund Program Upon Termination of the Emergency Period*, WC Docket 21-93, Public Notice, DA 23-406 (WCB May 12, 2023).

⁶⁹⁶ *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Order on Reconsideration, Second Report and Order, Order, and Second Further Notice of Proposed Rulemaking, 37 FCC Rcd 2527 (2023).

⁶⁹⁷ *Id.* at 2527, para. 1.

⁶⁹⁸ *Id.* at 2528, para. 1.

⁶⁹⁹ *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Order, 36 FCC Rcd 791 (WCB 2021) (waiver for funding years 2021 and 2022 for Alaska participants); *Promoting Telehealth in Rural America Order*, 36 FCC Rcd 7051; *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Order, 36 FCC Rcd 7061 (WCB 2021) (nationwide waiver for funding years 2021 and 2022); *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Order, 37 FCC Rcd 4891 (WCB 2022) (waiver for funding year 2023 for Alaska participants); *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Order, 37 FCC Rcd 6457 (WCB 2022) (nationwide waiver for funding year 2023). In addition, the Commission continued its practice of extending filing windows for the RHC in response to the COVID pandemic. *Rural Health Care Support Mechanism*, WC Docket No. 02-60, Order, 36 FCC Rcd 1604 (WCB 2021); *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Order, 36 FCC Rcd 7051 (WCB 2021); *Rural Health Care Support Mechanism*, WC Docket No. 02-60, Order, 37 FCC Rcd 2834 (WCB 2022); *Rural Health Care Support Mechanism*, WC Docket No. 02-60, Order, 38 FCC Rcd 1644 (WCB 2023).

efficiency of the RHC program.⁷⁰⁰ The Commission eliminated the mechanism for funding that may have resulted in insufficient support and streamlined the invoicing process.⁷⁰¹ It also proposed or sought comment on, among other things, simplifying the urban rate rule, permitting conditional eligibility for health care providers, and moving back the Service Provider Identification Number (SPIN) change deadline.⁷⁰²

219. On December 14, 2023, the Commission released a Report and Order that improves the RHC Program administration and facilitates participation in the program by allowing health care providers that expected to become eligible to complete the processes required to request funding, aligning program deadlines, simplifying rules for calculating urban rates, streamlining administrative processes, and freeing up unused funding for other purposes.⁷⁰³ Specifically, the Commission revised the RHC Program rules to permit conditional eligibility for health care providers and eliminated the seldom-used “standard urban distance” component of the urban rate calculation rules.⁷⁰⁴ The Commission also made two changes relating to the RHC Program administrative deadlines by aligning the SPIN change deadline with the existing invoice deadline and permitting healthcare providers to request a change to evergreen contract dates, as well as amended rules to shift to the use of the same form when determining RHC Telecommunications and Healthcare Connect Fund Program eligibility.⁷⁰⁵ Finally, the Commission established a deadline by which invoices must be submitted for undisbursed funding commitments from before 2020.⁷⁰⁶

220. *COVID-19 Telehealth Program.* The Commission established the COVID-19 Telehealth Program in 2020 pursuant to the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which was signed into law on March 27, 2020.⁷⁰⁷ The COVID-19 Telehealth Program distributed funding appropriated by Congress to help health care providers furnish telehealth services to patients at their homes or mobile locations in response to the COVID-19 pandemic.⁷⁰⁸ Between April 16, 2020 and July 8, 2020, the Commission approved 539 funding applications in 47 states plus the District of Columbia and Guam for a total of \$200 million in funding.⁷⁰⁹ In December 2020, Congress appropriated another

⁷⁰⁰ *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Order on Reconsideration, Second Report and Order, Order, and Second Further Notice of Proposed Rulemaking, 38 FCC Rcd 827 (2023).

⁷⁰¹ *Id.* at 831-37, 850-52, paras. 9-25, 55-59.

⁷⁰² *Id.* at 862-64, 866-68, paras. 87-91, 97-103.

⁷⁰³ *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Third Report and Order, FCC 23-110, at 2-3, 6, 8-10, 12-15, paras. 2-3, 7, 13, 17-21, 28-36 (Dec. 14, 2023).

⁷⁰⁴ *Id.* at 3, para. 7.

⁷⁰⁵ *Id.*

⁷⁰⁶ *Id.* In addition to the actions described above, as a response to catastrophic weather events, the Commission temporarily waived certain deadlines and rules for RHC participants in affected areas. *See, e.g., Affordable Connectivity Program et al.*, WC Docket No. 21-450 et al., Order, DA 23-805 (WCB Sept. 1, 2023); *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6 et al., Order, 37 FCC Rcd 11310 (WCB 2022); *Schools and Libraries Universal Support Mechanism*, CC Docket No. 02-6 et al., Order, 36 FCC Rcd 13405 (WCB 2021).

⁷⁰⁷ *COVID-19 Telehealth Program, Promoting Telehealth for Low-Income Consumers*, WC Docket Nos. 20-89, 18-213, Report and Order, 35 FCC Rcd 3366 (2020).

⁷⁰⁸ *Wireline Competition Bureau Announces Covid-19 Telehealth Program Application Portal Will Open Monday*, WC Docket No. 20-89, Public Notice, 35 FCC Rcd 3076 (WCB 2020).

⁷⁰⁹ *Communications Marketplace Report*, GN Docket No. 20-60, Report, 36 FCC Rcd 2945, 3166, para. 426 (2020).

\$249.95 million for a second round of funding to be distributed by the Commission.⁷¹⁰ On March 29, 2021, the Commission adopted a new order to establish a second round of the COVID-19 Telehealth Program to fund telehealth and connected care services as required by Congress in the Consolidated Appropriations Act, 2021.⁷¹¹ During this second round of the program, the Commission approved applications by 446 health care providers and awarded more than \$256 million in funding.⁷¹² Over the course of the two funding rounds, the COVID-19 Telehealth Program approved 985 awards to health care providers in each state, territory, and the District of Columbia.⁷¹³ On April 12, 2023, WCB and the Office of the Managing Director released a Public Notice announcing that the pandemic emergency period for the COVID-19 Telehealth Program ended on April 10, 2023 due to the enactment of House Joint Resolution 7, which ended the COVID-19 national emergency.⁷¹⁴ Pursuant to the CARES Act, eligible telehealth expenses must have been paid for and received on or between March 13, 2020, through April 10, 2023, the end of the emergency period. The deadline for submission of all invoices and requests for reimbursement was October 31, 2023.⁷¹⁵

221. *Connected Care Pilot Program.* The Connected Care Pilot Program was established to provide up to \$100 million in USF over three years support to help eligible health care providers defray the costs of providing connected care services to their patients and study how the USF can help support the continuing trend toward connected care services, with an emphasis on providing connected care services to low-income and veteran patients.⁷¹⁶ On June 21, 2021, the Commission released an Order providing further guidance on the administration of the Pilot Program, including guidance on eligible services, competitive bidding, invoicing, and data reporting for selected participants.⁷¹⁷ From January 2021 to March 2022, the Commission selected 107 projects to receive funding through the program.⁷¹⁸ The projects selected by the Commission represent a broad array of geographic areas and a diversity of provider types, involve patients in underserved communities, and will address a range of health conditions.⁷¹⁹ Connected Care Pilot Program projects are ongoing.

⁷¹⁰ *COVID-19 Telehealth Program, Promoting Telehealth for Low Income Consumers*, WC Docket Nos. 20-89, 18-213, Report and Order and Order on Reconsideration, 36 FCC Rcd 7141, 7142-43, paras. 2-3 (2021) (*COVID-19 Telehealth Round Two Order*).

⁷¹¹ *COVID-19 Telehealth Round Two Order*, 36 FCC Rcd at 7141-42, para. 1.

⁷¹² See FCC, *COVID-19 Telehealth Program (Invoices & Reimbursements)*, Final List of COVID-19 Telehealth Program Round 2 Awardees (June 30, 2022), <https://www.fcc.gov/covid-19-telehealth-program-invoices-reimbursements>.

⁷¹³ *Id.*

⁷¹⁴ *Wireline Competition Bureau and Office of the Managing Director Announce Update on Wind Down of COVID-19 Telehealth Program*, WC Docket No. 20-89, Public Notice, DA 23-316 (WCB Apr. 12, 2023) (*Wind Down of COVID-19 Telehealth Program*).

⁷¹⁵ *Wireline Competition Bureau Extends Deadlines for the COVID-19 Telehealth Program Round 2*, WC Docket No. 20-89, Public Notice, 37 FCC Rcd 8820, 8820, para. 1 (WCB 2022).

⁷¹⁶ *Federal Communications Commission Announces Final Set of Projects Selected for the Connected Care Program*, WC Docket No. 18-213, Public Notice, 37 FCC Rcd 4358, 4358, para. 1 (WCB 2022) (*Final Set of Projects for Connected Care Program Public Notice*).

⁷¹⁷ *Promoting Telehealth for Low Income Consumers*, WC Docket No. 18-213, Second Report and Order, 36 FCC Rcd 10642, 10643, para. 1 (2021).

⁷¹⁸ FCC, Press Release, FCC Announces Final Group of Approved Projects for Connected Care Pilot Program (Mar. 16, 2022), <https://www.fcc.gov/document/fcc-announces-final-group-connected-care-pilot-program-projects>.

⁷¹⁹ *Final Set of Projects for Connected Care Program Public Notice* at 1, para. 2.

V. SECTION 706 DETERMINATION

222. We find that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion. As discussed in detail above, although deployment of advanced telecommunications capability continues to increase overall, these advancements are not occurring quickly enough to bring such capability to all Americans. Broadband has not been deployed to far too many Americans, particularly when evaluated under our long-overdue new benchmark of 100/20 Mbps. Overall, over 24 million Americans lack access to fixed advanced telecommunications capability.⁷²⁰ Rural areas are the farthest from universal deployment, accounting for nearly 80% of that total, or almost 19 million Americans lacking access.⁷²¹ And approximately 700,000 people living on Tribal lands do not have fixed advanced telecommunications capability physically deployed to their homes.⁷²² In our view, these facts alone justify a negative finding under section 706.⁷²³

223. We are particularly concerned that those living in rural areas are almost four times more likely than average Americans not to have access to advanced telecommunications capability and those living on Tribal lands are almost three times more likely than average Americans not to have access to advanced telecommunications capability.⁷²⁴ While these gaps have been contracting,⁷²⁵ they are still significant and we find that they are not rapid enough for the deployment to be considered reasonable and timely. People living in rural America and on Tribal lands are particularly in need of broadband to obtain access to the economic, educational, and health care resources that people in urban areas are largely able to take for granted.

224. We note that the statistics we discuss above do not take into account the fact that in our current digital age, people need access both to fixed and mobile broadband service to have access to advanced telecommunications capability. Taking any measure of mobile broadband service used in this

⁷²⁰ See Fig. 1, *supra*. We reject claims that we are unreasonably understating data because we are relying on December 2022 data. See *ACA Ex Parte* at 1-2; *NCTA Ex Parte* at 2. As an initial matter, we note that since the Commission began collecting its own deployment data, it has always based its section 706 evaluation on data of a vintage of similar age to that which we use in this inquiry. See, e.g., *2021 Report*, 36 FCC Rcd at 858, para. 38 (December 2019 data); *2018 Report*, 33 FCC Rcd at 1681, para. 50 (December 2016 data); *2016 Report*, 31 FCC Rcd at 737, para. 88 (December 2014 data). Further, we evaluate December 2022 data because, among other things, the verification process for the more recent data, from June 2023 and December 2023, has not been completed. We also reject NCTA's suggestion that our inquiry should account for locations that currently lack access to 100/20 Mbps service, but are scheduled to have such service made available through various ISP federal funding commitments. See *NCTA Ex Parte* at 2. Consistent with all of the Commission's previous Reports issued pursuant to section 706, we evaluate broadband deployment for the current period, not a future moment in time. To the extent federal funding commitments lead to additional buildout in currently unserved areas, future Commission inquiries will account for such buildout. Finally, we are not persuaded by NCTA's argument that satellite service should not be excluded from our deployment evaluation due to satellite service's importance in serving extremely high-cost areas. See *NCTA Ex Parte* at 2. We note that even if we were to currently include fixed satellite service, over 21 million Americans would still lack access to fixed advanced telecommunications capability. See Appendix B-2. The Commission will have the opportunity to further examine the role of satellite service in our section 706 evaluation in future inquiries. With regard to ACA Connects's argument that we should include fixed wireless broadband service in our measurements, *ACA Connects Ex Parte* at 3, we note that this statistic, as well as all others referenced in our section 706 determination, include fixed wireless broadband service.

⁷²¹ See Fig. 1, *supra*.

⁷²² See *id.*

⁷²³ We conclude above that access to fixed broadband is necessary, but not sufficient, condition for someone to have access to advanced telecommunications capability under section 706. See Section III.A. Thus, we need not analyze mobile broadband data to come to this conclusion.

⁷²⁴ See Fig. 1, *supra*.

⁷²⁵ See *id.*

Report, a larger number of Americans can be said not to have access to advanced telecommunications capability. If we were to use Mobile 5G-NR with a minimum speed of 35/3 Mbps as the mobile standard, approximately 45 million Americans lack access to both fixed and mobile broadband and, therefore, advanced telecommunications capability.⁷²⁶

225. These data solely concern physical deployment and do not touch on our other universal service goals. Although we have not yet established benchmarks or standards for these other goals and do not yet have comprehensive data, there are statistics indicating there is additional work to be done. The limited pricing data available to the Commission indicates that a fixed broadband connection at 100/20 Mbps costs, on average, approximately \$100 in the United States.⁷²⁷ Such a price is \$70 in excess of the \$30 monthly subsidy currently available through the Affordable Connectivity Program. Indeed, for Americans in the lower 10th percentile of income, to purchase a 100/20 Mbps fixed connection currently means having to spend between approximately 5 to 11% of their monthly household income on broadband service, depending on the area of the country where they are located.⁷²⁸ While these data points are not definitive evidence, they strongly suggest that affordability for fixed advanced telecommunications capability remains a challenge for too many people.⁷²⁹ In addition, the rate of ACP enrollment, which continued up until the enrollment freeze on February 8, 2024, indicates that there is still unmet demand by eligible consumers for affordable broadband service.⁷³⁰

226. As the pandemic made painfully clear, broadband is essential infrastructure for modern life. This is why our nation made its largest ever federal investment in high-speed broadband⁷³¹—in order to close the digital divide once and for all. Absent evidence of sufficiently rapid progress toward true universal broadband service for all Americans, we cannot conclude that “advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion.”⁷³² Based on this determination, section 706 requires us to “take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market” as required by our section 706 mandate.⁷³³ We intend to do just that.⁷³⁴

⁷²⁶ Fig. 12, *supra*.

⁷²⁷ Fig. 17, *supra*.

⁷²⁸ Fig. 19, *supra*.

⁷²⁹ NCTA argues that our affordability analysis should account for support programs and other discounts. See NCTA Ex Parte at 2-3. As discussed in Section III.B above, our analysis of affordability of fixed broadband is necessarily limited to the available data, which does not currently include information regarding discounts, offered either through support programs or otherwise. See *supra* Section III.B. In any event, our ultimate determination under section 706 in this Report is not based on affordability data; as we make clear, the limited discussion of affordability here is meant to illustrate that broadband affordability remains a challenge for many Americans, a point that NCTA does not appear to dispute.

⁷³⁰ The ACP exceeded its enrollment targets with an average month-over-month increase in the participation rate of 3.9% for the life of the ACP to-date and 3.4% for each month in 2023. Letter to from Mark Stephens, Managing Director, FCC to Sharon R. Diskin, Acting Inspector General, FCC at 4 (Dec. 21, 2023), Appendix B to *Report on the Performance Audit of the Affordable Connectivity Program for the Federal Communications Commission*, Audit Report, 23-AUD-01-04, OIG, https://www.fcc.gov/sites/default/files/23-aud-01-04_acp_01222024.pdf (Jan. 22, 2024).

⁷³¹ Infrastructure Act, div. F, §§ 60101-604, 135 Stat. at 1182-251.

⁷³² 47 U.S.C. § 1302(b).

⁷³³ *Id.*

⁷³⁴ We will consider, among other things, the suggestions for “removing barriers to infrastructure investment and by promoting competition in the telecommunications market” from commenters in the record developed in this proceeding. See, e.g., Free State Foundation Comments at 23; INCOMPAS Comments at 10-16; Space Exploration (continued....)

VI. ORDERING CLAUSE

227. Accordingly, IT IS ORDERED that, pursuant to section 706 of the Telecommunications Act of 1996, as amended, 47 U.S.C. § 1302, this Report IS ADOPTED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

(Continued from previous page) _____
Holdings, LLC (SpaceX) Comments at 4-7; WIA Comments at 5-7; WIA Reply Comments at 8-9; WTA Comments at 7-11, 17-18; NCTA *Ex Parte* at 3.

APPENDIX A

Population Allocation Methodology

1. Prior to 2022, the Commission had no information about fixed broadband service availability below the level of the census block, and therefore FCC staff block-level population estimates were used to estimate the population with access to advanced telecommunications capability. Beginning in 2022, the BDC produced sub-block, location-level data. The Fabric dataset, on which the BDC is based, contains the number of units in each Broadband Serviceable Location (BSL), but it does not contain information on the population of each BSL or unit(s) therein.¹ To estimate the population with access to advanced telecommunications capability for December 2022 and beyond, we use our established block-level population estimation methodology as an input to estimate the population of each BSL (i.e., we rely on block-level estimates of population, based on Census Bureau estimates of county-level values in years outside of the decennial census, as part of the calculation). Generally, we estimate the population of each BSL by iteratively assigning the estimated population of blocks to BSLs in turn based on a fixed probability, where that fixed probability is a decreasing function of the total number of BSL units in the block. The allocation process is applied in two ways.

2. *Populated blocks with BSLs.* Where a census block has both a positive population estimate and a positive number of BSLs, each person is assigned to a BSL unit with probability $1/(\# \text{ of units in block})$. For example, if a block has a population of 20 persons (based on staff estimates or Census counts, depending on the year of the data) and six units contained within three BSLs (based on the contemporaneous version of the Fabric), each person is essentially assigned to a unit in turn by rolling a six-sided die (because there are six units).² When all persons in the block have been assigned, the population of each BSL will be an integer (between 0 and 20, inclusive, in this example), and the populations of the three BSLs will not necessarily be equal (the populations will definitely not be equal in this example). Each BSL with a person assigned to any unit within it is considered a “populated BSL” for purposes of this analysis. In this way, the population of each census block will equal the sum of the population of all of the populated BSLs in the block, but each BSL within a block will generally not have the same population. We then estimate the number of households by counting the number of units within populated BSLs.

3. *Populated blocks with no BSLs.* A small fraction of populated blocks contain no BSLs.³ In these cases, the population of the BSL-free blocks will be randomly assigned to BSLs in the next-

¹ A broadband serviceable location (BSL) is “a business or residential location in the United States at which mass-market fixed broadband Internet access service is, or can be, installed.” Residential BSLs include all residential structures, including structures that are (or contain) housing units or group quarters (as those terms are defined by the United States Census Bureau). The Fabric is a dataset of structures, not addresses. Most BSLs have an address associated with them as one of their attributes. Further, in order for a new structure to be added to the Fabric, it generally must have an address. But an address by itself does not equate to a BSL, and not all buildings or parcels with an address are BSLs. For example, an unimproved parcel or lot may have an address, but unless a habitable structure exists on that a parcel and is associated with an address, it will not be considered a BSL. Moreover, a single structure could have several addresses associated with it, but it would be reflected in the Fabric as one single BSL. FCC, *About the Fabric: What a Broadband Serviceable Location (BSL) Is and Is Not*, <https://help.bdc.fcc.gov/hc/en-us/articles/16842264428059-About-the-Fabric-What-a-Broadband-Serviceable-Location-BSL-Is-and-Is-Not> (last visited Feb. 14, 2024).

² An equivalent way to think about the process is that the population of the block is assigned to BSLs randomly using the unit count of the BSL to weight the probability the BSL is populated. If, in our example, BSL1 contains one unit, BSL2 contains two units, and BSL3 contains three units, then the chance a person is assigned to each BSL is $1/6$, $1/3$ and $1/2$, respectively. If a BSL contains more than one unit, the units within a BSL are not distinct. Thus, while the process effectively assigns people to units, particular unit assignments are not tracked.

³ Version 2 of the Fabric—released in December of 2022—contained 277,910 populated blocks with no BSLs, which, since our estimates are that there were 6,103,370 populated blocks, is 4.6%. While it is counterintuitive that populated blocks might contain no BSLs, it occurs here for a number of reasons not the least of which is that we are
(continued...)

highest geography in the census hierarchy, the census block group, using a two-tiered approach that favors vacant BSLs within unpopulated blocks in the parent block group. For blocks in the parent block group with BSLs but no population, each person is assigned to a BSL with probability:

$$\frac{(\# \text{ of units in unpopulated blocks with BSLs}) + (\# \text{ of total units in higher level geography})}{2 \cdot (\# \text{ of units in unpopulated blocks with BSLs}) \cdot (\# \text{ of total units in higher level geography})}$$

In blocks with population and units in the parent block group, each person is assigned to a unit with probability:

$$\frac{1}{\# \text{ of total units in higher level geography}}$$

When the parent block group also has no BSLs, we examine all the BSLs within the grandparent tract. This continues up the census geographic hierarchy until a level is reached that contains BSLs.⁴ As above, we then estimate the number of households in the geographic area by counting the number of units within populated BSLs.

4. An example of how population is allocated is shown in the following graphic. The entire area represents a single Census tract, with block groups distinguished by color, and blocks outlined in black. The upper left block has a population of 20 but does not contain any BSLs, and this block is located within a block group that has no BSLs. This opens up all BSLs within the tract to be eligible to be assigned these 20 persons with a preference given to the two blocks in the tract that have BSLs and no population. The upper right block also has population that needs to be allocated to BSLs in other blocks. Since its parent block group does have BSLs, only those BSLs within the block group are eligible to be assigned these five persons. All probabilities are provided using the formulas described above.

(Continued from previous page) _____
 joining datasets with different origins and purposes. Both datasets have imperfections. The Fabric is a relatively new dataset which is constantly improving through a robust challenge process (See <https://help.bdc.fcc.gov/hc/en-us/articles/8554187214107-Fabric-Challenge-Process> (last visited Feb. 20, 2024)). The block population counts are, for the intercensal years, staff estimates, and even decennial Census block population counts are not exact in every case (See e.g., <https://www.nytimes.com/2022/04/21/us/census-data-privacy-concerns.html> (last visited Feb. 20, 2024)).

⁴ Of the 241,571 total populated block groups, there are 465 with no BSLs. Of the 84,989 total populated census tracts, there are 101 with no BSLs. Of the 3,232 total populated counties, one contains no BSLs (Northern Islands Municipality, Commonwealth of the Northern Mariana Islands).

APPENDIX B**Supplemental Figures**

APPX. B-1: Service Availability (Millions) of Fixed Terrestrial Services at 100/20 Mbps; Mobile 5G-NR with a Minimum Speed of 35/3 Mbps; and Mobile 5G-NR with a Median Ookla Speed of 35/3 Mbps by State, District of Columbia, and U.S. Territory (December 31, 2022)

APPX. B-2: Service Availability (Millions) of Fixed Services (includes Satellite) at Different Speed Tiers in the United States

APPX. B-3: Service Availability (Millions) of Fixed Terrestrial Broadband and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps in U.S. Territories

APPX. B-4: Service Availability (Millions) of Mobile Services at Different Speed Tiers

APPX. B-5: Service Availability (Millions) of Mobile Services at Different Median Ookla Speed Tiers

APPX. B-6: Service Availability (Millions) of Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps; and Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Median Ookla Speed of 35/3 Mbps by State, District of Columbia, and U.S. Territory (December 31, 2022)

APPX. B-7: Adoption Rate for Fixed Terrestrial Services in the United States and U.S. Territories (December 31, 2022)

APPX. B-8: Service Availability (Millions) of Fixed 100/20 Mbps and Mobile Services at Different Speed Tiers Including U.S. Territories

APPX. B-9: Service Availability (Millions) of Fixed 100/20 Mbps and Mobile Services at Different Speed Tiers

APPX. B-10: Service Availability (Millions) on Tribal Lands of Mobile 5G-NR with a Minimum Speed of 35/3 Mbps

APPX. B-11: Service Availability (Millions) of Fixed 100/20 Mbps and Mobile Services at Different Median Ookla Speed Tiers

APPX. B-12: Service Availability (Millions) of Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps By State and County, including U.S. Territories (December 31, 2022)

APPX. B-13: Service Availability (Millions) of Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps By State and County Segmented by Urban and Rural Areas, Including U.S. Territories (December 31, 2022)

APPX. B-14: Service Availability (Millions) of Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps on Tribal Lands by State (December 31, 2022)

APPX. B-15: Service Availability (Millions) on Tribal Lands of Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps (In-Vehicle Mobile Services) (December 31, 2022)

APPX. B-16: Service Availability (Millions) on Tribal Lands of Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (Outdoor Stationary Services) (December 31, 2022)

APPX. B-17: Service Availability (Millions) on Tribal Lands of Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (In-Vehicle Mobile Services) (December 31, 2022)

APPX. B-18: Service Availability (Millions) on Tribal Lands of Fixed Terrestrial 100/20 Mbps and Mobile 4G LTE with a Minimum Speed of 5/1 Mbps (Outdoor Stationary Services) (December 31, 2022)

APPX. B-19: Service Availability (Millions) on Tribal Lands of Fixed Terrestrial 100/20 Mbps and Mobile 4G LTE with a Minimum Speed of 5/1 Mbps (In-Vehicle Mobile Services) (December 31, 2022)

APPX. B-20: Mobile Broadband Penetration Rate by State and U.S. Territory

APPX. B-21: Average Percentage of Households with Zero, One, Two, or at Least Three Provider Options for 25/3 Mbps Fixed Terrestrial Services by Census Block (December 31, 2022)

APPX. B-22: Average Percentage of Households with Zero, One, Two, or at Least Three Provider Options for 940/500 Mbps Fixed Terrestrial Services by Census Block Group (December 31, 2022)

APPX. B-23: Average Percentage of Population with Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (Outdoor Stationary Services) by Census Block Group (December 31, 2022)

APPX. B-24: Average Percentage of Population with Fixed Terrestrial Services at 100/20 Mbps and Mobile 4G LTE with a Minimum Speed of 5/1 Mbps (Outdoor Stationary Services) by Census Block Group (December 31, 2022)

APPX. B-25: Average Percentage of Population with Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps (In-Vehicle Mobile Services) by Census Block Group (December 31, 2022)

APPX. B-26: Average Percentage of Population with Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (In-Vehicle Mobile Services) by Census Block Group (December 31, 2022)

APPX. B-27: Average Percentage of Population with Fixed Terrestrial Services at 100/20 Mbps and Mobile 4G LTE with a Minimum Speed of 5/1 Mbps (In-Vehicle Mobile Services) by Census Block Group (December 31, 2022)

APPX. B-28: Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (Outdoor Stationary Services) (December 31, 2022)

APPX. B-29: Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile LTE with a Minimum Speed of 5/1 Mbps (Outdoor Stationary Services) (December 31, 2022)

APPX. B-30: Comparison of Demographic Data Between Areas With and Without Fixed

Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps (In-Vehicle Mobile Services) (December 31, 2022)

APPX. B-31: Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (In-Vehicle Mobile Services) (December 31, 2022)

APPX. B-32: Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile LTE with a Minimum Speed of 5/1 Mbps (In-Vehicle Mobile Services) (December 31, 2022)

APPX. B-33: Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Median Ookla Speed of 35/3 Mbps (December 31, 2022)

APPX. B-34: Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Median Ookla Speed of 7/1 Mbps (December 31, 2022)

APPX. B-35: Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile Broadband with a Median Ookla Speed of 10/3 Mbps (December 31, 2022)

APPX. B-1

Service Availability (Millions) of Fixed Terrestrial Services at 100/20 Mbps; Mobile 5G-NR with a Minimum Advertised Speed of 35/3 Mbps; and Mobile 5G-NR with a Median Ookla Speed of 35/3 Mbps by State, District of Columbia, and U.S. Territory (December 31, 2022)

| | Pop. Evaluated | Fixed 100/20 Mbps Including Fixed Wireless | | Fixed 100/20 Mbps Excluding Fixed Wireless | | Mobile 5G-NR Minimum 35/3 Mbps | | Pop. Evaluated | Mobile 5G- NR Median 35/3 Mbps | |
|---------------------------------|-------------------|--|-------|--|-------|--------------------------------------|--------|-------------------|---|-------|
| | | Pop. | % | Pop. | % | Pop. | % | | Pop. | % |
| United States | 336.881 | 312.509 | 92.8% | 304.527 | 90.4% | 306.658 | 91.0% | 304.974 | 286.314 | 93.8% |
| Rural Areas | 68.031 | 48.980 | 72.0% | 43.215 | 63.5% | 43.765 | 64.3% | 46.883 | 33.282 | 70.9% |
| Urban Areas | 268.850 | 263.529 | 98.0% | 261.312 | 97.2% | 262.893 | 97.8% | 258.090 | 253.031 | 98.0% |
| Alabama | 5.074 | 4.202 | 82.8% | 4.170 | 82.2% | 4.316 | 85.1% | 4.241 | 3.874 | 91.3% |
| Rural Areas | 2.155 | 1.399 | 64.9% | 1.375 | 63.8% | 1.461 | 67.8% | 1.477 | 1.146 | 77.6% |
| Urban Areas | 2.919 | 2.803 | 96.0% | 2.795 | 95.7% | 2.855 | 97.8% | 2.763 | 2.727 | 98.7% |
| Alaska | 0.734 | 0.577 | 78.7% | 0.527 | 71.9% | 0.464 | 63.2% | 0.588 | 0.350 | 59.6% |
| Rural Areas | 0.267 | 0.124 | 46.5% | 0.089 | 33.2% | 0.085 | 31.7% | 0.156 | 0.058 | 37.7% |
| Urban Areas | 0.466 | 0.453 | 97.1% | 0.438 | 94.0% | 0.379 | 81.3% | 0.431 | 0.291 | 67.5% |
| American Samoa | 0.045 | 0.010 | 22.1% | 0.010 | 22.1% | 0.000 | 0.0% | * | * | * |
| Rural Areas | 0.011 | 0.001 | 5.9% | 0.001 | 5.9% | 0.000 | 0.0% | * | * | * |
| Urban Areas | 0.034 | 0.009 | 27.3% | 0.009 | 27.3% | 0.000 | 0.0% | * | * | * |
| Arizona | 7.359 | 6.841 | 93.0% | 6.543 | 88.9% | 7.103 | 96.5% | 7.311 | 7.050 | 96.4% |
| Rural Areas | 0.793 | 0.437 | 55.1% | 0.267 | 33.7% | 0.573 | 72.3% | 0.763 | 0.537 | 70.3% |
| Urban Areas | 6.566 | 6.404 | 97.5% | 6.276 | 95.6% | 6.530 | 99.4% | 6.547 | 6.513 | 99.4% |
| Arkansas | 3.046 | 2.470 | 81.1% | 2.431 | 79.8% | 2.491 | 81.8% | 2.202 | 2.008 | 91.1% |
| Rural Areas | 1.359 | 0.850 | 62.5% | 0.817 | 60.1% | 0.842 | 61.9% | 0.735 | 0.556 | 75.6% |
| Urban Areas | 1.686 | 1.620 | 96.1% | 1.614 | 95.7% | 1.650 | 97.8% | 1.466 | 1.451 | 99.0% |
| California | 39.029 | 37.571 | 96.3% | 36.691 | 94.0% | 38.236 | 98.0% | 38.924 | 38.158 | 98.0% |
| Rural Areas | 2.295 | 1.513 | 65.9% | 0.950 | 41.4% | 1.823 | 79.4% | 2.214 | 1.768 | 79.8% |
| Urban Areas | 36.735 | 36.058 | 98.2% | 35.741 | 97.3% | 36.413 | 99.1% | 36.710 | 36.389 | 99.1% |
| Colorado | 5.840 | 5.501 | 94.2% | 5.299 | 90.7% | 5.463 | 93.5% | 5.475 | 5.252 | 95.9% |
| Rural Areas | 0.825 | 0.521 | 63.1% | 0.361 | 43.8% | 0.518 | 62.9% | 0.572 | 0.404 | 70.6% |
| Urban Areas | 5.015 | 4.981 | 99.3% | 4.938 | 98.4% | 4.945 | 98.6% | 4.902 | 4.848 | 98.8% |
| Connecticut | 3.626 | 3.558 | 98.1% | 3.552 | 97.9% | 3.236 | 89.2% | 3.626 | 3.236 | 89.2% |
| Rural Areas | 0.507 | 0.488 | 96.3% | 0.487 | 96.1% | 0.322 | 63.6% | 0.507 | 0.322 | 63.5% |
| Urban Areas | 3.119 | 3.070 | 98.4% | 3.065 | 98.3% | 2.914 | 93.4% | 3.119 | 2.913 | 93.4% |
| Delaware | 1.018 | 0.981 | 96.3% | 0.979 | 96.1% | 0.964 | 94.7% | 1.018 | 0.963 | 94.6% |
| Rural Areas | 0.181 | 0.150 | 82.8% | 0.148 | 81.8% | 0.144 | 79.7% | 0.181 | 0.144 | 79.6% |
| Urban Areas | 0.837 | 0.831 | 99.3% | 0.831 | 99.2% | 0.820 | 97.9% | 0.837 | 0.819 | 97.8% |
| District of Columbia | 0.672 | 0.670 | 99.7% | 0.670 | 99.7% | 0.672 | 100.0% | 0.671 | 0.671 | 99.9% |
| Urban Areas | 0.672 | 0.670 | 99.7% | 0.670 | 99.7% | 0.672 | 100.0% | 0.671 | 0.671 | 99.9% |
| Florida | 22.245 | 21.008 | 94.4% | 20.891 | 93.9% | 21.212 | 95.4% | 21.992 | 21.049 | 95.7% |
| Rural Areas | 1.910 | 1.143 | 59.8% | 1.073 | 56.2% | 1.365 | 71.5% | 1.687 | 1.229 | 72.8% |
| Urban Areas | 20.335 | 19.865 | 97.7% | 19.817 | 97.5% | 19.847 | 97.6% | 20.304 | 19.819 | 97.6% |
| Georgia | 10.913 | 9.945 | 91.1% | 9.873 | 90.5% | 9.534 | 87.4% | 9.169 | 8.525 | 92.9% |
| Rural Areas | 2.880 | 2.048 | 71.1% | 1.990 | 69.1% | 1.760 | 61.1% | 1.541 | 1.084 | 70.3% |

| | Fixed 100/20 Mbps Including Fixed Wireless | | Fixed 100/20 Mbps Excluding Fixed Wireless | | Mobile 5G-NR Minimum 35/3 Mbps | | Mobile 5G-NR Median 35/3 Mbps | | | |
|---------------|--|--------|--|--------|--------------------------------|--------|-------------------------------|----------------|--------|-------|
| | Pop. Evaluated | Pop. | % | Pop. | % | Pop. | % | Pop. Evaluated | Pop. | % |
| Urban Areas | 8.033 | 7.897 | 98.3% | 7.883 | 98.1% | 7.774 | 96.8% | 7.627 | 7.440 | 97.5% |
| Guam | 0.169 | 0.145 | 85.9% | 0.065 | 38.3% | 0.076 | 45.1% | * | * | * |
| Rural Areas | 0.020 | 0.006 | 30.9% | 0.001 | 5.6% | 0.001 | 7.1% | * | * | * |
| Urban Areas | 0.149 | 0.139 | 93.4% | 0.064 | 42.7% | 0.075 | 50.2% | * | * | * |
| Hawaii | 1.440 | 1.373 | 95.3% | 1.366 | 94.8% | 1.347 | 93.5% | 1.440 | 1.346 | 93.5% |
| Rural Areas | 0.210 | 0.178 | 84.6% | 0.178 | 84.4% | 0.148 | 70.5% | 0.210 | 0.148 | 70.5% |
| Urban Areas | 1.230 | 1.195 | 97.2% | 1.188 | 96.6% | 1.199 | 97.5% | 1.229 | 1.198 | 97.4% |
| Idaho | 1.939 | 1.716 | 88.5% | 1.557 | 80.3% | 1.691 | 87.2% | 1.521 | 1.397 | 91.8% |
| Rural Areas | 0.604 | 0.383 | 63.4% | 0.228 | 37.7% | 0.396 | 65.5% | 0.311 | 0.213 | 68.4% |
| Urban Areas | 1.335 | 1.333 | 99.8% | 1.329 | 99.6% | 1.295 | 97.0% | 1.209 | 1.184 | 97.9% |
| Illinois | 12.582 | 11.996 | 95.3% | 11.787 | 93.7% | 11.897 | 94.6% | 11.566 | 11.274 | 97.4% |
| Rural Areas | 1.669 | 1.155 | 69.2% | 0.969 | 58.0% | 1.088 | 65.2% | 0.968 | 0.738 | 76.2% |
| Urban Areas | 10.913 | 10.840 | 99.3% | 10.819 | 99.1% | 10.809 | 99.0% | 10.597 | 10.535 | 99.4% |
| Indiana | 6.833 | 6.180 | 90.4% | 5.994 | 87.7% | 6.060 | 88.7% | 5.737 | 5.353 | 93.3% |
| Rural Areas | 1.984 | 1.385 | 69.8% | 1.214 | 61.2% | 1.292 | 65.1% | 1.211 | 0.887 | 73.2% |
| Urban Areas | 4.849 | 4.795 | 98.9% | 4.780 | 98.6% | 4.768 | 98.3% | 4.526 | 4.465 | 98.6% |
| Iowa | 3.201 | 3.015 | 94.2% | 2.848 | 89.0% | 2.624 | 82.0% | 2.119 | 1.948 | 91.9% |
| Rural Areas | 1.183 | 1.008 | 85.3% | 0.845 | 71.5% | 0.688 | 58.2% | 0.414 | 0.281 | 67.7% |
| Urban Areas | 2.018 | 2.007 | 99.5% | 2.003 | 99.2% | 1.936 | 95.9% | 1.704 | 1.667 | 97.8% |
| Kansas | 2.937 | 2.697 | 91.8% | 2.564 | 87.3% | 2.600 | 88.5% | 2.041 | 1.967 | 96.3% |
| Rural Areas | 0.826 | 0.620 | 75.1% | 0.494 | 59.8% | 0.543 | 65.8% | 0.271 | 0.217 | 79.9% |
| Urban Areas | 2.112 | 2.076 | 98.3% | 2.071 | 98.1% | 2.057 | 97.4% | 1.770 | 1.750 | 98.8% |
| Kentucky | 4.512 | 3.846 | 85.2% | 3.819 | 84.6% | 3.397 | 75.3% | 2.991 | 2.721 | 90.9% |
| Rural Areas | 1.873 | 1.273 | 68.0% | 1.258 | 67.2% | 0.871 | 46.5% | 0.627 | 0.414 | 66.0% |
| Urban Areas | 2.639 | 2.573 | 97.5% | 2.561 | 97.0% | 2.525 | 95.7% | 2.364 | 2.306 | 97.5% |
| Louisiana | 4.590 | 3.827 | 83.4% | 3.780 | 82.3% | 4.008 | 87.3% | 3.936 | 3.598 | 91.4% |
| Rural Areas | 1.315 | 0.685 | 52.1% | 0.664 | 50.5% | 0.836 | 63.6% | 0.842 | 0.587 | 69.7% |
| Urban Areas | 3.275 | 3.142 | 95.9% | 3.116 | 95.1% | 3.172 | 96.9% | 3.094 | 3.011 | 97.3% |
| Maine | 1.385 | 1.222 | 88.2% | 1.209 | 87.2% | 0.896 | 64.7% | 1.229 | 0.832 | 67.6% |
| Rural Areas | 0.849 | 0.698 | 82.2% | 0.693 | 81.6% | 0.412 | 48.5% | 0.700 | 0.353 | 50.4% |
| Urban Areas | 0.536 | 0.524 | 97.7% | 0.516 | 96.2% | 0.484 | 90.3% | 0.528 | 0.478 | 90.5% |
| Maryland | 6.165 | 6.008 | 97.5% | 5.984 | 97.1% | 5.812 | 94.3% | 6.054 | 5.725 | 94.5% |
| Rural Areas | 0.911 | 0.782 | 85.8% | 0.771 | 84.7% | 0.695 | 76.3% | 0.836 | 0.643 | 76.9% |
| Urban Areas | 5.254 | 5.226 | 99.5% | 5.213 | 99.2% | 5.116 | 97.4% | 5.218 | 5.081 | 97.3% |
| Massachusetts | 6.982 | 6.892 | 98.7% | 6.881 | 98.5% | 6.431 | 92.1% | 6.967 | 6.422 | 92.1% |
| Rural Areas | 0.627 | 0.602 | 96.1% | 0.602 | 96.0% | 0.392 | 62.6% | 0.624 | 0.391 | 62.7% |
| Urban Areas | 6.355 | 6.290 | 99.0% | 6.279 | 98.8% | 6.039 | 95.0% | 6.343 | 6.031 | 95.0% |
| Michigan | 10.034 | 9.110 | 90.8% | 8.820 | 87.9% | 8.862 | 88.3% | 9.215 | 8.452 | 91.7% |
| Rural Areas | 2.712 | 1.914 | 70.6% | 1.670 | 61.6% | 1.733 | 63.9% | 2.051 | 1.450 | 70.7% |
| Urban Areas | 7.323 | 7.195 | 98.3% | 7.151 | 97.7% | 7.129 | 97.4% | 7.164 | 7.001 | 97.7% |
| Minnesota | 5.717 | 5.389 | 94.3% | 5.171 | 90.4% | 5.080 | 88.8% | 4.777 | 4.496 | 94.1% |

| | Pop. Evaluated | Fixed 100/20 Mbps Including Fixed Wireless | | Fixed 100/20 Mbps Excluding Fixed Wireless | | Mobile 5G-NR Minimum 35/3 Mbps | | Pop. Evaluated | Mobile 5G- NR Median 35/3 Mbps | |
|------------------------|-------------------|--|-------|--|-------|--------------------------------------|-------|-------------------|---|-------|
| | | Pop. | % | Pop. | % | Pop. | % | | Pop. | % |
| Rural Areas | 1.633 | 1.334 | 81.7% | 1.125 | 68.9% | 1.075 | 65.8% | 0.996 | 0.748 | 75.0% |
| Urban Areas | 4.084 | 4.054 | 99.3% | 4.046 | 99.1% | 4.005 | 98.1% | 3.780 | 3.748 | 99.1% |
| Mississippi | 2.940 | 2.321 | 78.9% | 2.308 | 78.5% | 2.066 | 70.3% | 1.530 | 1.299 | 84.9% |
| Rural Areas | 1.587 | 1.000 | 63.0% | 0.990 | 62.4% | 0.787 | 49.6% | 0.493 | 0.301 | 61.0% |
| Urban Areas | 1.354 | 1.321 | 97.6% | 1.319 | 97.4% | 1.279 | 94.5% | 1.037 | 0.998 | 96.2% |
| Missouri | 6.178 | 5.500 | 89.0% | 5.027 | 81.4% | 5.475 | 88.6% | 5.234 | 4.869 | 93.0% |
| Rural Areas | 1.918 | 1.315 | 68.6% | 0.890 | 46.4% | 1.267 | 66.1% | 1.164 | 0.843 | 72.4% |
| Urban Areas | 4.260 | 4.185 | 98.2% | 4.137 | 97.1% | 4.208 | 98.8% | 4.070 | 4.025 | 98.9% |
| Montana | 1.123 | 0.844 | 75.2% | 0.791 | 70.5% | 0.921 | 82.0% | 0.733 | 0.652 | 88.9% |
| Rural Areas | 0.527 | 0.279 | 52.9% | 0.230 | 43.6% | 0.353 | 67.0% | 0.238 | 0.180 | 75.4% |
| Urban Areas | 0.596 | 0.565 | 94.9% | 0.561 | 94.2% | 0.568 | 95.3% | 0.494 | 0.472 | 95.5% |
| N. Mariana Isl. | 0.051 | 0.016 | 31.9% | 0.000 | 0.0% | 0.000 | 0.2% | * | * | * |
| Rural Areas | 0.013 | 0.004 | 31.0% | 0.000 | 0.0% | 0.000 | 0.2% | * | * | * |
| Urban Areas | 0.038 | 0.012 | 32.2% | 0.000 | 0.0% | 0.000 | 0.3% | * | * | * |
| Nebraska | 1.968 | 1.858 | 94.4% | 1.746 | 88.7% | 1.439 | 73.1% | 1.169 | 1.149 | 98.2% |
| Rural Areas | 0.532 | 0.426 | 80.1% | 0.317 | 59.5% | 0.176 | 33.1% | 0.065 | 0.050 | 77.8% |
| Urban Areas | 1.436 | 1.432 | 99.7% | 1.429 | 99.5% | 1.263 | 87.9% | 1.104 | 1.098 | 99.5% |
| Nevada | 3.178 | 3.106 | 97.7% | 3.010 | 94.7% | 3.128 | 98.4% | 3.097 | 2.958 | 95.4% |
| Rural Areas | 0.189 | 0.141 | 74.4% | 0.086 | 45.5% | 0.147 | 78.0% | 0.141 | 0.102 | 71.9% |
| Urban Areas | 2.989 | 2.965 | 99.2% | 2.924 | 97.8% | 2.981 | 99.7% | 2.955 | 2.856 | 96.6% |
| New Hampshire | 1.395 | 1.327 | 95.1% | 1.324 | 94.9% | 0.927 | 66.5% | 1.319 | 0.889 | 67.3% |
| Rural Areas | 0.589 | 0.529 | 89.7% | 0.526 | 89.2% | 0.258 | 43.8% | 0.533 | 0.237 | 44.5% |
| Urban Areas | 0.806 | 0.798 | 99.1% | 0.798 | 99.0% | 0.669 | 83.0% | 0.785 | 0.651 | 82.8% |
| New Jersey | 9.262 | 8.936 | 96.5% | 8.883 | 95.9% | 8.976 | 96.9% | 9.261 | 8.975 | 96.9% |
| Rural Areas | 0.594 | 0.540 | 90.9% | 0.537 | 90.5% | 0.431 | 72.5% | 0.593 | 0.430 | 72.5% |
| Urban Areas | 8.668 | 8.396 | 96.9% | 8.346 | 96.3% | 8.545 | 98.6% | 8.667 | 8.545 | 98.5% |
| New Mexico | 2.113 | 1.765 | 83.5% | 1.703 | 80.6% | 1.880 | 89.0% | 1.914 | 1.522 | 79.4% |
| Rural Areas | 0.532 | 0.238 | 44.8% | 0.200 | 37.6% | 0.351 | 66.0% | 0.436 | 0.234 | 53.7% |
| Urban Areas | 1.581 | 1.527 | 96.6% | 1.503 | 95.0% | 1.529 | 96.7% | 1.478 | 1.287 | 87.0% |
| New York | 19.677 | 18.910 | 96.1% | 18.693 | 95.0% | 18.456 | 93.8% | 19.281 | 18.259 | 94.7% |
| Rural Areas | 2.563 | 2.261 | 88.2% | 2.250 | 87.8% | 1.598 | 62.3% | 2.248 | 1.471 | 65.4% |
| Urban Areas | 17.114 | 16.649 | 97.3% | 16.444 | 96.1% | 16.859 | 98.5% | 17.033 | 16.788 | 98.5% |
| North Carolina | 10.699 | 9.529 | 89.1% | 9.445 | 88.3% | 9.222 | 86.2% | 9.498 | 8.499 | 89.4% |
| Rural Areas | 3.589 | 2.653 | 73.9% | 2.614 | 72.8% | 2.359 | 65.7% | 2.632 | 1.857 | 70.5% |
| Urban Areas | 7.110 | 6.876 | 96.7% | 6.830 | 96.1% | 6.863 | 96.5% | 6.866 | 6.641 | 96.7% |
| North Dakota | 0.779 | 0.765 | 98.2% | 0.754 | 96.8% | 0.617 | 79.2% | 0.364 | 0.330 | 90.5% |
| Rural Areas | 0.302 | 0.290 | 95.9% | 0.280 | 92.5% | 0.169 | 55.8% | 0.056 | 0.029 | 52.2% |
| Urban Areas | 0.477 | 0.475 | 99.6% | 0.474 | 99.5% | 0.448 | 94.0% | 0.307 | 0.300 | 97.6% |
| Ohio | 11.756 | 10.819 | 92.0% | 10.585 | 90.0% | 10.792 | 91.8% | 11.131 | 10.416 | 93.5% |
| Rural Areas | 2.812 | 2.058 | 73.2% | 1.875 | 66.7% | 1.971 | 70.1% | 2.374 | 1.760 | 74.1% |
| Urban Areas | 8.944 | 8.761 | 97.9% | 8.710 | 97.4% | 8.821 | 98.6% | 8.756 | 8.656 | 98.8% |

| | Pop. Evaluated | Fixed 100/20 Mbps Including Fixed Wireless | | Fixed 100/20 Mbps Excluding Fixed Wireless | | Mobile 5G-NR Minimum 35/3 Mbps | | Pop. Evaluated | Mobile 5G- NR Median 35/3 Mbps | |
|-------------------------|-------------------|--|-------|--|-------|--------------------------------------|-------|-------------------|---|-------|
| | | Pop. | % | Pop. | % | Pop. | % | | Pop. | % |
| Oklahoma | 4.020 | 3.574 | 88.9% | 3.350 | 83.3% | 3.611 | 89.8% | 3.574 | 3.281 | 91.7% |
| Rural Areas | 1.432 | 1.028 | 71.8% | 0.823 | 57.5% | 1.037 | 72.4% | 1.078 | 0.809 | 75.0% |
| Urban Areas | 2.588 | 2.546 | 98.4% | 2.527 | 97.6% | 2.574 | 99.5% | 2.496 | 2.472 | 99.0% |
| Oregon | 4.240 | 3.889 | 91.7% | 3.819 | 90.1% | 3.836 | 90.5% | 4.021 | 3.686 | 91.6% |
| Rural Areas | 0.843 | 0.527 | 62.6% | 0.469 | 55.7% | 0.523 | 62.0% | 0.730 | 0.466 | 63.9% |
| Urban Areas | 3.397 | 3.362 | 99.0% | 3.350 | 98.6% | 3.314 | 97.5% | 3.291 | 3.219 | 97.8% |
| Pennsylvania | 12.972 | 12.338 | 95.1% | 12.262 | 94.5% | 11.913 | 91.8% | 12.517 | 11.639 | 92.9% |
| Rural Areas | 3.085 | 2.511 | 81.4% | 2.449 | 79.4% | 2.199 | 71.3% | 2.739 | 2.025 | 73.9% |
| Urban Areas | 9.887 | 9.827 | 99.4% | 9.813 | 99.3% | 9.714 | 98.3% | 9.778 | 9.614 | 98.3% |
| Puerto Rico | 3.222 | 3.125 | 97.0% | 2.817 | 87.4% | 3.156 | 98.0% | * | * | * |
| Rural Areas | 0.255 | 0.197 | 77.1% | 0.103 | 40.5% | 0.221 | 86.4% | * | * | * |
| Urban Areas | 2.966 | 2.929 | 98.7% | 2.713 | 91.5% | 2.936 | 99.0% | * | * | * |
| Rhode Island | 1.094 | 1.088 | 99.5% | 1.088 | 99.5% | 1.002 | 91.6% | 1.093 | 1.001 | 91.5% |
| Rural Areas | 0.101 | 0.098 | 96.7% | 0.098 | 96.6% | 0.067 | 66.7% | 0.100 | 0.067 | 66.6% |
| Urban Areas | 0.993 | 0.991 | 99.8% | 0.991 | 99.8% | 0.935 | 94.1% | 0.992 | 0.934 | 94.1% |
| South Carolina | 5.283 | 4.775 | 90.4% | 4.737 | 89.7% | 4.611 | 87.3% | 4.708 | 4.290 | 91.1% |
| Rural Areas | 1.694 | 1.289 | 76.1% | 1.269 | 74.9% | 1.130 | 66.7% | 1.244 | 0.918 | 73.7% |
| Urban Areas | 3.589 | 3.486 | 97.1% | 3.468 | 96.6% | 3.481 | 97.0% | 3.463 | 3.371 | 97.3% |
| South Dakota | 0.910 | 0.842 | 92.6% | 0.827 | 90.8% | 0.771 | 84.7% | 0.389 | 0.374 | 96.2% |
| Rural Areas | 0.393 | 0.328 | 83.4% | 0.313 | 79.7% | 0.267 | 68.0% | 0.070 | 0.057 | 81.2% |
| Urban Areas | 0.517 | 0.515 | 99.5% | 0.514 | 99.3% | 0.503 | 97.4% | 0.318 | 0.317 | 99.5% |
| Tennessee | 7.051 | 6.499 | 92.2% | 6.475 | 91.8% | 5.967 | 84.6% | 5.695 | 5.211 | 91.5% |
| Rural Areas | 2.407 | 1.911 | 79.4% | 1.897 | 78.8% | 1.446 | 60.1% | 1.364 | 0.958 | 70.3% |
| Urban Areas | 4.644 | 4.588 | 98.8% | 4.579 | 98.6% | 4.521 | 97.3% | 4.331 | 4.252 | 98.1% |
| Texas | 30.030 | 27.861 | 92.8% | 26.203 | 87.3% | 28.561 | 95.1% | 28.610 | 27.595 | 96.4% |
| Rural Areas | 5.029 | 3.646 | 72.5% | 2.431 | 48.3% | 3.745 | 74.5% | 4.026 | 3.152 | 78.2% |
| Urban Areas | 25.001 | 24.214 | 96.9% | 23.772 | 95.1% | 24.816 | 99.3% | 24.583 | 24.443 | 99.4% |
| U.S. Virgin Isl. | 0.105 | 0.105 | 99.4% | 0.104 | 98.7% | 0.095 | 89.9% | * | * | * |
| Rural Areas | 0.006 | 0.006 | 96.1% | 0.006 | 90.0% | 0.003 | 54.8% | * | * | * |
| Urban Areas | 0.099 | 0.099 | 99.6% | 0.098 | 99.3% | 0.091 | 92.1% | * | * | * |
| Utah | 3.381 | 3.284 | 97.1% | 3.179 | 94.0% | 3.329 | 98.5% | 3.237 | 3.213 | 99.2% |
| Rural Areas | 0.362 | 0.295 | 81.5% | 0.227 | 62.7% | 0.318 | 87.7% | 0.254 | 0.232 | 91.5% |
| Urban Areas | 3.018 | 2.989 | 99.0% | 2.952 | 97.8% | 3.011 | 99.8% | 2.982 | 2.981 | 99.9% |
| Vermont | 0.647 | 0.532 | 82.3% | 0.530 | 81.9% | 0.343 | 53.0% | 0.169 | 0.115 | 68.2% |
| Rural Areas | 0.419 | 0.308 | 73.5% | 0.305 | 72.9% | 0.162 | 38.7% | 0.044 | 0.017 | 38.3% |
| Urban Areas | 0.228 | 0.225 | 98.4% | 0.225 | 98.4% | 0.181 | 79.3% | 0.124 | 0.098 | 79.0% |
| Virginia | 8.684 | 8.019 | 92.3% | 7.767 | 89.4% | 7.471 | 86.0% | 7.338 | 6.622 | 90.2% |
| Rural Areas | 2.158 | 1.590 | 73.7% | 1.364 | 63.2% | 1.156 | 53.6% | 1.238 | 0.729 | 58.8% |
| Urban Areas | 6.526 | 6.429 | 98.5% | 6.403 | 98.1% | 6.315 | 96.8% | 6.099 | 5.893 | 96.6% |
| Washington | 7.786 | 7.123 | 91.5% | 7.011 | 90.0% | 7.142 | 91.7% | 7.683 | 7.070 | 92.0% |
| Rural Areas | 1.331 | 0.758 | 56.9% | 0.668 | 50.2% | 0.888 | 66.8% | 1.253 | 0.841 | 67.1% |

| | Fixed 100/20 Mbps Including Fixed Wireless | | Fixed 100/20 Mbps Excluding Fixed Wireless | | Mobile 5G-NR Minimum 35/3 Mbps | | Mobile 5G-NR Median 35/3 Mbps | | | |
|---------------|--|-------|--|-------|--------------------------------|-------|-------------------------------|----------------|-------|-------|
| | Pop. Evaluated | Pop. | % | Pop. | % | Pop. | % | Pop. Evaluated | Pop. | % |
| Urban Areas | 6.455 | 6.365 | 98.6% | 6.343 | 98.3% | 6.254 | 96.9% | 6.429 | 6.228 | 96.8% |
| West Virginia | 1.775 | 1.252 | 70.5% | 1.238 | 69.8% | 1.179 | 66.4% | 1.261 | 0.956 | 75.7% |
| Rural Areas | 0.980 | 0.516 | 52.7% | 0.505 | 51.6% | 0.443 | 45.3% | 0.556 | 0.296 | 53.2% |
| Urban Areas | 0.795 | 0.736 | 92.5% | 0.733 | 92.2% | 0.736 | 92.5% | 0.704 | 0.659 | 93.6% |
| Wisconsin | 5.893 | 5.249 | 89.1% | 4.941 | 83.9% | 4.891 | 83.0% | 5.026 | 4.507 | 89.6% |
| Rural Areas | 1.966 | 1.383 | 70.3% | 1.134 | 57.7% | 1.115 | 56.7% | 1.229 | 0.837 | 68.1% |
| Urban Areas | 3.927 | 3.866 | 98.5% | 3.807 | 97.0% | 3.777 | 96.2% | 3.797 | 3.670 | 96.6% |
| Wyoming | 0.581 | 0.510 | 87.7% | 0.430 | 73.9% | 0.409 | 70.3% | 0.288 | 0.244 | 84.7% |
| Rural Areas | 0.226 | 0.159 | 70.4% | 0.091 | 40.2% | 0.115 | 50.9% | 0.067 | 0.043 | 64.3% |
| Urban Areas | 0.356 | 0.351 | 98.6% | 0.339 | 95.3% | 0.294 | 82.6% | 0.221 | 0.201 | 90.9% |

Source: FCC BDC data; Ookla Speedtest data; Staff Block Estimates.

Note: U.S. territories do not have a sufficient number of samples, thus, we do not provide Ookla analysis in these areas. In addition, all Ookla analyses in this Report reflect the percentage of the population living in counties with a sufficient number of Ookla speed tests such that we can evaluate the actual speeds of 35/3 Mbps. Further, the population within eligible counties is overlaid with coverage data from the FCC Form 477 and the FCC BDC data such that only the population living in areas where providers claim 5G-NR coverage with a minimum expected speed of 35/3 Mbps is counted towards the covered population figure.

Note: Unless it is specified that we have used in-vehicle BDC data, outdoor stationary BDC data are used in the analysis in this report.

APPX. B-2
Service Availability (Millions) of Fixed Services (includes Satellite)
at Different Speed Tiers in the United States

| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|---------------------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | Pop. | % |
| 25/3 Mbps | | | | | | | | | | |
| United States | 327.087 | 100.0% | 328.131 | 100.0% | 329.415 | 100.0% | 331.894 | 100.0% | 333.287 | 100.0% |
| Rural Areas | 64.434 | 99.9% | 65.015 | 99.9% | 65.743 | 99.9% | 67.111 | 100.0% | 67.725 | 100.0% |
| Urban Areas | 262.653 | 100.0% | 263.116 | 100.0% | 263.672 | 100.0% | 264.783 | 100.0% | 265.562 | 100.0% |
| Tribal Areas | 3.980 | 98.5% | 3.994 | 98.6% | 4.025 | 98.6% | 4.051 | 100.0% | 4.043 | 100.0% |
| 100/20 Mbps | | | | | | | | | | |
| United States | 289.752 | 88.6% | 294.124 | 89.6% | 301.756 | 91.6% | 312.934 | 94.3% | 311.961 | 93.6% |
| Rural Areas | 37.561 | 58.2% | 40.377 | 62.0% | 44.771 | 68.0% | 52.012 | 77.5% | 50.738 | 74.9% |
| Urban Areas | 252.191 | 96.0% | 253.747 | 96.4% | 256.985 | 97.5% | 260.923 | 98.5% | 261.222 | 98.4% |
| Tribal Areas | 1.999 | 49.5% | 2.221 | 54.8% | 2.490 | 61.0% | 3.063 | 75.6% | 3.413 | 84.4% |
| 940/500 Mbps | | | | | | | | | | |
| United States | 91.352 | 27.9% | 106.014 | 32.3% | 119.083 | 36.1% | 148.069 | 44.6% | 134.617 | 40.4% |
| Rural Areas | 6.830 | 10.6% | 9.038 | 13.9% | 11.960 | 18.2% | 16.084 | 24.0% | 16.204 | 23.9% |
| Urban Areas | 84.522 | 32.2% | 96.976 | 36.9% | 107.123 | 40.6% | 131.985 | 49.8% | 118.413 | 44.6% |
| Tribal Areas | 0.453 | 11.2% | 0.587 | 14.5% | 0.820 | 20.1% | 1.096 | 27.1% | 1.117 | 27.6% |

| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-----------------------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | Pop. | % |
| Pop. Evaluated | 327.167 | 100.0% | 328.210 | 100.0% | 329.491 | 100.0% | 331.894 | 100.0% | 333.288 | 100.0% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

APPX. B-3
Service Availability (Millions) of Fixed Terrestrial Broadband and Mobile 5G-NR
with a Minimum Speed of 35/3 Mbps in U.S. Territories

| | 2020 | | 2021 | | 2022 | |
|---|-------|-------|-------|--------|-------|-------|
| | Pop. | % | Pop. | % | Pop. | % |
| Mobile 5G-NR - 35/3 Mbps | | | | | | |
| U.S. Territories | 0.011 | 0.3% | 3.359 | 92.4% | 3.328 | 92.6% |
| Rural Areas | 0.000 | 0.0% | 0.261 | 82.2% | 0.226 | 73.7% |
| Urban Areas | 0.011 | 0.3% | 3.098 | 93.4% | 3.102 | 94.4% |
| Fixed 25/3 Mbps (Including Fixed Wireless) | | | | | | |
| U.S. Territories | 3.471 | 98.4% | 3.629 | 99.8% | 3.565 | 99.2% |
| Rural Areas | 0.227 | 96.4% | 0.312 | 98.2% | 0.286 | 93.5% |
| Urban Areas | 3.243 | 98.6% | 3.317 | 100.0% | 3.279 | 99.8% |
| Fixed 25/3 Mbps (Including Fixed Wireless) and Mobile 5G-NR - 35/3 Mbps | | | | | | |
| U.S. Territories | 0.010 | 0.3% | 3.359 | 92.4% | 3.309 | 92.1% |
| Rural Areas | 0.000 | 0.0% | 0.261 | 82.2% | 0.214 | 70.0% |
| Urban Areas | 0.010 | 0.3% | 3.098 | 93.4% | 3.095 | 94.1% |
| Fixed 25/3 Mbps (Excluding Fixed Wireless) | | | | | | |
| U.S. Territories | 3.093 | 87.7% | 3.248 | 89.3% | 3.205 | 89.2% |
| Rural Areas | 0.159 | 67.5% | 0.200 | 62.8% | 0.157 | 51.4% |
| Urban Areas | 2.933 | 89.1% | 3.049 | 91.9% | 3.048 | 92.7% |
| Fixed 25/3 Mbps (Excluding Fixed Wireless) and Mobile 5G-NR - 35/3 Mbps | | | | | | |
| U.S. Territories | 0.010 | 0.3% | 2.993 | 82.3% | 2.976 | 82.8% |
| Rural Areas | 0.000 | 0.0% | 0.156 | 49.1% | 0.105 | 34.4% |
| Urban Areas | 0.010 | 0.3% | 2.836 | 85.5% | 2.871 | 87.3% |
| Fixed 100/20 Mbps (Including Fixed Wireless) | | | | | | |
| U.S. Territories | 3.255 | 92.3% | 3.589 | 98.7% | 3.402 | 94.7% |
| Rural Areas | 0.185 | 78.4% | 0.298 | 93.6% | 0.214 | 69.9% |
| Urban Areas | 3.070 | 93.3% | 3.291 | 99.2% | 3.188 | 97.0% |
| Fixed 100/20 Mbps (Including Fixed Wireless) and Mobile 5G-NR - 35/3 Mbps | | | | | | |
| U.S. Territories | 0.005 | 0.1% | 3.339 | 91.8% | 3.243 | 90.3% |
| Rural Areas | 0.000 | 0.0% | 0.259 | 81.3% | 0.180 | 58.9% |
| Urban Areas | 0.005 | 0.1% | 3.080 | 92.8% | 3.063 | 93.2% |
| Fixed 100/20 Mbps (Excluding Fixed Wireless) | | | | | | |
| U.S. Territories | 2.735 | 77.5% | 3.005 | 82.6% | 2.996 | 83.4% |
| Rural Areas | 0.074 | 31.3% | 0.164 | 51.5% | 0.111 | 36.3% |
| Urban Areas | 2.661 | 80.9% | 2.841 | 85.6% | 2.885 | 87.8% |
| Fixed 100/20 Mbps (Excluding Fixed Wireless) and Mobile 5G-NR - 35/3 Mbps | | | | | | |
| U.S. Territories | 0.005 | 0.1% | 2.901 | 79.8% | 2.914 | 81.1% |
| Rural Areas | 0.000 | 0.0% | 0.139 | 43.7% | 0.099 | 32.3% |
| Urban Areas | 0.005 | 0.1% | 2.762 | 83.2% | 2.815 | 85.6% |
| Fixed 940/500 Mbps (Including Fixed Wireless) | | | | | | |
| U.S. Territories | 0.494 | 14.0% | 1.582 | 43.5% | 1.530 | 42.6% |
| Rural Areas | 0.011 | 4.7% | 0.069 | 21.7% | 0.055 | 17.9% |
| Urban Areas | 0.483 | 14.7% | 1.512 | 45.6% | 1.475 | 44.9% |
| Fixed 940/500 Mbps (Including Fixed Wireless) and Mobile 5G-NR - 35/3 Mbps | | | | | | |
| U.S. Territories | 0.005 | 0.1% | 1.577 | 43.4% | 1.514 | 42.1% |
| Rural Areas | 0.000 | 0.0% | 0.067 | 21.1% | 0.051 | 16.8% |

| | 2020 | | 2021 | | 2022 | |
|---|-------|--------|-------|--------|-------|--------|
| | Pop. | % | Pop. | % | Pop. | % |
| Urban Areas | 0.005 | 0.1% | 1.510 | 45.5% | 1.462 | 44.5% |
| Fixed 940/500 Mbps (Excluding Fixed Wireless) | | | | | | |
| U.S. Territories | 0.494 | 14.0% | 1.582 | 43.5% | 1.529 | 42.5% |
| Rural Areas | 0.011 | 4.7% | 0.069 | 21.7% | 0.055 | 17.9% |
| Urban Areas | 0.483 | 14.7% | 1.512 | 45.6% | 1.474 | 44.8% |
| Fixed 940/500 Mbps (Excluding Fixed Wireless) and Mobile 5G-NR - 35/3 Mbps | | | | | | |
| U.S. Territories | 0.005 | 0.1% | 1.577 | 43.4% | 1.513 | 42.1% |
| Rural Areas | 0.000 | 0.0% | 0.067 | 21.1% | 0.051 | 16.7% |
| Urban Areas | 0.005 | 0.1% | 1.510 | 45.5% | 1.461 | 44.5% |
| Pop. Evaluated | 3.527 | 100.0% | 3.636 | 100.0% | 3.593 | 100.0% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

APPX. B-4

Service Availability (Millions) of Mobile Services at Different Speed Tiers

| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|---|---------|--------|---------|--------|---------|--------|---------|--------|---------|-------|
| | Pop. | % | Pop. | % | Pop. | % | Pop. | % | Pop. | % |
| 5G-NR - 35/3 Mbps (Outdoor Stationary Service) | | | | | | | | | | |
| United States | | | | | 237.475 | 72.1% | 321.790 | 97.0% | 303.330 | 91.0% |
| Rural Areas | | | | | 28.467 | 43.3% | 58.748 | 87.5% | 43.540 | 64.3% |
| Urban Areas | | | | | 209.008 | 79.3% | 263.041 | 99.3% | 259.791 | 97.8% |
| Tribal Areas | | | | | 2.308 | 56.5% | 3.603 | 88.9% | 3.145 | 77.8% |
| 5G-NR - 35/3 Mbps (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 242.722 | 72.8% |
| Rural Areas | | | | | | | | | 25.855 | 38.2% |
| Urban Areas | | | | | | | | | 216.867 | 81.7% |
| Tribal Areas | | | | | | | | | 2.559 | 63.3% |
| 5G-NR - 7/1 Mbps (Outdoor Stationary Service) | | | | | | | | | | |
| United States | | | | | 307.561 | 93.3% | 324.174 | 97.7% | 323.537 | 97.1% |
| Rural Areas | | | | | 52.012 | 79.0% | 60.155 | 89.6% | 58.901 | 87.0% |
| Urban Areas | | | | | 255.549 | 96.9% | 264.019 | 99.7% | 264.637 | 99.7% |
| Tribal Areas | | | | | 3.358 | 82.3% | 3.648 | 90.0% | 3.642 | 90.1% |
| 5G-NR - 7/1 Mbps (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 304.527 | 91.4% |
| Rural Areas | | | | | | | | | 46.279 | 68.3% |
| Urban Areas | | | | | | | | | 258.248 | 97.2% |
| Tribal Areas | | | | | | | | | 3.326 | 82.3% |
| 4G LTE - 5/1 Mbps (Outdoor Stationary Service) | | | | | | | | | | |
| United States | 326.727 | 99.9% | 327.817 | 99.9% | 329.181 | 99.9% | 330.664 | 99.6% | 331.673 | 99.5% |
| Rural Areas | 64.097 | 99.4% | 64.722 | 99.4% | 65.513 | 99.5% | 65.904 | 98.2% | 66.408 | 98.1% |
| Urban Areas | 262.630 | 100.0% | 263.095 | 100.0% | 263.668 | 100.0% | 264.760 | 100.0% | 265.265 | 99.9% |
| Tribal Areas | 3.937 | 97.5% | 3.959 | 97.7% | 4.009 | 98.2% | 3.952 | 97.5% | 3.978 | 98.4% |
| 4G LTE - 5/1 Mbps (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 323.767 | 97.1% |
| Rural Areas | | | | | | | | | 59.434 | 87.8% |
| Urban Areas | | | | | | | | | 264.333 | 99.5% |
| Tribal Areas | | | | | | | | | 3.833 | 94.8% |

| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-----------------------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | Pop. | % |
| Pop. Evaluated | 327.167 | 100.0% | 328.210 | 100.0% | 329.491 | 100.0% | 331.894 | 100.0% | 333.288 | 100.0% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

Note: For the purposes of this report, we assume that all mobile broadband deployment data collected through Form 477 was modeled using an outdoor stationary environment. The Commission did not collect in-vehicle mobile data prior to 2022.

APPX. B-5

Service Availability (Millions) of Mobile Services at Different Median Ookla Speed Tiers

| | 2020 | | 2021 | | 2022 | |
|--|---------|-------|---------|-------|---------|-------|
| | Pop. | % | Pop. | % | Pop. | % |
| 5G-NR with a Median Speed of 7/1 Mbps | | | | | | |
| United States | 256.139 | 96.8% | 290.599 | 99.2% | 300.636 | 98.6% |
| Rural Areas | 24.729 | 87.7% | 37.676 | 95.0% | 43.125 | 92.0% |
| Urban Areas | 231.410 | 97.9% | 252.923 | 99.9% | 257.512 | 99.8% |
| Pop. Evaluated | 264.520 | 80.3% | 292.861 | 88.2% | 304.974 | 91.5% |
| Mobile Broadband with a Median Speed of 10/3 Mbps | | | | | | |
| United States | 310.203 | 95.9% | 311.625 | 95.7% | 315.570 | 96.5% |
| Rural Areas | 51.541 | 84.4% | 50.935 | 82.4% | 53.328 | 85.6% |
| Urban Areas | 258.662 | 98.6% | 260.690 | 98.8% | 262.242 | 99.1% |
| Pop. Evaluated | 323.358 | 98.1% | 325.755 | 98.2% | 327.008 | 98.1% |

Source: FCC Form 477 data; FCC BDC data; Ookla Speedtest data; Staff Block Estimates.

APPX. B-6

Service Availability (Millions) of Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Minimum Advertised Speed of 35/3 Mbps; and Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Median Ookla Speed of 35/3 Mbps by State, District of Columbia, and U.S. Territory (December 31, 2022)

| | Fixed 100/20 Mbps and Mobile 5G-NR Minimum 35/3 Mbps | | | Fixed 100/20 Mbps and Mobile 5G-NR Median 35/3 Mbps | | |
|---------------------------------|--|---------|-------|---|---------|-------|
| | Pop. Evaluated | Pop. | % | Pop. Evaluated | Pop. | % |
| Including Fixed Wireless | | | | | | |
| United States | 336.881 | 291.746 | 86.6% | 304.974 | 274.424 | 90.0% |
| Rural Areas | 68.031 | 33.916 | 49.9% | 46.884 | 26.163 | 55.8% |
| Urban Areas | 268.850 | 257.830 | 95.9% | 258.090 | 248.261 | 96.2% |
| Alabama | 5.074 | 3.804 | 75.0% | 4.241 | 3.472 | 81.9% |
| Rural Areas | 2.155 | 1.060 | 49.2% | 1.478 | 0.845 | 57.2% |
| Urban Areas | 2.919 | 2.743 | 94.0% | 2.764 | 2.627 | 95.1% |
| Alaska | 0.734 | 0.433 | 59.0% | 0.588 | 0.328 | 55.8% |
| Rural Areas | 0.267 | 0.060 | 22.5% | 0.156 | 0.041 | 26.3% |
| Urban Areas | 0.466 | 0.373 | 79.9% | 0.432 | 0.287 | 66.4% |
| American Samoa | 0.045 | 0.000 | 0.0% | * | * | * |
| Rural Areas | 0.011 | 0.000 | 0.0% | * | * | * |
| Urban Areas | 0.034 | 0.000 | 0.0% | * | * | * |
| Arizona | 7.359 | 6.755 | 91.8% | 7.311 | 6.730 | 92.1% |
| Rural Areas | 0.793 | 0.380 | 48.0% | 0.763 | 0.364 | 47.7% |

| | Fixed 100/20 Mbps and Mobile 5G-NR Minimum 35/3 Mbps | | | Fixed 100/20 Mbps and Mobile 5G-NR Median 35/3 Mbps | | |
|-----------------------------|--|--------|-------|---|--------|-------|
| | Pop. Evaluated | Pop. | % | Pop. Evaluated | Pop. | % |
| Urban Areas | 6.566 | 6.375 | 97.1% | 6.548 | 6.366 | 97.2% |
| Arkansas | 3.046 | 2.156 | 70.8% | 2.202 | 1.784 | 81.0% |
| Rural Areas | 1.359 | 0.571 | 42.0% | 0.736 | 0.386 | 52.5% |
| Urban Areas | 1.686 | 1.585 | 94.0% | 1.466 | 1.398 | 95.3% |
| California | 39.029 | 37.023 | 94.9% | 38.924 | 36.967 | 95.0% |
| Rural Areas | 2.295 | 1.273 | 55.5% | 2.214 | 1.240 | 56.0% |
| Urban Areas | 36.735 | 35.750 | 97.3% | 36.710 | 35.728 | 97.3% |
| Colorado | 5.840 | 5.284 | 90.5% | 5.476 | 5.106 | 93.3% |
| Rural Areas | 0.825 | 0.373 | 45.3% | 0.573 | 0.290 | 50.6% |
| Urban Areas | 5.015 | 4.911 | 97.9% | 4.903 | 4.817 | 98.2% |
| Connecticut | 3.626 | 3.180 | 87.7% | 3.626 | 3.180 | 87.7% |
| Rural Areas | 0.507 | 0.312 | 61.5% | 0.507 | 0.312 | 61.5% |
| Urban Areas | 3.119 | 2.868 | 92.0% | 3.119 | 2.868 | 92.0% |
| Delaware | 1.018 | 0.936 | 91.9% | 1.018 | 0.936 | 91.9% |
| Rural Areas | 0.181 | 0.122 | 67.4% | 0.181 | 0.122 | 67.4% |
| Urban Areas | 0.837 | 0.814 | 97.2% | 0.837 | 0.814 | 97.2% |
| District of Columbia | 0.672 | 0.670 | 99.7% | 0.672 | 0.670 | 99.7% |
| Urban Areas | 0.672 | 0.670 | 99.7% | 0.672 | 0.670 | 99.7% |
| Florida | 22.245 | 20.284 | 91.2% | 21.993 | 20.192 | 91.8% |
| Rural Areas | 1.910 | 0.894 | 46.8% | 1.688 | 0.828 | 49.1% |
| Urban Areas | 20.335 | 19.390 | 95.4% | 20.305 | 19.364 | 95.4% |
| Georgia | 10.913 | 9.013 | 82.6% | 9.170 | 8.208 | 89.5% |
| Rural Areas | 2.880 | 1.365 | 47.4% | 1.542 | 0.884 | 57.3% |
| Urban Areas | 8.033 | 7.648 | 95.2% | 7.628 | 7.324 | 96.0% |
| Guam | 0.169 | 0.072 | 42.4% | * | * | * |
| Rural Areas | 0.020 | 0.001 | 5.4% | * | * | * |
| Urban Areas | 0.149 | 0.071 | 47.4% | * | * | * |
| Hawaii | 1.440 | 1.295 | 89.9% | 1.440 | 1.295 | 89.9% |
| Rural Areas | 0.210 | 0.130 | 62.0% | 0.210 | 0.130 | 62.0% |
| Urban Areas | 1.230 | 1.164 | 94.7% | 1.230 | 1.164 | 94.7% |
| Idaho | 1.939 | 1.584 | 81.7% | 1.521 | 1.344 | 88.4% |
| Rural Areas | 0.604 | 0.291 | 48.2% | 0.312 | 0.161 | 51.7% |
| Urban Areas | 1.335 | 1.293 | 96.9% | 1.210 | 1.183 | 97.8% |
| Illinois | 12.582 | 11.550 | 91.8% | 11.566 | 11.020 | 95.3% |
| Rural Areas | 1.669 | 0.813 | 48.7% | 0.969 | 0.551 | 56.9% |
| Urban Areas | 10.913 | 10.737 | 98.4% | 10.597 | 10.469 | 98.8% |
| Indiana | 6.833 | 5.689 | 83.3% | 5.738 | 5.110 | 89.1% |
| Rural Areas | 1.984 | 0.975 | 49.1% | 1.211 | 0.695 | 57.4% |
| Urban Areas | 4.849 | 4.714 | 97.2% | 4.526 | 4.415 | 97.5% |
| Iowa | 3.201 | 2.526 | 78.9% | 2.119 | 1.891 | 89.2% |
| Rural Areas | 1.183 | 0.601 | 50.8% | 0.415 | 0.234 | 56.4% |
| Urban Areas | 2.018 | 1.925 | 95.4% | 1.704 | 1.657 | 97.2% |
| Kansas | 2.937 | 2.460 | 83.8% | 2.042 | 1.890 | 92.6% |

| | Fixed 100/20 Mbps and Mobile 5G-NR Minimum 35/3 Mbps | | | Fixed 100/20 Mbps and Mobile 5G-NR Median 35/3 Mbps | | |
|------------------------|--|-------|-------|---|-------|-------|
| | Pop. Evaluated | Pop. | % | Pop. Evaluated | Pop. | % |
| Rural Areas | 0.826 | 0.435 | 52.7% | 0.271 | 0.168 | 61.7% |
| Urban Areas | 2.112 | 2.025 | 95.9% | 1.770 | 1.722 | 97.3% |
| Kentucky | 4.512 | 3.103 | 68.8% | 2.991 | 2.566 | 85.8% |
| Rural Areas | 1.873 | 0.638 | 34.1% | 0.627 | 0.311 | 49.6% |
| Urban Areas | 2.639 | 2.465 | 93.4% | 2.364 | 2.255 | 95.4% |
| Louisiana | 4.590 | 3.568 | 77.7% | 3.937 | 3.338 | 84.8% |
| Rural Areas | 1.315 | 0.515 | 39.2% | 0.842 | 0.411 | 48.7% |
| Urban Areas | 3.275 | 3.053 | 93.2% | 3.094 | 2.928 | 94.6% |
| Maine | 1.385 | 0.834 | 60.2% | 1.230 | 0.782 | 63.6% |
| Rural Areas | 0.849 | 0.360 | 42.4% | 0.701 | 0.314 | 44.8% |
| Urban Areas | 0.536 | 0.473 | 88.3% | 0.529 | 0.468 | 88.5% |
| Maryland | 6.165 | 5.702 | 92.5% | 6.055 | 5.628 | 92.9% |
| Rural Areas | 0.911 | 0.612 | 67.2% | 0.836 | 0.573 | 68.5% |
| Urban Areas | 5.254 | 5.090 | 96.9% | 5.218 | 5.055 | 96.9% |
| Massachusetts | 6.982 | 6.357 | 91.0% | 6.968 | 6.348 | 91.1% |
| Rural Areas | 0.627 | 0.379 | 60.5% | 0.625 | 0.379 | 60.6% |
| Urban Areas | 6.355 | 5.977 | 94.1% | 6.343 | 5.970 | 94.1% |
| Michigan | 10.034 | 8.315 | 82.9% | 9.215 | 7.990 | 86.7% |
| Rural Areas | 2.712 | 1.306 | 48.2% | 2.051 | 1.101 | 53.7% |
| Urban Areas | 7.323 | 7.010 | 95.7% | 7.164 | 6.889 | 96.2% |
| Minnesota | 5.717 | 4.883 | 85.4% | 4.777 | 4.325 | 90.5% |
| Rural Areas | 1.633 | 0.907 | 55.6% | 0.997 | 0.605 | 60.7% |
| Urban Areas | 4.084 | 3.976 | 97.4% | 3.781 | 3.720 | 98.4% |
| Mississippi | 2.940 | 1.806 | 61.4% | 1.531 | 1.223 | 79.9% |
| Rural Areas | 1.587 | 0.552 | 34.8% | 0.494 | 0.234 | 47.3% |
| Urban Areas | 1.354 | 1.254 | 92.6% | 1.037 | 0.989 | 95.4% |
| Missouri | 6.178 | 5.064 | 82.0% | 5.235 | 4.564 | 87.2% |
| Rural Areas | 1.918 | 0.928 | 48.4% | 1.164 | 0.608 | 52.2% |
| Urban Areas | 4.260 | 4.136 | 97.1% | 4.070 | 3.957 | 97.2% |
| Montana | 1.123 | 0.746 | 66.4% | 0.734 | 0.561 | 76.5% |
| Rural Areas | 0.527 | 0.207 | 39.3% | 0.239 | 0.110 | 45.9% |
| Urban Areas | 0.596 | 0.539 | 90.4% | 0.495 | 0.452 | 91.3% |
| N. Mariana Isl. | 0.051 | 0.000 | 0.2% | * | * | * |
| Rural Areas | 0.013 | 0.000 | 0.2% | * | * | * |
| Urban Areas | 0.038 | 0.000 | 0.2% | * | * | * |
| Nebraska | 1.968 | 1.408 | 71.5% | 1.170 | 1.141 | 97.6% |
| Rural Areas | 0.532 | 0.148 | 27.8% | 0.065 | 0.044 | 67.2% |
| Urban Areas | 1.436 | 1.260 | 87.7% | 1.104 | 1.097 | 99.4% |
| Nevada | 3.178 | 3.076 | 96.8% | 3.098 | 2.933 | 94.7% |
| Rural Areas | 0.189 | 0.119 | 63.1% | 0.142 | 0.090 | 63.8% |
| Urban Areas | 2.989 | 2.957 | 98.9% | 2.956 | 2.842 | 96.1% |
| New Hampshire | 1.395 | 0.903 | 64.7% | 1.320 | 0.868 | 65.8% |
| Rural Areas | 0.589 | 0.240 | 40.7% | 0.534 | 0.223 | 41.8% |

| | Fixed 100/20 Mbps and Mobile 5G-NR Minimum 35/3 Mbps | | | Fixed 100/20 Mbps and Mobile 5G-NR Median 35/3 Mbps | | |
|-----------------------|--|--------|-------|---|--------|-------|
| | Pop. Evaluated | Pop. | % | Pop. Evaluated | Pop. | % |
| Urban Areas | 0.806 | 0.663 | 82.3% | 0.786 | 0.645 | 82.1% |
| New Jersey | 9.262 | 8.676 | 93.7% | 9.262 | 8.676 | 93.7% |
| Rural Areas | 0.594 | 0.400 | 67.4% | 0.594 | 0.400 | 67.4% |
| Urban Areas | 8.668 | 8.276 | 95.5% | 8.668 | 8.276 | 95.5% |
| New Mexico | 2.113 | 1.662 | 78.6% | 1.915 | 1.398 | 73.0% |
| Rural Areas | 0.532 | 0.181 | 34.1% | 0.436 | 0.130 | 29.9% |
| Urban Areas | 1.581 | 1.481 | 93.6% | 1.478 | 1.268 | 85.8% |
| New York | 19.677 | 17.853 | 90.7% | 19.281 | 17.679 | 91.7% |
| Rural Areas | 2.563 | 1.446 | 56.4% | 2.248 | 1.336 | 59.4% |
| Urban Areas | 17.114 | 16.407 | 95.9% | 17.033 | 16.343 | 95.9% |
| North Carolina | 10.699 | 8.516 | 79.6% | 9.498 | 7.948 | 83.7% |
| Rural Areas | 3.589 | 1.879 | 52.4% | 2.632 | 1.520 | 57.7% |
| Urban Areas | 7.110 | 6.637 | 93.3% | 6.866 | 6.428 | 93.6% |
| North Dakota | 0.779 | 0.610 | 78.3% | 0.364 | 0.329 | 90.2% |
| Rural Areas | 0.302 | 0.164 | 54.1% | 0.057 | 0.029 | 51.5% |
| Urban Areas | 0.477 | 0.447 | 93.7% | 0.308 | 0.300 | 97.4% |
| Ohio | 11.756 | 10.190 | 86.7% | 11.131 | 9.887 | 88.8% |
| Rural Areas | 2.812 | 1.549 | 55.1% | 2.375 | 1.406 | 59.2% |
| Urban Areas | 8.944 | 8.641 | 96.6% | 8.757 | 8.481 | 96.9% |
| Oklahoma | 4.020 | 3.327 | 82.8% | 3.575 | 3.044 | 85.1% |
| Rural Areas | 1.432 | 0.794 | 55.4% | 1.078 | 0.613 | 56.8% |
| Urban Areas | 2.588 | 2.533 | 97.9% | 2.497 | 2.431 | 97.4% |
| Oregon | 4.240 | 3.643 | 85.9% | 4.022 | 3.518 | 87.5% |
| Rural Areas | 0.843 | 0.363 | 43.1% | 0.730 | 0.331 | 45.3% |
| Urban Areas | 3.397 | 3.280 | 96.5% | 3.292 | 3.187 | 96.8% |
| Pennsylvania | 12.972 | 11.557 | 89.1% | 12.517 | 11.317 | 90.4% |
| Rural Areas | 3.085 | 1.900 | 61.6% | 2.739 | 1.759 | 64.2% |
| Urban Areas | 9.887 | 9.657 | 97.7% | 9.778 | 9.558 | 97.7% |
| Puerto Rico | 3.222 | 3.077 | 95.5% | * | * | * |
| Rural Areas | 0.255 | 0.176 | 68.8% | * | * | * |
| Urban Areas | 2.966 | 2.901 | 97.8% | * | * | * |
| Rhode Island | 1.094 | 0.998 | 91.2% | 1.094 | 0.998 | 91.2% |
| Rural Areas | 0.101 | 0.065 | 64.7% | 0.101 | 0.065 | 64.7% |
| Urban Areas | 0.993 | 0.932 | 93.9% | 0.993 | 0.932 | 93.9% |
| South Carolina | 5.283 | 4.282 | 81.1% | 4.708 | 4.017 | 85.3% |
| Rural Areas | 1.694 | 0.901 | 53.2% | 1.245 | 0.737 | 59.2% |
| Urban Areas | 3.589 | 3.382 | 94.2% | 3.463 | 3.280 | 94.7% |
| South Dakota | 0.910 | 0.735 | 80.7% | 0.389 | 0.363 | 93.3% |
| Rural Areas | 0.393 | 0.233 | 59.4% | 0.071 | 0.048 | 67.9% |
| Urban Areas | 0.517 | 0.501 | 96.9% | 0.319 | 0.315 | 99.0% |
| Tennessee | 7.051 | 5.695 | 80.8% | 5.695 | 5.020 | 88.1% |
| Rural Areas | 2.407 | 1.228 | 51.0% | 1.364 | 0.813 | 59.6% |
| Urban Areas | 4.644 | 4.467 | 96.2% | 4.331 | 4.207 | 97.1% |

| | Fixed 100/20 Mbps and Mobile 5G-NR Minimum 35/3 Mbps | | | Fixed 100/20 Mbps and Mobile 5G-NR Median 35/3 Mbps | | |
|---------------------------------|--|---------|-------|---|---------|-------|
| | Pop. Evaluated | Pop. | % | Pop. Evaluated | Pop. | % |
| Texas | 30.030 | 26.950 | 89.7% | 28.611 | 26.140 | 91.4% |
| Rural Areas | 5.029 | 2.908 | 57.8% | 4.027 | 2.458 | 61.0% |
| Urban Areas | 25.001 | 24.042 | 96.2% | 24.584 | 23.682 | 96.3% |
| U.S. Virgin Isl. | 0.105 | 0.094 | 89.5% | * | * | * |
| Rural Areas | 0.006 | 0.003 | 52.4% | * | * | * |
| Urban Areas | 0.099 | 0.091 | 91.8% | * | * | * |
| Utah | 3.381 | 3.254 | 96.2% | 3.237 | 3.152 | 97.4% |
| Rural Areas | 0.362 | 0.272 | 75.1% | 0.254 | 0.200 | 78.9% |
| Urban Areas | 3.018 | 2.982 | 98.8% | 2.983 | 2.952 | 99.0% |
| Vermont | 0.647 | 0.311 | 48.0% | 0.169 | 0.112 | 65.9% |
| Rural Areas | 0.419 | 0.133 | 31.8% | 0.045 | 0.015 | 34.1% |
| Urban Areas | 0.228 | 0.178 | 77.8% | 0.124 | 0.096 | 77.4% |
| Virginia | 8.684 | 7.131 | 82.1% | 7.338 | 6.380 | 86.9% |
| Rural Areas | 2.158 | 0.909 | 42.1% | 1.238 | 0.575 | 46.4% |
| Urban Areas | 6.526 | 6.221 | 95.3% | 6.100 | 5.806 | 95.2% |
| Washington | 7.786 | 6.732 | 86.5% | 7.683 | 6.686 | 87.0% |
| Rural Areas | 1.331 | 0.559 | 42.0% | 1.254 | 0.537 | 42.8% |
| Urban Areas | 6.455 | 6.173 | 95.6% | 6.429 | 6.149 | 95.6% |
| West Virginia | 1.775 | 0.973 | 54.8% | 1.262 | 0.812 | 64.4% |
| Rural Areas | 0.980 | 0.288 | 29.4% | 0.557 | 0.197 | 35.3% |
| Urban Areas | 0.795 | 0.685 | 86.1% | 0.705 | 0.616 | 87.3% |
| Wisconsin | 5.893 | 4.618 | 78.4% | 5.026 | 4.316 | 85.9% |
| Rural Areas | 1.966 | 0.898 | 45.7% | 1.229 | 0.699 | 56.9% |
| Urban Areas | 3.927 | 3.719 | 94.7% | 3.797 | 3.617 | 95.2% |
| Wyoming | 0.581 | 0.385 | 66.2% | 0.289 | 0.239 | 82.8% |
| Rural Areas | 0.226 | 0.095 | 41.9% | 0.067 | 0.040 | 59.4% |
| Urban Areas | 0.356 | 0.290 | 81.6% | 0.221 | 0.199 | 89.9% |
| Excluding Fixed Wireless | | | | | | |
| United States | 336.881 | 285.699 | 84.8% | 304.974 | 269.607 | 88.4% |
| Rural Areas | 68.031 | 29.995 | 44.1% | 46.884 | 23.124 | 49.3% |
| Urban Areas | 268.850 | 255.704 | 95.1% | 258.090 | 246.483 | 95.5% |
| Alabama | 5.074 | 3.775 | 74.4% | 4.241 | 3.454 | 81.4% |
| Rural Areas | 2.155 | 1.039 | 48.2% | 1.478 | 0.835 | 56.5% |
| Urban Areas | 2.919 | 2.736 | 93.7% | 2.764 | 2.620 | 94.8% |
| Alaska | 0.734 | 0.407 | 55.4% | 0.588 | 0.314 | 53.5% |
| Rural Areas | 0.267 | 0.045 | 16.7% | 0.156 | 0.030 | 19.5% |
| Urban Areas | 0.466 | 0.362 | 77.6% | 0.432 | 0.284 | 65.7% |
| American Samoa | 0.045 | 0.000 | 0.0% | * | * | * |
| Rural Areas | 0.011 | 0.000 | 0.0% | * | * | * |
| Urban Areas | 0.034 | 0.000 | 0.0% | * | * | * |
| Arizona | 7.359 | 6.473 | 88.0% | 7.311 | 6.450 | 88.2% |
| Rural Areas | 0.793 | 0.226 | 28.5% | 0.763 | 0.211 | 27.7% |
| Urban Areas | 6.566 | 6.247 | 95.1% | 6.548 | 6.239 | 95.3% |

| | Fixed 100/20 Mbps and Mobile 5G-NR Minimum 35/3 Mbps | | | Fixed 100/20 Mbps and Mobile 5G-NR Median 35/3 Mbps | | |
|-----------------------------|--|--------|-------|---|--------|-------|
| | Pop. Evaluated | Pop. | % | Pop. Evaluated | Pop. | % |
| Arkansas | 3.046 | 2.123 | 69.7% | 2.202 | 1.763 | 80.1% |
| Rural Areas | 1.359 | 0.544 | 40.0% | 0.736 | 0.371 | 50.4% |
| Urban Areas | 1.686 | 1.579 | 93.7% | 1.466 | 1.392 | 95.0% |
| California | 39.029 | 36.240 | 92.9% | 38.924 | 36.203 | 93.0% |
| Rural Areas | 2.295 | 0.801 | 34.9% | 2.214 | 0.785 | 35.5% |
| Urban Areas | 36.735 | 35.440 | 96.5% | 36.710 | 35.417 | 96.5% |
| Colorado | 5.840 | 5.137 | 88.0% | 5.476 | 4.974 | 90.8% |
| Rural Areas | 0.825 | 0.267 | 32.4% | 0.573 | 0.197 | 34.3% |
| Urban Areas | 5.015 | 4.870 | 97.1% | 4.903 | 4.777 | 97.4% |
| Connecticut | 3.626 | 3.173 | 87.5% | 3.626 | 3.173 | 87.5% |
| Rural Areas | 0.507 | 0.311 | 61.3% | 0.507 | 0.311 | 61.3% |
| Urban Areas | 3.119 | 2.863 | 91.8% | 3.119 | 2.863 | 91.8% |
| Delaware | 1.018 | 0.934 | 91.7% | 1.018 | 0.934 | 91.7% |
| Rural Areas | 0.181 | 0.120 | 66.4% | 0.181 | 0.120 | 66.4% |
| Urban Areas | 0.837 | 0.813 | 97.1% | 0.837 | 0.813 | 97.1% |
| District of Columbia | 0.672 | 0.670 | 99.7% | 0.672 | 0.670 | 99.7% |
| Urban Areas | 0.672 | 0.670 | 99.7% | 0.672 | 0.670 | 99.7% |
| Florida | 22.245 | 20.183 | 90.7% | 21.993 | 20.096 | 91.4% |
| Rural Areas | 1.910 | 0.840 | 44.0% | 1.688 | 0.779 | 46.1% |
| Urban Areas | 20.335 | 19.343 | 95.1% | 20.305 | 19.317 | 95.1% |
| Georgia | 10.913 | 8.951 | 82.0% | 9.170 | 8.168 | 89.1% |
| Rural Areas | 2.880 | 1.317 | 45.7% | 1.542 | 0.858 | 55.7% |
| Urban Areas | 8.033 | 7.633 | 95.0% | 7.628 | 7.310 | 95.8% |
| Guam | 0.169 | 0.033 | 19.8% | * | * | * |
| Rural Areas | 0.020 | 0.000 | 0.8% | * | * | * |
| Urban Areas | 0.149 | 0.033 | 22.3% | * | * | * |
| Hawaii | 1.440 | 1.288 | 89.4% | 1.440 | 1.288 | 89.4% |
| Rural Areas | 0.210 | 0.130 | 61.8% | 0.210 | 0.130 | 61.8% |
| Urban Areas | 1.230 | 1.158 | 94.1% | 1.230 | 1.158 | 94.1% |
| Idaho | 1.939 | 1.468 | 75.7% | 1.521 | 1.277 | 84.0% |
| Rural Areas | 0.604 | 0.178 | 29.4% | 0.312 | 0.097 | 31.0% |
| Urban Areas | 1.335 | 1.290 | 96.6% | 1.210 | 1.181 | 97.6% |
| Illinois | 12.582 | 11.420 | 90.8% | 11.566 | 10.924 | 94.5% |
| Rural Areas | 1.669 | 0.704 | 42.2% | 0.969 | 0.474 | 48.9% |
| Urban Areas | 10.913 | 10.716 | 98.2% | 10.597 | 10.450 | 98.6% |
| Indiana | 6.833 | 5.563 | 81.4% | 5.738 | 4.991 | 87.0% |
| Rural Areas | 1.984 | 0.863 | 43.5% | 1.211 | 0.590 | 48.7% |
| Urban Areas | 4.849 | 4.700 | 96.9% | 4.526 | 4.401 | 97.2% |
| Iowa | 3.201 | 2.450 | 76.5% | 2.119 | 1.860 | 87.8% |
| Rural Areas | 1.183 | 0.529 | 44.7% | 0.415 | 0.206 | 49.6% |
| Urban Areas | 2.018 | 1.921 | 95.2% | 1.704 | 1.654 | 97.1% |
| Kansas | 2.937 | 2.364 | 80.5% | 2.042 | 1.835 | 89.9% |
| Rural Areas | 0.826 | 0.345 | 41.8% | 0.271 | 0.117 | 43.2% |

| | Fixed 100/20 Mbps and Mobile 5G-NR Minimum 35/3 Mbps | | | Fixed 100/20 Mbps and Mobile 5G-NR Median 35/3 Mbps | | |
|------------------------|--|-------|-------|---|-------|-------|
| | Pop. Evaluated | Pop. | % | Pop. Evaluated | Pop. | % |
| Urban Areas | 2.112 | 2.019 | 95.6% | 1.770 | 1.717 | 97.0% |
| Kentucky | 4.512 | 3.081 | 68.3% | 2.991 | 2.552 | 85.3% |
| Rural Areas | 1.873 | 0.627 | 33.5% | 0.627 | 0.304 | 48.5% |
| Urban Areas | 2.639 | 2.454 | 93.0% | 2.364 | 2.248 | 95.1% |
| Louisiana | 4.590 | 3.524 | 76.8% | 3.937 | 3.306 | 84.0% |
| Rural Areas | 1.315 | 0.497 | 37.8% | 0.842 | 0.400 | 47.4% |
| Urban Areas | 3.275 | 3.027 | 92.4% | 3.094 | 2.906 | 93.9% |
| Maine | 1.385 | 0.823 | 59.4% | 1.230 | 0.771 | 62.7% |
| Rural Areas | 0.849 | 0.357 | 42.0% | 0.701 | 0.311 | 44.4% |
| Urban Areas | 0.536 | 0.466 | 86.8% | 0.529 | 0.460 | 87.0% |
| Maryland | 6.165 | 5.679 | 92.1% | 6.055 | 5.605 | 92.6% |
| Rural Areas | 0.911 | 0.602 | 66.1% | 0.836 | 0.564 | 67.4% |
| Urban Areas | 5.254 | 5.077 | 96.6% | 5.218 | 5.042 | 96.6% |
| Massachusetts | 6.982 | 6.345 | 90.9% | 6.968 | 6.337 | 90.9% |
| Rural Areas | 0.627 | 0.379 | 60.4% | 0.625 | 0.378 | 60.5% |
| Urban Areas | 6.355 | 5.966 | 93.9% | 6.343 | 5.959 | 93.9% |
| Michigan | 10.034 | 8.125 | 81.0% | 9.215 | 7.821 | 84.9% |
| Rural Areas | 2.712 | 1.158 | 42.7% | 2.051 | 0.973 | 47.4% |
| Urban Areas | 7.323 | 6.967 | 95.1% | 7.164 | 6.848 | 95.6% |
| Minnesota | 5.717 | 4.753 | 83.1% | 4.777 | 4.240 | 88.7% |
| Rural Areas | 1.633 | 0.785 | 48.1% | 0.997 | 0.527 | 52.8% |
| Urban Areas | 4.084 | 3.968 | 97.2% | 3.781 | 3.713 | 98.2% |
| Mississippi | 2.940 | 1.794 | 61.0% | 1.531 | 1.218 | 79.5% |
| Rural Areas | 1.587 | 0.542 | 34.2% | 0.494 | 0.231 | 46.7% |
| Urban Areas | 1.354 | 1.251 | 92.5% | 1.037 | 0.987 | 95.2% |
| Missouri | 6.178 | 4.765 | 77.1% | 5.235 | 4.351 | 83.1% |
| Rural Areas | 1.918 | 0.677 | 35.3% | 1.164 | 0.437 | 37.5% |
| Urban Areas | 4.260 | 4.088 | 96.0% | 4.070 | 3.914 | 96.2% |
| Montana | 1.123 | 0.704 | 62.7% | 0.734 | 0.526 | 71.8% |
| Rural Areas | 0.527 | 0.169 | 32.1% | 0.239 | 0.079 | 33.0% |
| Urban Areas | 0.596 | 0.535 | 89.7% | 0.495 | 0.448 | 90.5% |
| N. Mariana Isl. | 0.051 | 0.000 | 0.0% | * | * | * |
| Rural Areas | 0.013 | 0.000 | 0.0% | * | * | * |
| Urban Areas | 0.038 | 0.000 | 0.0% | * | * | * |
| Nebraska | 1.968 | 1.376 | 69.9% | 1.170 | 1.126 | 96.3% |
| Rural Areas | 0.532 | 0.119 | 22.3% | 0.065 | 0.031 | 47.3% |
| Urban Areas | 1.436 | 1.257 | 87.5% | 1.104 | 1.095 | 99.2% |
| Nevada | 3.178 | 2.992 | 94.2% | 3.098 | 2.886 | 93.2% |
| Rural Areas | 0.189 | 0.076 | 40.0% | 0.142 | 0.062 | 44.0% |
| Urban Areas | 2.989 | 2.916 | 97.6% | 2.956 | 2.823 | 95.5% |
| New Hampshire | 1.395 | 0.900 | 64.5% | 1.320 | 0.866 | 65.6% |
| Rural Areas | 0.589 | 0.238 | 40.4% | 0.534 | 0.221 | 41.5% |
| Urban Areas | 0.806 | 0.662 | 82.2% | 0.786 | 0.645 | 82.0% |

| | Fixed 100/20 Mbps and Mobile 5G-NR Minimum 35/3 Mbps | | | Fixed 100/20 Mbps and Mobile 5G-NR Median 35/3 Mbps | | |
|-----------------------|--|--------|-------|---|--------|-------|
| | Pop. Evaluated | Pop. | % | Pop. Evaluated | Pop. | % |
| New Jersey | 9.262 | 8.624 | 93.1% | 9.262 | 8.624 | 93.1% |
| Rural Areas | 0.594 | 0.397 | 66.9% | 0.594 | 0.397 | 66.9% |
| Urban Areas | 8.668 | 8.226 | 94.9% | 8.668 | 8.226 | 94.9% |
| New Mexico | 2.113 | 1.610 | 76.2% | 1.915 | 1.351 | 70.6% |
| Rural Areas | 0.532 | 0.153 | 28.8% | 0.436 | 0.107 | 24.5% |
| Urban Areas | 1.581 | 1.457 | 92.1% | 1.478 | 1.244 | 84.2% |
| New York | 19.677 | 17.638 | 89.6% | 19.281 | 17.465 | 90.6% |
| Rural Areas | 2.563 | 1.436 | 56.0% | 2.248 | 1.327 | 59.0% |
| Urban Areas | 17.114 | 16.202 | 94.7% | 17.033 | 16.138 | 94.7% |
| North Carolina | 10.699 | 8.435 | 78.8% | 9.498 | 7.876 | 82.9% |
| Rural Areas | 3.589 | 1.843 | 51.4% | 2.632 | 1.492 | 56.7% |
| Urban Areas | 7.110 | 6.592 | 92.7% | 6.866 | 6.384 | 93.0% |
| North Dakota | 0.779 | 0.602 | 77.3% | 0.364 | 0.323 | 88.7% |
| Rural Areas | 0.302 | 0.157 | 51.8% | 0.057 | 0.024 | 42.8% |
| Urban Areas | 0.477 | 0.446 | 93.5% | 0.308 | 0.299 | 97.1% |
| Ohio | 11.756 | 10.052 | 85.5% | 11.131 | 9.772 | 87.8% |
| Rural Areas | 2.812 | 1.461 | 52.0% | 2.375 | 1.338 | 56.3% |
| Urban Areas | 8.944 | 8.591 | 96.0% | 8.757 | 8.434 | 96.3% |
| Oklahoma | 4.020 | 3.173 | 78.9% | 3.575 | 2.944 | 82.3% |
| Rural Areas | 1.432 | 0.659 | 46.0% | 1.078 | 0.527 | 48.9% |
| Urban Areas | 2.588 | 2.514 | 97.1% | 2.497 | 2.417 | 96.8% |
| Oregon | 4.240 | 3.590 | 84.7% | 4.022 | 3.467 | 86.2% |
| Rural Areas | 0.843 | 0.322 | 38.3% | 0.730 | 0.292 | 39.9% |
| Urban Areas | 3.397 | 3.268 | 96.2% | 3.292 | 3.175 | 96.5% |
| Pennsylvania | 12.972 | 11.500 | 88.7% | 12.517 | 11.272 | 90.0% |
| Rural Areas | 3.085 | 1.857 | 60.2% | 2.739 | 1.725 | 63.0% |
| Urban Areas | 9.887 | 9.643 | 97.5% | 9.778 | 9.546 | 97.6% |
| Puerto Rico | 3.222 | 2.786 | 86.5% | * | * | * |
| Rural Areas | 0.255 | 0.096 | 37.5% | * | * | * |
| Urban Areas | 2.966 | 2.691 | 90.7% | * | * | * |
| Rhode Island | 1.094 | 0.998 | 91.2% | 1.094 | 0.998 | 91.2% |
| Rural Areas | 0.101 | 0.065 | 64.7% | 0.101 | 0.065 | 64.7% |
| Urban Areas | 0.993 | 0.932 | 93.9% | 0.993 | 0.932 | 93.9% |
| South Carolina | 5.283 | 4.245 | 80.3% | 4.708 | 3.984 | 84.6% |
| Rural Areas | 1.694 | 0.880 | 52.0% | 1.245 | 0.721 | 57.9% |
| Urban Areas | 3.589 | 3.364 | 93.7% | 3.463 | 3.264 | 94.2% |
| South Dakota | 0.910 | 0.724 | 79.5% | 0.389 | 0.362 | 92.9% |
| Rural Areas | 0.393 | 0.223 | 56.9% | 0.071 | 0.047 | 66.1% |
| Urban Areas | 0.517 | 0.500 | 96.7% | 0.319 | 0.315 | 98.9% |
| Tennessee | 7.051 | 5.672 | 80.4% | 5.695 | 5.001 | 87.8% |
| Rural Areas | 2.407 | 1.215 | 50.5% | 1.364 | 0.803 | 58.9% |
| Urban Areas | 4.644 | 4.458 | 96.0% | 4.331 | 4.198 | 96.9% |
| Texas | 30.030 | 25.639 | 85.4% | 28.611 | 24.975 | 87.3% |

| | Fixed 100/20 Mbps and Mobile 5G-NR Minimum 35/3 Mbps | | | Fixed 100/20 Mbps and Mobile 5G-NR Median 35/3 Mbps | | |
|-------------------------|--|--------|-------|---|--------|-------|
| | Pop. Evaluated | Pop. | % | Pop. Evaluated | Pop. | % |
| Rural Areas | 5.029 | 2.033 | 40.4% | 4.027 | 1.707 | 42.4% |
| Urban Areas | 25.001 | 23.606 | 94.4% | 24.584 | 23.268 | 94.6% |
| U.S. Virgin Isl. | 0.105 | 0.094 | 88.9% | * | * | * |
| Rural Areas | 0.006 | 0.003 | 48.0% | * | * | * |
| Urban Areas | 0.099 | 0.091 | 91.5% | * | * | * |
| Utah | 3.381 | 3.153 | 93.3% | 3.237 | 3.065 | 94.7% |
| Rural Areas | 0.362 | 0.208 | 57.4% | 0.254 | 0.150 | 59.0% |
| Urban Areas | 3.018 | 2.945 | 97.6% | 2.983 | 2.915 | 97.7% |
| Vermont | 0.647 | 0.309 | 47.7% | 0.169 | 0.111 | 65.8% |
| Rural Areas | 0.419 | 0.131 | 31.4% | 0.045 | 0.015 | 33.7% |
| Urban Areas | 0.228 | 0.178 | 77.8% | 0.124 | 0.096 | 77.4% |
| Virginia | 8.684 | 7.014 | 80.8% | 7.338 | 6.305 | 85.9% |
| Rural Areas | 2.158 | 0.817 | 37.9% | 1.238 | 0.521 | 42.1% |
| Urban Areas | 6.526 | 6.197 | 95.0% | 6.100 | 5.784 | 94.8% |
| Washington | 7.786 | 6.634 | 85.2% | 7.683 | 6.593 | 85.8% |
| Rural Areas | 1.331 | 0.482 | 36.2% | 1.254 | 0.466 | 37.2% |
| Urban Areas | 6.455 | 6.152 | 95.3% | 6.429 | 6.127 | 95.3% |
| West Virginia | 1.775 | 0.964 | 54.3% | 1.262 | 0.807 | 63.9% |
| Rural Areas | 0.980 | 0.282 | 28.8% | 0.557 | 0.193 | 34.7% |
| Urban Areas | 0.795 | 0.682 | 85.8% | 0.705 | 0.613 | 87.0% |
| Wisconsin | 5.893 | 4.388 | 74.5% | 5.026 | 4.115 | 81.9% |
| Rural Areas | 1.966 | 0.726 | 36.9% | 1.229 | 0.555 | 45.2% |
| Urban Areas | 3.927 | 3.662 | 93.3% | 3.797 | 3.560 | 93.7% |
| Wyoming | 0.581 | 0.343 | 59.0% | 0.289 | 0.215 | 74.6% |
| Rural Areas | 0.226 | 0.062 | 27.3% | 0.067 | 0.022 | 33.4% |
| Urban Areas | 0.356 | 0.281 | 79.1% | 0.221 | 0.193 | 87.1% |

Source: FCC BDC data; Ookla Speedtest data; Staff Block Estimates.

Note: U.S. territories do not have a sufficient number of samples, thus, we do not provide Ookla analysis in these areas.

APPX. B-7

Adoption Rate for Fixed Terrestrial Services in the United States and U.S. Territories (December 31, 2022)

| | Including Fixed Wireless | | | Excluding Fixed Wireless | | |
|-----------------------|--------------------------|----------------|-----------------|--------------------------|----------------|-----------------|
| | 25/3 Mbps | 100/20 Mbps | 940/500 Mbps | 25/3 Mbps | 100/20 Mbps | 940/500 Mbps |
| United States | 78.2% | 41.3% | 19.6% | 79.3% | 41.8% | 19.9% |
| Alabama | 71.5% | 37.8% | 22.0% | 71.1% | 37.7% | 22.0% |
| Alaska | 65.0% | * | 8.0% | 70.2% | * | * |
| American Samoa | * | 0.0% | NA | * | 0.0% | NA |
| Arizona | 79.6% | 27.2% | 9.9% | 78.8% | 26.3% | 20.2% |
| Arkansas | 63.2% | 36.0% | 15.5% | 63.6% | 36.1% | 15.5% |
| California | 82.7% | 36.7% | 16.6% | 83.2% | 36.5% | 16.2% |
| Colorado | 83.4% | 34.6% | 18.4% | 85.0% | 35.0% | 18.1% |

| | Including Fixed Wireless | | | Excluding Fixed Wireless | | |
|----------------------|--------------------------|-------------|--------------|--------------------------|-------------|--------------|
| | 25/3 Mbps | 100/20 Mbps | 940/500 Mbps | 25/3 Mbps | 100/20 Mbps | 940/500 Mbps |
| Connecticut | 78.5% | 47.0% | 7.2% | 77.8% | 46.9% | 7.2% |
| Delaware | 73.6% | 47.7% | * | 74.3% | 47.7% | * |
| District of Columbia | 77.7% | 51.3% | * | 74.1% | 49.4% | * |
| Florida | 85.9% | 43.6% | 18.0% | 85.5% | 43.3% | 17.9% |
| Georgia | 79.7% | 46.5% | 27.0% | 79.4% | 46.7% | 27.0% |
| Guam | * | * | 0.0% | * | * | 0.0% |
| Hawaii | * | * | * | * | * | * |
| Idaho | 61.6% | 43.8% | 11.0% | 65.3% | 47.9% | 11.9% |
| Illinois | 72.8% | 37.2% | 12.5% | 71.7% | 36.2% | 11.3% |
| Indiana | 72.9% | 39.8% | 16.7% | 75.1% | 39.9% | 16.7% |
| Iowa | 66.1% | 48.0% | 10.7% | 67.0% | 50.7% | 10.7% |
| Kansas | 70.6% | 38.6% | 26.7% | 73.6% | 40.4% | 26.7% |
| Kentucky | 74.6% | 40.3% | 13.1% | 75.7% | 40.4% | 13.1% |
| Louisiana | 68.8% | 31.7% | 20.2% | 69.8% | 31.9% | 20.2% |
| Maine | 74.6% | 19.5% | 1.3% | 78.4% | 19.7% | 1.3% |
| Maryland | 87.3% | 60.2% | * | 87.0% | 60.2% | * |
| Massachusetts | 85.2% | 49.7% | 26.6% | 84.0% | 49.2% | 26.7% |
| Michigan | 76.1% | 31.2% | 11.2% | 77.9% | 31.5% | 11.2% |
| Minnesota | 76.5% | 32.1% | 8.3% | 76.1% | 32.3% | 8.3% |
| Mississippi | 62.3% | 44.5% | 27.8% | 62.4% | 44.8% | 27.8% |
| Missouri | 68.1% | 40.4% | 18.9% | 74.0% | 43.8% | 23.2% |
| Montana | 69.0% | 21.2% | 10.6% | 76.7% | 22.5% | 10.8% |
| N. Mariana Isl. | * | 0.0% | NA | * | NA | NA |
| Nebraska | 75.1% | 34.6% | 8.8% | 77.8% | 36.3% | 8.8% |
| Nevada | 80.5% | 27.0% | 15.8% | 78.6% | 26.1% | 17.2% |
| New Hampshire | 82.4% | 48.3% | 1.8% | 82.7% | 48.4% | 1.8% |
| New Jersey | 82.4% | 62.2% | * | 82.6% | 62.4% | * |
| New Mexico | 66.1% | 22.3% | 19.1% | 68.7% | 22.9% | 19.1% |
| New York | 79.8% | 49.3% | 20.2% | 80.3% | 49.6% | 20.2% |
| North Carolina | 84.9% | 42.6% | 24.3% | 86.1% | 42.8% | 24.3% |
| North Dakota | 73.4% | 67.8% | 5.1% | 73.3% | 68.1% | 5.1% |
| Ohio | 77.1% | 34.3% | 11.0% | 78.0% | 34.4% | 11.0% |
| Oklahoma | 63.6% | 33.8% | 22.4% | 66.9% | 35.9% | 22.4% |
| Oregon | 81.7% | 31.8% | 10.5% | 82.4% | 31.9% | 10.5% |
| Pennsylvania | 81.1% | 51.3% | 21.2% | 80.3% | 51.3% | 21.2% |
| Puerto Rico | 38.2% | 11.8% | 1.3% | 41.0% | 12.8% | 1.3% |
| Rhode Island | 82.7% | 43.9% | * | 81.8% | 43.8% | * |
| South Carolina | 80.4% | 44.1% | 15.8% | 79.9% | 44.1% | 15.8% |
| South Dakota | 76.1% | 60.4% | 8.1% | 76.8% | 61.3% | 8.3% |
| Tennessee | 79.3% | 46.0% | 23.9% | 78.5% | 45.7% | 23.9% |
| Texas | 78.0% | 46.7% | 25.4% | 82.5% | 49.8% | 26.5% |
| U.S. Virgin Isl. | * | * | NA | * | * | NA |
| Utah | 81.2% | 40.3% | 23.1% | 78.8% | 40.0% | 23.2% |
| Vermont | 79.3% | 43.1% | 13.6% | 84.6% | 43.3% | 13.6% |
| Virginia | 80.5% | 47.6% | 35.9% | 82.5% | 48.9% | 35.9% |

| | Including Fixed Wireless | | | Excluding Fixed Wireless | | |
|---------------|--------------------------|-------------|--------------|--------------------------|-------------|--------------|
| | 25/3 Mbps | 100/20 Mbps | 940/500 Mbps | 25/3 Mbps | 100/20 Mbps | 940/500 Mbps |
| Washington | 85.7% | 33.3% | 12.8% | 86.3% | 33.2% | 12.5% |
| West Virginia | 66.5% | 42.5% | 11.2% | 69.8% | 43.0% | 11.2% |
| Wisconsin | 72.0% | 25.8% | 8.3% | 77.0% | 27.3% | 8.3% |
| Wyoming | 72.8% | 21.3% | 7.7% | 74.5% | 23.4% | 9.6% |

Source: FCC BDC data; Staff Block Estimates.

NA: Service is not available in this area; * Data not included to maintain confidentiality.

APPX. B-8

Service Availability (Millions) of Fixed 100/20 Mbps and Mobile Services at Different Speed Tiers Including U.S. Territories

| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|--|------|---|------|---|---------|-------|---------|-------|---------|-------|
| | Pop. | % | Pop. | % | Pop. | % | Pop. | % | Pop. | % |
| Fixed 100/20 Mbps (Including Fixed Wireless) and Mobile 5G-NR - 35/3 Mbps (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 236.149 | 70.0% |
| Rural Areas | | | | | | | | | 20.594 | 30.2% |
| Urban Areas | | | | | | | | | 215.555 | 80.1% |
| Tribal Areas | | | | | | | | | 2.242 | 55.4% |
| Fixed 100/20 Mbps (Excluding Fixed Wireless) and Mobile 5G-NR - 35/3 Mbps (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 231.605 | 68.7% |
| Rural Areas | | | | | | | | | 17.958 | 26.3% |
| Urban Areas | | | | | | | | | 213.647 | 79.4% |
| Tribal Areas | | | | | | | | | 2.113 | 52.2% |
| Fixed 100/20 Mbps (Incl. Fixed Wireless) and Mobile 5G-NR - 7/1 Mbps (Outdoor Stationary Service) | | | | | | | | | | |
| United States | | | | | 288.749 | 86.7% | 310.723 | 92.6% | 306.525 | 90.9% |
| Rural Areas | | | | | 36.504 | 55.2% | 47.466 | 70.3% | 43.970 | 64.6% |
| Urban Areas | | | | | 252.245 | 94.4% | 263.256 | 98.1% | 262.555 | 97.6% |
| Tribal Areas | | | | | 2.227 | 54.5% | 2.864 | 70.7% | 2.948 | 72.9% |
| Fixed 100/20 Mbps (Excl. Fixed Wireless) and Mobile 5G-NR - 7/1 Mbps (Outdoor Stationary Service) | | | | | | | | | | |
| United States | | | | | 285.009 | 85.5% | 305.974 | 91.1% | 299.085 | 88.7% |
| Rural Areas | | | | | 34.306 | 51.9% | 44.071 | 65.3% | 38.701 | 56.8% |
| Urban Areas | | | | | 250.703 | 93.9% | 261.903 | 97.6% | 260.384 | 96.8% |
| Tribal Areas | | | | | 2.128 | 52.1% | 2.789 | 68.8% | 2.697 | 66.7% |
| Fixed 100/20 Mbps (Including Fixed Wireless) and Mobile 5G-NR - 7/1 Mbps (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 291.541 | 86.5% |
| Rural Areas | | | | | | | | | 35.314 | 51.9% |
| Urban Areas | | | | | | | | | 256.227 | 95.3% |
| Tribal Areas | | | | | | | | | 2.762 | 68.3% |
| Fixed 100/20 Mbps (Excluding Fixed Wireless) and Mobile 5G-NR - 7/1 Mbps (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 284.906 | 84.5% |
| Rural Areas | | | | | | | | | 30.800 | 45.2% |
| Urban Areas | | | | | | | | | 254.106 | 94.5% |
| Tribal Areas | | | | | | | | | 2.542 | 62.8% |

| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|--|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | Pop. | % |
| Fixed 100/20 Mbps (Including Fixed Wireless) and Mobile 4G LTE (Outdoor Stationary Service) | | | | | | | | | | |
| United States | 291.811 | 88.2% | 297.069 | 89.5% | 304.753 | 91.5% | 315.365 | 93.9% | 311.636 | 92.5% |
| Rural Areas | 37.515 | 57.9% | 40.407 | 61.8% | 44.780 | 67.8% | 51.240 | 75.9% | 48.398 | 71.1% |
| Urban Areas | 254.295 | 95.6% | 256.662 | 96.3% | 259.973 | 97.3% | 264.125 | 98.5% | 263.237 | 97.9% |
| Tribal Areas | 1.995 | 49.4% | 2.218 | 54.7% | 2.484 | 60.8% | 2.988 | 73.7% | 3.076 | 76.0% |
| Fixed 100/20 Mbps (Excluding Fixed Wireless) and Mobile 4G LTE (Outdoor Stationary Service) | | | | | | | | | | |
| United States | 287.884 | 87.0% | 294.107 | 88.6% | 300.434 | 90.2% | 310.161 | 92.4% | 303.696 | 90.1% |
| Rural Areas | 36.228 | 55.9% | 38.752 | 59.3% | 42.088 | 63.7% | 47.533 | 70.4% | 42.673 | 62.7% |
| Urban Areas | 251.657 | 94.6% | 255.354 | 95.8% | 258.347 | 96.7% | 262.628 | 97.9% | 261.022 | 97.0% |
| Tribal Areas | 1.946 | 48.1% | 2.130 | 52.5% | 2.353 | 57.6% | 2.896 | 71.4% | 2.800 | 69.2% |
| Fixed 100/20 Mbps (Including Fixed Wireless) and Mobile 4G LTE (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 306.639 | 91.0% |
| Rural Areas | | | | | | | | | 44.317 | 65.1% |
| Urban Areas | | | | | | | | | 262.321 | 97.5% |
| Tribal Areas | | | | | | | | | 3.005 | 74.3% |
| Fixed 100/20 Mbps (Excluding Fixed Wireless) and Mobile 4G LTE (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 299.058 | 88.7% |
| Rural Areas | | | | | | | | | 38.948 | 57.2% |
| Urban Areas | | | | | | | | | 260.111 | 96.7% |
| Tribal Areas | | | | | | | | | 2.741 | 67.8% |
| Pop. Evaluated | 330.740 | 100.0% | 331.777 | 100.0% | 333.018 | 100.0% | 335.530 | 100.0% | 336.881 | 100.0% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

Note: For the purposes of this report, we assume that all mobile broadband deployment data collected through Form 477 was modeled using an outdoor stationary environment. The Commission did not collect in-vehicle mobile data prior to 2022.

APPX. B-9

Service Availability (Millions) of Fixed 100/20 Mbps and Mobile Services at Different Speed Tiers

| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|--|------|---|------|---|---------|-------|---------|-------|---------|-------|
| | Pop. | % | Pop. | % | Pop. | % | Pop. | % | Pop. | % |
| Fixed 100/20 Mbps (Including Fixed Wireless) and Mobile 5G-NR - 35/3 Mbps (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 233.126 | 69.9% |
| Rural Areas | | | | | | | | | 20.448 | 30.1% |
| Urban Areas | | | | | | | | | 212.677 | 80.0% |
| Tribal Areas | | | | | | | | | 2.242 | 55.4% |
| Fixed 100/20 Mbps (Excluding Fixed Wireless) and Mobile 5G-NR - 35/3 Mbps (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 228.868 | 68.6% |
| Rural Areas | | | | | | | | | 17.876 | 26.3% |
| Urban Areas | | | | | | | | | 210.992 | 79.4% |
| Tribal Areas | | | | | | | | | 2.113 | 52.2% |
| Fixed 100/20 Mbps (Incl. Fixed Wireless) and Mobile 5G-NR - 7/1 Mbps (Outdoor Stationary Service) | | | | | | | | | | |
| United States | | | | | 285.644 | 86.6% | 307.384 | 92.6% | 303.242 | 90.9% |
| Rural Areas | | | | | 36.353 | 55.2% | 47.208 | 70.3% | 43.783 | 64.6% |
| Urban Areas | | | | | 249.291 | 94.5% | 260.176 | 98.2% | 259.459 | 97.7% |

| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|---|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | Pop. | % |
| Tribal Areas | | | | | 2.227 | 54.5% | 2.864 | 70.7% | 2.948 | 72.9% |
| Fixed 100/20 Mbps (Excl. Fixed Wireless) and Mobile 5G-NR - 7/1 Mbps (Outdoor Stationary Service) | | | | | | | | | | |
| United States | | | | | 282.393 | 85.7% | 303.073 | 91.3% | 296.148 | 88.8% |
| Rural Areas | | | | | 34.249 | 52.0% | 43.932 | 65.4% | 38.599 | 56.9% |
| Urban Areas | | | | | 248.144 | 94.1% | 259.141 | 97.8% | 257.549 | 96.9% |
| Tribal Areas | | | | | 2.128 | 52.1% | 2.789 | 68.8% | 2.697 | 66.7% |
| Fixed 100/20 Mbps (Including Fixed Wireless) and Mobile 5G-NR - 7/1 Mbps (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 288.431 | 86.5% |
| Rural Areas | | | | | | | | | 35.160 | 51.9% |
| Urban Areas | | | | | | | | | 253.271 | 95.3% |
| Tribal Areas | | | | | | | | | 2.762 | 68.3% |
| Fixed 100/20 Mbps (Excluding Fixed Wireless) and Mobile 5G-NR - 7/1 Mbps (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 282.098 | 84.6% |
| Rural Areas | | | | | | | | | 30.713 | 45.3% |
| Urban Areas | | | | | | | | | 251.385 | 94.6% |
| Tribal Areas | | | | | | | | | 2.542 | 62.8% |
| Fixed 100/20 Mbps (Including Fixed Wireless) and Mobile 4G LTE (Outdoor Stationary Service) | | | | | | | | | | |
| United States | 289.620 | 88.5% | 294.013 | 89.5% | 301.583 | 91.5% | 311.839 | 93.9% | 308.240 | 92.4% |
| Rural Areas | 37.451 | 58.0% | 40.287 | 61.9% | 44.614 | 67.7% | 50.965 | 75.9% | 48.186 | 71.1% |
| Urban Areas | 252.169 | 96.0% | 253.726 | 96.4% | 256.970 | 97.4% | 260.874 | 98.5% | 260.054 | 97.9% |
| Tribal Areas | 1.995 | 49.4% | 2.218 | 54.7% | 2.484 | 60.8% | 2.988 | 73.7% | 3.076 | 76.0% |
| Fixed 100/20 Mbps (Excluding Fixed Wireless) and Mobile 4G LTE (Outdoor Stationary Service) | | | | | | | | | | |
| United States | 287.658 | 87.9% | 291.237 | 88.7% | 297.771 | 90.3% | 307.209 | 92.5% | 300.705 | 90.2% |
| Rural Areas | 36.221 | 56.1% | 38.663 | 59.4% | 42.026 | 63.8% | 47.384 | 70.6% | 42.563 | 62.8% |
| Urban Areas | 251.437 | 95.7% | 252.574 | 95.9% | 255.744 | 96.9% | 259.825 | 98.1% | 258.142 | 97.2% |
| Tribal Areas | 1.946 | 48.1% | 2.130 | 52.5% | 2.353 | 57.6% | 2.896 | 71.4% | 2.800 | 69.2% |
| Fixed 100/20 Mbps (Including Fixed Wireless) and Mobile 4G LTE (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 303.263 | 90.9% |
| Rural Areas | | | | | | | | | 44.114 | 65.1% |
| Urban Areas | | | | | | | | | 259.149 | 97.5% |
| Tribal Areas | | | | | | | | | 3.005 | 74.3% |
| Fixed 100/20 Mbps (Excluding Fixed Wireless) and Mobile 4G LTE (In-Vehicle Mobile Service) | | | | | | | | | | |
| United States | | | | | | | | | 296.080 | 88.8% |
| Rural Areas | | | | | | | | | 38.840 | 57.3% |
| Urban Areas | | | | | | | | | 257.239 | 96.8% |
| Tribal Areas | | | | | | | | | 2.741 | 67.8% |
| Pop. Evaluated | 327.167 | 100.0% | 328.210 | 100.0% | 329.491 | 100.0% | 331.894 | 100.0% | 333.288 | 100.0% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

Note: For the purposes of this report, we assume that all mobile broadband deployment data collected through Form 477 was modeled using an outdoor stationary environment. The Commission did not collect in-vehicle mobile data prior to 2022.

APPX. B-10
Service Availability (Millions) on Tribal Lands of Mobile 5G-NR
with a Minimum Speed of 35/3 Mbps

| Area | 2020 | | 2021 | | 2022 | |
|--|-------|--------|-------|--------|-------|--------|
| | Pop. | % | Pop. | % | Pop. | % |
| Tribal Lands | 2.308 | 56.5% | 3.603 | 88.9% | 3.145 | 77.8% |
| Rural Areas | 0.928 | 43.2% | 1.832 | 81.7% | 1.371 | 61.8% |
| Urban Areas | 1.380 | 71.3% | 1.771 | 97.9% | 1.774 | 97.3% |
| Alaska Native Village Statistical Areas | 0.110 | 40.9% | 0.147 | 54.0% | 0.118 | 43.6% |
| Rural Areas | 0.050 | 29.0% | 0.075 | 42.1% | 0.050 | 28.2% |
| Urban Areas | 0.060 | 62.7% | 0.072 | 76.8% | 0.068 | 72.4% |
| Federal Reservations | 0.407 | 37.1% | 0.850 | 78.1% | 0.689 | 65.1% |
| Rural Areas | 0.219 | 28.6% | 0.583 | 71.8% | 0.419 | 53.8% |
| Urban Areas | 0.188 | 56.5% | 0.267 | 96.6% | 0.269 | 97.2% |
| Hawaiian Home Lands | 0.010 | 29.3% | 0.031 | 89.0% | 0.032 | 94.0% |
| Rural Areas | 0.001 | 22.0% | 0.006 | 74.8% | 0.006 | 78.0% |
| Urban Areas | 0.009 | 30.9% | 0.024 | 93.6% | 0.026 | 99.1% |
| Tribal Statistical Areas | 1.781 | 66.4% | 2.576 | 96.9% | 2.307 | 86.0% |
| Rural Areas | 0.657 | 54.7% | 1.168 | 93.8% | 0.896 | 71.4% |
| Urban Areas | 1.124 | 76.0% | 1.408 | 99.7% | 1.411 | 98.9% |
| Pop. Evaluated | 4.083 | 100.0% | 4.051 | 100.0% | 4.043 | 100.0% |

Source: FCC Form 477 data; FCC BDC data; Staff Block Estimates.

APPX. B-11
Service Availability (Millions) of Fixed 100/20 Mbps
and Mobile Services at Different Median Ookla Speed Tiers

| | 2020 | | 2021 | | 2022 | |
|---|---------|-------|---------|-------|---------|-------|
| | Pop. | % | Pop. | % | Pop. | % |
| Fixed 100/20 Mbps (Including Fixed Wireless) and Mobile 5G-NR with a Median Speed of 7/1 Mbps | | | | | | |
| United States | 246.221 | 93.1% | 280.513 | 95.8% | 285.381 | 93.6% |
| Rural Areas | 18.915 | 67.0% | 30.975 | 78.1% | 32.802 | 70.0% |
| Urban Areas | 227.306 | 96.2% | 249.538 | 98.6% | 252.579 | 97.9% |
| Fixed 100/20 Mbps (Excluding Fixed Wireless) and Mobile 5G-NR with a Median Speed of 7/1 Mbps | | | | | | |
| United States | 244.317 | 92.4% | 277.438 | 94.7% | 279.616 | 91.7% |
| Rural Areas | 17.893 | 63.4% | 28.855 | 72.7% | 28.871 | 61.6% |
| Urban Areas | 226.425 | 95.8% | 248.583 | 98.2% | 250.744 | 97.2% |
| Pop. Evaluated | 264.520 | 80.3% | 292.861 | 88.2% | 304.974 | 91.5% |
| Fixed 100/20 Mbps (Incl. Fixed Wireless) and Mobile Broadband with a Median Speed of 10/3 Mbps | | | | | | |
| United States | 289.341 | 89.5% | 298.023 | 91.5% | 297.051 | 90.8% |
| Rural Areas | 36.667 | 60.1% | 40.910 | 66.2% | 39.876 | 64.0% |
| Urban Areas | 252.673 | 96.3% | 257.112 | 97.4% | 257.176 | 97.2% |
| Fixed 100/20 Mbps (Excl. Fixed Wireless) and Mobile Broadband with a Median Speed of 10/3 Mbps | | | | | | |
| United States | 286.149 | 88.5% | 294.186 | 90.3% | 290.501 | 88.8% |
| Rural Areas | 34.622 | 56.7% | 38.056 | 61.5% | 35.191 | 56.5% |
| Urban Areas | 251.527 | 95.9% | 256.130 | 97.1% | 255.310 | 96.5% |

| | 2020 | | 2021 | | 2022 | |
|-----------------------|---------|-------|---------|-------|---------|-------|
| | Pop. | % | Pop. | % | Pop. | % |
| Pop. Evaluated | 323,358 | 98.1% | 325,755 | 98.2% | 327,008 | 98.1% |

Source: FCC Form 477 data; FCC BDC data; Ookla Speedtest data; Staff Block Estimates.

APPX. B-12

Service Availability (Millions) of Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps By State and County, including U.S. Territories (December 31, 2022)

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Alabama | 5,074,296 | 82.8% | 85.1% | 75.0% | 100.2 | \$33,344 |
| Autauga County | 59,759 | 94.9% | 90.9% | 86.8% | 100.5 | \$35,332 |
| Baldwin County | 246,435 | 72.1% | 91.4% | 68.0% | 155.0 | \$38,907 |
| Barbour County | 24,706 | 61.3% | 57.3% | 42.6% | 27.9 | \$23,378 |
| Bibb County | 22,005 | 14.9% | 49.9% | 11.4% | 35.4 | \$24,966 |
| Blount County | 59,512 | 34.7% | 69.0% | 27.2% | 92.3 | \$29,053 |
| Bullock County | 10,202 | 85.0% | 5.2% | 3.4% | 16.4 | \$22,115 |
| Butler County | 18,650 | 62.8% | 55.8% | 42.7% | 24.0 | \$26,334 |
| Calhoun County | 115,788 | 92.1% | 95.2% | 89.8% | 191.1 | \$28,227 |
| Chambers County | 34,088 | 81.5% | 76.6% | 70.9% | 57.1 | \$27,006 |
| Cherokee County | 25,302 | 31.8% | 49.4% | 26.2% | 45.7 | \$28,422 |
| Chilton County | 45,884 | 48.2% | 47.3% | 16.7% | 66.2 | \$28,497 |
| Choctaw County | 12,439 | 21.6% | 32.0% | 7.6% | 13.6 | \$26,343 |
| Clarke County | 22,515 | 41.0% | 55.3% | 34.3% | 18.2 | \$29,310 |
| Clay County | 14,198 | 30.1% | 39.1% | 20.8% | 23.5 | \$27,991 |
| Cleburne County | 15,346 | 13.7% | 33.0% | 4.7% | 27.4 | \$28,598 |
| Coffee County | 54,805 | 81.7% | 52.8% | 45.5% | 80.7 | \$31,227 |
| Colbert County | 58,033 | 78.9% | 82.9% | 71.2% | 97.9 | \$30,724 |
| Conecuh County | 11,206 | 34.0% | 44.5% | 25.6% | 13.2 | \$24,426 |
| Coosa County | 10,166 | 73.8% | 41.1% | 35.9% | 15.6 | \$28,998 |
| Covington County | 37,602 | 90.1% | 61.7% | 59.9% | 36.5 | \$28,528 |
| Crenshaw County | 13,025 | 53.7% | 51.8% | 32.0% | 21.4 | \$32,396 |
| Cullman County | 90,665 | 75.1% | 67.2% | 53.6% | 123.4 | \$29,788 |
| Dale County | 49,544 | 66.1% | 63.5% | 46.4% | 88.3 | \$28,312 |
| Dallas County | 36,767 | 72.3% | 51.8% | 43.9% | 37.6 | \$22,798 |
| DeKalb County | 71,998 | 84.9% | 63.9% | 56.0% | 92.7 | \$24,915 |
| Elmore County | 89,563 | 86.6% | 86.7% | 75.6% | 144.8 | \$34,152 |
| Escambia County | 36,666 | 57.3% | 65.2% | 46.9% | 38.8 | \$21,758 |
| Etowah County | 103,088 | 88.6% | 86.5% | 80.5% | 192.6 | \$28,479 |
| Fayette County | 16,118 | 50.1% | 46.0% | 27.8% | 25.7 | \$27,053 |
| Franklin County | 31,932 | 57.9% | 71.0% | 50.5% | 50.4 | \$24,874 |
| Geneva County | 26,783 | 58.9% | 53.6% | 40.2% | 46.6 | \$25,644 |
| Greene County | 7,422 | 21.1% | 57.5% | 21.1% | 11.5 | \$20,862 |
| Hale County | 14,595 | 47.0% | 54.7% | 36.7% | 22.7 | \$23,690 |
| Henry County | 17,655 | 47.5% | 55.0% | 40.7% | 31.4 | \$30,273 |
| Houston County | 108,079 | 86.3% | 85.2% | 78.6% | 186.4 | \$32,126 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Jackson County | 52,891 | 91.3% | 48.1% | 44.4% | 49.1 | \$27,695 |
| Jefferson County | 665,409 | 94.7% | 98.1% | 93.3% | 598.6 | \$38,224 |
| Lamar County | 13,705 | 96.5% | 44.5% | 42.8% | 22.7 | \$24,794 |
| Lauderdale County | 95,878 | 81.5% | 89.2% | 76.3% | 143.5 | \$32,678 |
| Lawrence County | 33,214 | 92.3% | 63.5% | 58.5% | 48.1 | \$29,486 |
| Lee County | 180,773 | 94.3% | 88.9% | 85.1% | 297.5 | \$33,083 |
| Limestone County | 110,900 | 86.8% | 97.5% | 86.0% | 198.0 | \$37,504 |
| Lowndes County | 9,777 | 26.7% | 19.6% | 8.6% | 13.7 | \$23,415 |
| Macon County | 18,516 | 64.3% | 52.1% | 42.6% | 30.4 | \$22,449 |
| Madison County | 403,565 | 98.3% | 98.5% | 97.0% | 503.4 | \$44,720 |
| Marengo County | 18,745 | 70.1% | 65.2% | 52.5% | 19.2 | \$27,210 |
| Marion County | 29,156 | 99.7% | 65.4% | 65.2% | 39.3 | \$25,205 |
| Marshall County | 99,423 | 92.9% | 91.4% | 86.3% | 175.7 | \$29,509 |
| Mobile County | 411,411 | 90.1% | 95.1% | 87.2% | 334.7 | \$30,482 |
| Monroe County | 19,404 | 53.1% | 44.2% | 31.0% | 18.9 | \$23,090 |
| Montgomery County | 226,361 | 92.0% | 96.9% | 89.8% | 288.2 | \$32,769 |
| Morgan County | 124,211 | 85.3% | 84.8% | 76.0% | 214.3 | \$33,223 |
| Perry County | 8,035 | 21.4% | 35.8% | 20.2% | 11.2 | \$16,581 |
| Pickens County | 18,697 | 48.7% | 59.5% | 40.8% | 21.2 | \$26,912 |
| Pike County | 33,014 | 56.6% | 70.1% | 41.7% | 49.1 | \$26,685 |
| Randolph County | 22,479 | 33.9% | 47.1% | 25.3% | 38.7 | \$27,558 |
| Russell County | 58,555 | 85.5% | 94.8% | 83.9% | 91.3 | \$25,855 |
| Shelby County | 230,115 | 87.9% | 97.7% | 86.8% | 293.0 | \$45,701 |
| St. Clair County | 93,932 | 85.7% | 93.4% | 82.0% | 148.7 | \$33,571 |
| Sumter County | 11,853 | 43.2% | 62.2% | 39.2% | 13.1 | \$19,720 |
| Talladega County | 80,704 | 79.5% | 94.6% | 76.4% | 109.5 | \$29,236 |
| Tallapoosa County | 40,977 | 82.9% | 50.6% | 45.6% | 57.2 | \$29,682 |
| Tuscaloosa County | 236,780 | 89.4% | 95.6% | 87.7% | 179.3 | \$32,141 |
| Walker County | 64,339 | 64.2% | 90.5% | 61.5% | 81.3 | \$28,204 |
| Washington County | 15,122 | 19.6% | 28.2% | 11.4% | 14.0 | \$29,210 |
| Wilcox County | 10,059 | 34.7% | 18.6% | 9.2% | 11.3 | \$20,442 |
| Winston County | 23,755 | 45.9% | 51.2% | 30.5% | 38.8 | \$26,933 |
| Alaska | 733,599 | 78.7% | 63.2% | 59.0% | 1.3 | \$42,828 |
| Aleutians East Borough | 3,398 | 0.0% | 0.0% | 0.0% | 0.5 | \$42,165 |
| Aleutians West Census Area | 5,122 | 3.5% | 0.0% | 0.0% | 1.2 | \$47,339 |
| Anchorage Municipality | 287,145 | 97.0% | 84.3% | 83.3% | 168.2 | \$46,554 |
| Bethel Census Area | 18,257 | 0.0% | 0.0% | 0.0% | 0.4 | \$25,859 |
| Bristol Bay Borough | 865 | 0.0% | 0.0% | 0.0% | 1.8 | \$45,499 |
| Chugach Census Area | 6,874 | 49.2% | 42.1% | 38.4% | 0.7 | \$44,700 |
| Copper River Census Area | 2,589 | 69.3% | 0.0% | 0.0% | 0.1 | \$37,887 |
| Denali Borough | 1,585 | 2.6% | 13.9% | 0.2% | 0.1 | \$73,692 |
| Dillingham Census Area | 4,723 | 0.0% | 0.0% | 0.0% | 0.3 | \$31,948 |
| Fairbanks North Star Borough | 95,356 | 89.0% | 69.5% | 64.4% | 13.0 | \$42,744 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Haines Borough | 2,056 | 39.0% | 0.3% | 0.1% | 0.9 | \$33,585 |
| Hoonah-Angoon Census Area | 2,287 | 39.0% | 18.1% | 17.6% | 0.3 | \$39,257 |
| Juneau City and Borough | 31,685 | 98.1% | 76.3% | 75.9% | 11.7 | \$49,207 |
| Kenai Peninsula Borough | 60,690 | 80.0% | 51.2% | 45.0% | 3.8 | \$40,720 |
| Ketchikan Gateway Borough | 13,741 | 98.4% | 57.0% | 56.5% | 2.8 | \$44,368 |
| Kodiak Island Borough | 12,720 | 82.6% | 63.5% | 59.2% | 1.9 | \$39,563 |
| Kusilvak Census Area | 8,278 | 0.0% | 0.0% | 0.0% | 0.5 | \$17,166 |
| Lake and Peninsula Borough | 1,381 | 0.0% | 0.0% | 0.0% | 0.1 | \$39,409 |
| Matanuska-Susitna Borough | 113,325 | 67.3% | 68.6% | 54.5% | 4.6 | \$39,201 |
| Nome Census Area | 9,835 | 40.0% | 0.0% | 0.0% | 0.4 | \$28,678 |
| North Slope Borough | 10,805 | 52.8% | 0.0% | 0.0% | 0.1 | \$61,841 |
| Northwest Arctic Borough | 7,423 | 39.6% | 0.0% | 0.0% | 0.2 | \$32,133 |
| Petersburg Borough | 3,360 | 93.0% | 0.0% | 0.0% | 1.2 | \$37,856 |
| Prince of Wales-Hyder Census Area | 5,666 | 3.9% | 0.2% | 0.0% | 0.9 | \$34,433 |
| Sitka City and Borough | 8,382 | 97.0% | 0.0% | 0.0% | 2.9 | \$43,964 |
| Skagway Municipality | 1,081 | 55.7% | 84.6% | 54.6% | 2.5 | \$46,771 |
| Southeast Fairbanks Census Area | 7,021 | 5.4% | 21.7% | 4.3% | 0.3 | \$33,809 |
| Wrangell City and Borough | 2,070 | 85.7% | 0.0% | 0.0% | 0.8 | \$35,421 |
| Yakutat City and Borough | 700 | 0.0% | 0.0% | 0.0% | 0.1 | \$45,578 |
| Yukon-Koyukuk Census Area | 5,179 | 0.1% | 8.9% | 0.0% | 0.0 | \$29,382 |
| American Samoa | 45,443 | 22.1% | 0.0% | 0.0% | 595.2 | NA |
| Eastern District | 15,034 | 28.7% | 0.0% | 0.0% | 597.9 | NA |
| Manu'a District | 777 | 0.0% | 0.0% | 0.0% | 34.9 | NA |
| Western District | 29,632 | 19.3% | 0.0% | 0.0% | 1,058.6 | NA |
| Arizona | 7,359,197 | 93.0% | 96.5% | 91.8% | 64.8 | \$38,334 |
| Apache County | 65,432 | 2.5% | 17.5% | 0.9% | 5.8 | \$18,930 |
| Cochise County | 125,663 | 42.0% | 88.5% | 37.4% | 20.2 | \$31,423 |
| Coconino County | 144,060 | 70.0% | 87.4% | 68.6% | 7.7 | \$32,592 |
| Gila County | 53,922 | 54.4% | 91.0% | 53.2% | 11.3 | \$29,945 |
| Graham County | 38,779 | 85.0% | 54.6% | 47.8% | 8.4 | \$24,052 |
| Greenlee County | 9,302 | 68.6% | 85.0% | 57.8% | 5.0 | \$29,394 |
| La Paz County | 16,506 | 1.0% | 72.0% | 1.0% | 3.7 | \$30,399 |
| Maricopa County | 4,551,524 | 98.8% | 99.8% | 98.6% | 494.6 | \$41,533 |
| Mohave County | 220,816 | 79.1% | 95.5% | 79.1% | 16.6 | \$32,835 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Navajo County | 108,650 | 50.8% | 47.7% | 40.5% | 10.9 | \$22,826 |
| Pima County | 1,057,597 | 99.2% | 98.9% | 98.4% | 115.1 | \$36,494 |
| Pinal County | 464,154 | 91.7% | 96.7% | 89.8% | 86.5 | \$33,158 |
| Santa Cruz County | 48,759 | 95.3% | 78.6% | 76.5% | 39.4 | \$25,619 |
| Yavapai County | 246,191 | 71.1% | 90.1% | 65.9% | 30.3 | \$37,666 |
| Yuma County | 207,842 | 93.1% | 99.5% | 93.0% | 37.7 | \$27,516 |
| Arkansas | 3,045,637 | 81.1% | 81.8% | 70.8% | 58.6 | \$31,868 |
| Arkansas County | 16,512 | 43.5% | 77.7% | 43.5% | 16.6 | \$28,759 |
| Ashley County | 18,354 | 63.0% | 34.4% | 24.2% | 19.8 | \$25,568 |
| Baxter County | 42,435 | 97.9% | 71.5% | 70.0% | 76.6 | \$30,264 |
| Benton County | 302,863 | 88.6% | 95.2% | 87.4% | 357.3 | \$43,359 |
| Boone County | 38,284 | 63.1% | 74.8% | 52.6% | 64.9 | \$28,886 |
| Bradley County | 10,135 | 78.0% | 48.0% | 43.4% | 15.6 | \$23,830 |
| Calhoun County | 4,695 | 84.6% | 18.2% | 14.4% | 7.5 | \$24,047 |
| Carroll County | 28,742 | 55.2% | 74.0% | 50.2% | 45.6 | \$29,123 |
| Chicot County | 9,873 | 70.8% | 67.4% | 56.7% | 15.5 | \$24,156 |
| Clark County | 21,250 | 90.7% | 66.8% | 60.9% | 24.5 | \$24,532 |
| Clay County | 14,265 | 86.9% | 37.0% | 34.9% | 22.3 | \$26,554 |
| Cleburne County | 25,284 | 47.7% | 64.0% | 38.7% | 45.6 | \$31,041 |
| Cleveland County | 7,467 | 0.4% | 30.9% | 0.1% | 12.5 | \$26,479 |
| Columbia County | 22,216 | 64.0% | 62.1% | 43.7% | 29.0 | \$27,243 |
| Conway County | 21,046 | 63.1% | 73.7% | 49.5% | 38.1 | \$28,694 |
| Craighead County | 113,017 | 93.1% | 85.1% | 78.6% | 159.8 | \$31,298 |
| Crawford County | 61,075 | 97.9% | 86.7% | 85.2% | 102.6 | \$28,920 |
| Crittenden County | 47,061 | 91.6% | 93.0% | 87.8% | 76.8 | \$27,834 |
| Cross County | 16,601 | 73.8% | 60.3% | 53.9% | 26.9 | \$27,776 |
| Dallas County | 6,191 | 60.8% | 66.4% | 50.8% | 9.3 | \$26,378 |
| Desha County | 10,771 | 88.8% | 75.2% | 72.1% | 14.5 | \$21,588 |
| Drew County | 16,911 | 69.3% | 44.6% | 38.0% | 20.4 | \$27,349 |
| Faulkner County | 127,665 | 80.1% | 94.5% | 77.9% | 197.2 | \$31,301 |
| Franklin County | 17,271 | 57.5% | 62.0% | 35.1% | 28.4 | \$25,517 |
| Fulton County | 12,382 | 98.2% | 45.3% | 44.6% | 20.0 | \$22,895 |
| Garland County | 100,089 | 86.2% | 86.1% | 78.3% | 147.7 | \$31,854 |
| Grant County | 18,160 | 68.4% | 47.8% | 35.2% | 28.7 | \$35,170 |
| Greene County | 46,448 | 99.9% | 75.6% | 75.5% | 80.5 | \$26,941 |
| Hempstead County | 19,453 | 72.1% | 64.7% | 59.6% | 26.8 | \$25,577 |
| Hot Spring County | 33,203 | 64.4% | 48.5% | 38.2% | 54.0 | \$25,486 |
| Howard County | 12,557 | 71.3% | 59.0% | 47.2% | 21.4 | \$25,458 |
| Independence County | 37,945 | 55.6% | 72.9% | 49.4% | 49.7 | \$27,867 |
| Izard County | 14,048 | 87.5% | 32.9% | 31.4% | 24.2 | \$25,331 |
| Jackson County | 16,624 | 61.4% | 66.9% | 53.2% | 26.2 | \$23,048 |
| Jefferson County | 64,246 | 62.4% | 92.6% | 62.0% | 73.6 | \$24,571 |
| Johnson County | 26,001 | 88.7% | 72.8% | 67.1% | 39.3 | \$22,457 |
| Lafayette County | 6,101 | 40.7% | 33.3% | 20.8% | 11.5 | \$23,699 |
| Lawrence County | 16,205 | 91.7% | 62.1% | 56.1% | 27.6 | \$25,301 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|-------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Lee County | 8,364 | 43.2% | 50.7% | 39.8% | 13.9 | \$20,338 |
| Lincoln County | 12,916 | 36.8% | 27.4% | 16.1% | 23.1 | \$18,191 |
| Little River County | 11,821 | 57.2% | 53.0% | 37.3% | 22.3 | \$28,764 |
| Logan County | 21,253 | 27.7% | 62.8% | 21.6% | 30.0 | \$28,495 |
| Lonoke County | 75,225 | 60.5% | 97.3% | 58.8% | 97.5 | \$32,720 |
| Madison County | 17,486 | 83.2% | 42.1% | 37.5% | 21.0 | \$27,709 |
| Marion County | 17,254 | 46.1% | 56.3% | 30.9% | 28.9 | \$25,315 |
| Miller County | 42,552 | 98.0% | 81.0% | 79.8% | 68.2 | \$26,572 |
| Mississippi County | 38,896 | 89.3% | 73.7% | 66.0% | 43.1 | \$27,863 |
| Monroe County | 6,564 | 0.2% | 33.6% | 0.2% | 10.8 | \$24,117 |
| Montgomery County | 8,556 | 33.1% | 41.7% | 22.0% | 11.0 | \$26,815 |
| Nevada County | 8,181 | 65.2% | 36.0% | 28.1% | 13.2 | \$22,041 |
| Newton County | 7,078 | 2.5% | 40.5% | 0.4% | 8.6 | \$26,544 |
| Ouachita County | 22,049 | 81.0% | 76.1% | 69.0% | 30.1 | \$25,289 |
| Perry County | 10,063 | 91.1% | 61.0% | 57.2% | 18.3 | \$26,967 |
| Phillips County | 15,304 | 71.2% | 79.8% | 64.4% | 22.2 | \$22,644 |
| Pike County | 10,179 | 97.1% | 42.5% | 41.7% | 17.0 | \$28,392 |
| Poinsett County | 22,495 | 85.2% | 64.0% | 52.5% | 29.7 | \$24,807 |
| Polk County | 19,337 | 52.1% | 39.5% | 25.2% | 22.6 | \$30,395 |
| Pope County | 64,065 | 73.2% | 85.8% | 65.8% | 79.0 | \$28,018 |
| Prairie County | 8,069 | 71.4% | 76.8% | 58.1% | 12.5 | \$29,018 |
| Pulaski County | 399,145 | 94.9% | 99.2% | 94.6% | 526.4 | \$39,146 |
| Randolph County | 18,837 | 88.2% | 51.9% | 48.5% | 28.9 | \$25,528 |
| Saline County | 127,357 | 92.3% | 95.9% | 89.4% | 176.0 | \$36,151 |
| Scott County | 9,805 | 29.1% | 60.4% | 26.8% | 11.0 | \$23,086 |
| Searcy County | 7,918 | 23.8% | 54.5% | 21.0% | 11.9 | \$22,384 |
| Sebastian County | 129,059 | 98.0% | 95.4% | 93.8% | 243.0 | \$32,577 |
| Sevier County | 15,686 | 76.1% | 54.9% | 49.4% | 27.8 | \$26,369 |
| Sharp County | 17,810 | 83.0% | 32.1% | 26.4% | 29.5 | \$25,283 |
| St. Francis County | 22,451 | 50.8% | 55.8% | 41.0% | 35.4 | \$20,991 |
| Stone County | 12,575 | 12.7% | 39.3% | 3.3% | 20.7 | \$21,640 |
| Union County | 37,752 | 65.3% | 66.2% | 50.2% | 36.3 | \$29,252 |
| Van Buren County | 16,102 | 58.3% | 48.3% | 28.1% | 22.7 | \$26,183 |
| Washington County | 256,054 | 99.9% | 94.2% | 94.1% | 272.0 | \$34,531 |
| White County | 77,755 | 44.4% | 83.4% | 39.8% | 75.2 | \$27,364 |
| Woodruff County | 6,049 | 53.1% | 85.2% | 52.4% | 10.3 | \$29,216 |
| Yell County | 20,129 | 63.0% | 62.3% | 42.1% | 21.6 | \$26,044 |
| California | 39,029,342 | 96.3% | 98.0% | 94.9% | 250.4 | \$45,591 |
| Alameda County | 1,628,997 | 99.7% | 99.4% | 99.1% | 2,208.9 | \$60,193 |
| Alpine County | 1,190 | 10.2% | 41.1% | 10.1% | 1.6 | \$55,425 |
| Amador County | 41,412 | 50.4% | 62.5% | 42.4% | 69.6 | \$40,379 |
| Butte County | 207,303 | 94.8% | 93.3% | 91.0% | 126.7 | \$36,374 |
| Calaveras County | 46,563 | 80.0% | 52.6% | 45.3% | 45.6 | \$37,935 |
| Colusa County | 21,914 | 96.4% | 89.1% | 86.8% | 19.0 | \$31,915 |
| Contra Costa County | 1,156,966 | 99.2% | 99.0% | 98.3% | 1,613.8 | \$59,083 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Del Norte County | 27,082 | 81.5% | 84.7% | 71.8% | 26.9 | \$28,396 |
| El Dorado County | 192,646 | 85.7% | 92.5% | 81.5% | 112.8 | \$55,455 |
| Fresno County | 1,015,190 | 94.7% | 99.2% | 94.5% | 170.4 | \$30,130 |
| Glenn County | 28,339 | 96.8% | 95.2% | 93.9% | 21.6 | \$28,106 |
| Humboldt County | 135,010 | 94.8% | 84.9% | 81.8% | 37.8 | \$33,988 |
| Imperial County | 178,713 | 87.3% | 95.0% | 85.0% | 42.8 | \$21,216 |
| Inyo County | 18,718 | 23.2% | 80.8% | 21.0% | 1.8 | \$36,673 |
| Kern County | 916,108 | 93.1% | 97.4% | 91.5% | 112.6 | \$27,976 |
| Kings County | 152,981 | 84.8% | 98.5% | 84.8% | 110.0 | \$26,193 |
| Lake County | 68,191 | 87.0% | 70.9% | 64.4% | 54.3 | \$34,020 |
| Lassen County | 29,904 | 79.1% | 90.4% | 76.9% | 6.6 | \$23,646 |
| Los Angeles County | 9,721,138 | 96.8% | 99.3% | 96.2% | 2,394.8 | \$41,847 |
| Madera County | 160,256 | 77.8% | 95.1% | 75.2% | 75.0 | \$28,158 |
| Marin County | 256,018 | 97.6% | 85.4% | 84.0% | 491.9 | \$87,300 |
| Mariposa County | 17,020 | 2.1% | 50.2% | 1.9% | 11.7 | \$36,106 |
| Mendocino County | 89,783 | 82.0% | 62.3% | 56.3% | 25.6 | \$34,977 |
| Merced County | 290,014 | 96.8% | 99.4% | 96.4% | 149.6 | \$26,869 |
| Modoc County | 8,511 | 41.2% | 54.9% | 31.3% | 2.2 | \$28,860 |
| Mono County | 12,978 | 68.6% | 82.5% | 62.3% | 4.3 | \$43,315 |
| Monterey County | 432,858 | 98.9% | 94.0% | 93.4% | 131.9 | \$37,741 |
| Napa County | 134,300 | 96.5% | 96.0% | 93.2% | 179.5 | \$54,306 |
| Nevada County | 102,293 | 78.4% | 76.2% | 64.6% | 106.8 | \$46,706 |
| Orange County | 3,151,184 | 97.8% | 99.6% | 97.5% | 3,974.5 | \$50,683 |
| Placer County | 417,772 | 92.5% | 96.8% | 90.4% | 296.9 | \$54,004 |
| Plumas County | 19,351 | 53.7% | 77.1% | 49.4% | 7.6 | \$41,701 |
| Riverside County | 2,473,902 | 95.3% | 99.0% | 94.7% | 343.2 | \$35,356 |
| Sacramento County | 1,584,169 | 98.5% | 99.8% | 98.4% | 1,641.2 | \$39,763 |
| San Benito County | 67,579 | 98.7% | 87.8% | 87.4% | 48.7 | \$40,799 |
| San Bernardino County | 2,193,656 | 93.6% | 99.2% | 93.1% | 109.3 | \$31,348 |
| San Diego County | 3,276,208 | 98.4% | 98.2% | 97.0% | 778.2 | \$46,957 |
| San Francisco County | 808,437 | 99.5% | 99.9% | 99.4% | 17,232.3 | \$86,186 |
| San Joaquin County | 793,229 | 98.3% | 99.6% | 97.9% | 569.7 | \$33,870 |
| San Luis Obispo County | 282,013 | 96.1% | 93.4% | 91.0% | 85.4 | \$47,390 |
| San Mateo County | 729,181 | 99.1% | 98.5% | 97.9% | 1,625.4 | \$77,741 |
| Santa Barbara County | 443,837 | 95.0% | 95.6% | 92.4% | 162.3 | \$44,635 |
| Santa Clara County | 1,870,945 | 99.8% | 99.5% | 99.4% | 1,449.1 | \$73,017 |
| Santa Cruz County | 264,370 | 98.3% | 82.4% | 81.7% | 593.9 | \$52,887 |
| Shasta County | 180,930 | 75.7% | 83.0% | 69.4% | 47.9 | \$36,458 |
| Sierra County | 3,217 | 29.8% | 35.0% | 16.2% | 3.4 | \$37,692 |
| Siskiyou County | 43,660 | 72.4% | 79.8% | 62.1% | 7.0 | \$33,650 |
| Solano County | 448,747 | 99.0% | 98.9% | 97.9% | 546.0 | \$42,886 |
| Sonoma County | 482,650 | 95.0% | 95.5% | 91.8% | 306.3 | \$52,523 |
| Stanislaus County | 551,275 | 99.2% | 99.8% | 99.1% | 368.5 | \$32,044 |
| Sutter County | 98,503 | 99.7% | 97.6% | 97.3% | 163.4 | \$34,039 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Tehama County | 65,245 | 82.5% | 79.4% | 68.2% | 22.1 | \$33,800 |
| Trinity County | 15,781 | 6.1% | 39.6% | 0.4% | 5.0 | \$32,856 |
| Tulare County | 477,544 | 90.0% | 98.7% | 89.5% | 99.0 | \$26,282 |
| Tuolumne County | 54,531 | 71.9% | 75.7% | 58.5% | 24.6 | \$40,095 |
| Ventura County | 832,605 | 96.3% | 98.2% | 94.7% | 452.3 | \$45,846 |
| Yolo County | 222,115 | 96.7% | 99.5% | 96.5% | 218.9 | \$41,703 |
| Yuba County | 84,310 | 94.4% | 94.6% | 92.4% | 133.4 | \$30,036 |
| Colorado | 5,839,926 | 94.2% | 93.5% | 90.5% | 56.3 | \$47,346 |
| Adams County | 527,575 | 98.0% | 98.8% | 97.1% | 452.2 | \$37,550 |
| Alamosa County | 16,592 | 85.5% | 75.0% | 71.1% | 23.0 | \$28,945 |
| Arapahoe County | 655,808 | 99.2% | 99.2% | 98.6% | 822.0 | \$49,530 |
| Archuleta County | 14,003 | 80.9% | 65.0% | 61.4% | 10.4 | \$39,155 |
| Baca County | 3,432 | 29.7% | 51.8% | 27.0% | 1.3 | \$28,115 |
| Bent County | 5,399 | 66.3% | 6.1% | 0.0% | 3.6 | \$19,041 |
| Boulder County | 327,468 | 96.5% | 94.9% | 93.7% | 450.8 | \$57,339 |
| Broomfield County | 76,121 | 99.3% | 99.9% | 99.2% | 2,308.9 | \$60,862 |
| Chaffee County | 20,223 | 65.2% | 78.1% | 59.9% | 20.0 | \$38,167 |
| Cheyenne County | 1,732 | 18.2% | 33.4% | 13.1% | 1.0 | \$38,791 |
| Clear Creek County | 9,355 | 49.3% | 61.4% | 38.3% | 23.7 | \$59,550 |
| Conejos County | 7,579 | 69.3% | 43.7% | 32.4% | 5.9 | \$25,240 |
| Costilla County | 3,603 | 64.2% | 39.7% | 36.2% | 2.9 | \$24,318 |
| Crowley County | 5,614 | 4.2% | 27.1% | 3.2% | 7.1 | \$20,909 |
| Custer County | 5,335 | 0.5% | 39.2% | 0.2% | 7.2 | \$37,232 |
| Delta County | 31,602 | 84.1% | 83.1% | 73.9% | 27.7 | \$33,055 |
| Denver County | 713,252 | 99.9% | 99.2% | 99.1% | 4,659.5 | \$56,381 |
| Dolores County | 2,455 | 4.6% | 51.1% | 0.0% | 2.3 | \$38,098 |
| Douglas County | 375,988 | 98.3% | 95.4% | 94.3% | 447.5 | \$63,186 |
| Eagle County | 55,285 | 93.2% | 92.1% | 89.4% | 32.8 | \$55,007 |
| El Paso County | 740,567 | 96.4% | 97.6% | 95.1% | 348.3 | \$41,444 |
| Elbert County | 27,799 | 71.2% | 30.0% | 23.4% | 15.0 | \$55,535 |
| Fremont County | 49,621 | 66.2% | 86.1% | 62.8% | 32.4 | \$28,224 |
| Garfield County | 62,271 | 83.4% | 87.2% | 77.2% | 21.1 | \$39,024 |
| Gilpin County | 5,891 | 47.2% | 79.6% | 45.2% | 39.3 | \$57,593 |
| Grand County | 15,769 | 76.8% | 60.0% | 51.8% | 8.5 | \$43,553 |
| Gunnison County | 17,267 | 87.3% | 59.3% | 58.1% | 5.3 | \$44,167 |
| Hinsdale County | 775 | 0.3% | 0.0% | 0.0% | 0.7 | \$46,944 |
| Huerfano County | 7,082 | 53.7% | 54.7% | 44.0% | 4.5 | \$29,508 |
| Jackson County | 1,302 | 82.1% | 65.1% | 63.3% | 0.8 | \$29,657 |
| Jefferson County | 576,143 | 95.8% | 97.0% | 94.5% | 753.7 | \$54,571 |
| Kiowa County | 1,424 | 57.2% | 0.6% | 0.0% | 0.8 | \$27,957 |
| Kit Carson County | 6,961 | 73.5% | 60.0% | 54.3% | 3.2 | \$36,039 |
| La Plata County | 56,607 | 81.5% | 73.6% | 64.8% | 33.5 | \$44,614 |
| Lake County | 7,327 | 80.7% | 90.1% | 75.7% | 19.4 | \$44,794 |
| Larimer County | 366,778 | 96.4% | 94.5% | 93.1% | 141.3 | \$46,676 |
| Las Animas County | 14,327 | 64.1% | 78.6% | 61.2% | 3.0 | \$29,432 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|--|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Lincoln County | 5,510 | 36.6% | 43.7% | 31.4% | 2.1 | \$27,610 |
| Logan County | 20,823 | 91.3% | 0.6% | 0.4% | 11.3 | \$29,440 |
| Mesa County | 158,636 | 88.9% | 97.1% | 88.2% | 47.7 | \$36,303 |
| Mineral County | 931 | 51.1% | 1.6% | 0.5% | 1.1 | \$37,647 |
| Moffat County | 13,177 | 90.6% | 62.1% | 60.2% | 2.8 | \$33,019 |
| Montezuma County | 26,468 | 71.6% | 71.4% | 58.6% | 13.0 | \$31,044 |
| Montrose County | 43,811 | 82.4% | 90.8% | 79.5% | 19.6 | \$35,755 |
| Morgan County | 29,239 | 95.2% | 82.7% | 81.8% | 22.8 | \$30,422 |
| Otero County | 18,303 | 80.2% | 77.9% | 67.0% | 14.5 | \$25,789 |
| Ouray County | 5,100 | 52.0% | 32.5% | 21.4% | 9.4 | \$47,768 |
| Park County | 17,939 | 39.6% | 40.0% | 20.1% | 8.2 | \$48,221 |
| Phillips County | 4,449 | 90.0% | 5.3% | 4.9% | 6.5 | \$37,996 |
| Pitkin County | 16,876 | 86.2% | 86.6% | 82.3% | 17.4 | \$87,561 |
| Prowers County | 11,854 | 69.1% | 84.7% | 68.8% | 7.2 | \$29,026 |
| Pueblo County | 169,544 | 94.6% | 94.3% | 90.1% | 71.0 | \$31,513 |
| Rio Blanco County | 6,569 | 66.3% | 37.6% | 32.9% | 2.0 | \$30,140 |
| Rio Grande County | 11,325 | 65.6% | 64.6% | 51.1% | 12.4 | \$34,328 |
| Routt County | 25,007 | 90.7% | 73.8% | 73.1% | 10.6 | \$58,304 |
| Saguache County | 6,623 | 57.7% | 20.7% | 7.9% | 2.1 | \$34,311 |
| San Juan County | 803 | 82.1% | 87.5% | 81.6% | 2.1 | \$42,678 |
| San Miguel County | 8,003 | 56.0% | 72.8% | 50.5% | 6.2 | \$55,184 |
| Sedgwick County | 2,295 | 76.7% | 65.0% | 62.2% | 4.2 | \$32,776 |
| Summit County | 30,565 | 93.2% | 97.6% | 91.9% | 50.2 | \$54,935 |
| Teller County | 24,857 | 56.6% | 67.4% | 54.1% | 44.6 | \$41,836 |
| Washington County | 4,812 | 78.1% | 12.0% | 11.9% | 1.9 | \$33,374 |
| Weld County | 350,176 | 94.2% | 95.4% | 90.4% | 87.9 | \$39,480 |
| Yuma County | 9,899 | 90.3% | 55.6% | 55.5% | 4.2 | \$32,575 |
| Connecticut | 3,626,205 | 98.1% | 89.2% | 87.7% | 748.8 | \$52,034 |
| Capitol Planning Region | 974,517 | 99.4% | 95.8% | 95.3% | 948.6 | \$47,802 |
| Greater Bridgeport Planning Region | 328,984 | 95.7% | 95.2% | 91.0% | 2,346.8 | \$48,201 |
| Lower Connecticut River Valley Planning Region | 178,603 | 99.1% | 87.2% | 86.6% | 421.1 | \$54,712 |
| Naugatuck Valley Planning Region | 457,179 | 99.4% | 91.0% | 90.5% | 1,107.7 | \$44,275 |
| Northeastern Connecticut Planning Region | 96,123 | 92.3% | 61.6% | 57.0% | 173.5 | \$40,723 |
| Northwest Hills Planning Region | 114,747 | 93.6% | 66.3% | 62.5% | 145.9 | \$52,279 |
| South Central Connecticut Planning Region | 572,282 | 99.5% | 93.6% | 93.1% | 1,558.5 | \$46,781 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|-------------------|----------------------------------|---------------------------------------|-------------------------------|-----------------|-------------------|
| Southeastern Connecticut Planning Region | 283,944 | 98.0% | 82.7% | 81.1% | 474.7 | \$43,292 |
| Western Connecticut Planning Region | 619,826 | 96.7% | 82.6% | 79.7% | 1,164.8 | \$76,090 |
| Delaware | 1,018,396 | 96.3% | 94.7% | 91.9% | 522.6 | \$42,180 |
| Kent County | 186,946 | 92.9% | 95.0% | 89.1% | 319.0 | \$33,191 |
| New Castle County | 575,494 | 99.0% | 97.7% | 96.8% | 1,349.9 | \$44,725 |
| Sussex County | 255,956 | 92.9% | 87.6% | 82.9% | 273.4 | \$42,958 |
| District of Columbia | 671,803 | 99.7% | 100.0% | 99.7% | 10,990.4 | \$71,297 |
| District of Columbia | 671,803 | 99.7% | 100.0% | 99.7% | 10,990.4 | \$71,297 |
| Florida | 22,244,826 | 94.4% | 95.4% | 91.2% | 410.5 | \$38,850 |
| Alachua County | 284,030 | 88.0% | 91.0% | 81.7% | 324.4 | \$35,684 |
| Baker County | 27,803 | 74.2% | 56.9% | 48.4% | 47.5 | \$28,612 |
| Bay County | 185,134 | 95.2% | 92.9% | 89.1% | 244.0 | \$36,868 |
| Bradford County | 27,313 | 39.9% | 92.4% | 38.5% | 92.9 | \$25,276 |
| Brevard County | 630,693 | 96.3% | 99.4% | 95.8% | 621.4 | \$40,111 |
| Broward County | 1,947,026 | 97.9% | 99.0% | 96.9% | 1,618.8 | \$39,753 |
| Calhoun County | 13,464 | 30.5% | 40.6% | 24.9% | 23.7 | \$21,324 |
| Charlotte County | 202,661 | 92.0% | 90.3% | 83.2% | 297.5 | \$38,466 |
| Citrus County | 162,529 | 89.3% | 84.3% | 76.0% | 279.3 | \$33,514 |
| Clay County | 226,589 | 90.9% | 93.6% | 86.8% | 374.8 | \$37,334 |
| Collier County | 397,994 | 98.2% | 92.7% | 91.2% | 199.3 | \$56,666 |
| Columbia County | 71,908 | 61.0% | 63.8% | 44.6% | 90.2 | \$28,317 |
| DeSoto County | 35,312 | 36.7% | 87.5% | 32.3% | 55.5 | \$21,726 |
| Dixie County | 17,124 | 1.7% | 44.3% | 1.0% | 24.3 | \$20,508 |
| Duval County | 1,016,536 | 98.7% | 97.6% | 96.4% | 1,332.9 | \$37,376 |
| Escambia County | 324,878 | 97.5% | 96.3% | 94.6% | 494.5 | \$33,656 |
| Flagler County | 126,705 | 96.4% | 89.0% | 86.0% | 260.6 | \$40,463 |
| Franklin County | 12,498 | 86.7% | 67.3% | 62.6% | 22.9 | \$31,433 |
| Gadsden County | 43,403 | 72.0% | 60.7% | 51.3% | 84.1 | \$23,898 |
| Gilchrist County | 18,992 | 14.3% | 68.6% | 11.9% | 54.3 | \$31,477 |
| Glades County | 12,454 | 43.1% | 76.6% | 39.7% | 15.4 | \$23,296 |
| Gulf County | 15,314 | 70.7% | 59.6% | 52.9% | 27.7 | \$30,011 |
| Hamilton County | 13,217 | 30.4% | 51.6% | 16.5% | 25.7 | \$17,331 |
| Hardee County | 25,645 | 66.4% | 88.8% | 65.2% | 40.2 | \$23,380 |
| Hendry County | 41,339 | 72.8% | 86.7% | 68.9% | 35.8 | \$24,825 |
| Hernando County | 206,896 | 95.7% | 95.8% | 91.8% | 437.4 | \$31,516 |
| Highlands County | 105,618 | 85.2% | 84.1% | 74.3% | 103.8 | \$31,864 |
| Hillsborough County | 1,513,301 | 95.8% | 99.0% | 95.0% | 1,480.9 | \$39,509 |
| Holmes County | 19,651 | 20.2% | 48.6% | 19.9% | 41.0 | \$22,860 |
| Indian River County | 167,352 | 97.6% | 91.8% | 89.6% | 332.8 | \$44,102 |
| Jackson County | 48,211 | 45.3% | 55.0% | 33.8% | 52.5 | \$23,210 |
| Jefferson County | 15,042 | 4.1% | 53.8% | 3.9% | 25.2 | \$29,189 |
| Lafayette County | 7,786 | 27.8% | 72.8% | 24.0% | 14.3 | \$20,073 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|-------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Lake County | 410,139 | 88.5% | 95.0% | 85.8% | 431.0 | \$35,150 |
| Lee County | 822,453 | 94.4% | 97.1% | 92.3% | 1,053.1 | \$41,332 |
| Leon County | 297,369 | 95.7% | 95.0% | 92.5% | 444.9 | \$36,823 |
| Levy County | 45,260 | 15.2% | 63.7% | 11.2% | 40.5 | \$29,042 |
| Liberty County | 7,603 | 28.7% | 33.5% | 21.8% | 9.1 | \$24,080 |
| Madison County | 18,198 | 40.2% | 58.6% | 33.7% | 26.1 | \$22,760 |
| Manatee County | 429,125 | 96.9% | 97.0% | 94.0% | 577.7 | \$41,760 |
| Marion County | 396,415 | 83.2% | 89.4% | 76.8% | 249.6 | \$31,086 |
| Martin County | 162,006 | 97.2% | 94.2% | 91.9% | 297.9 | \$50,748 |
| Miami-Dade County | 2,673,837 | 98.8% | 98.1% | 97.1% | 1,407.4 | \$35,563 |
| Monroe County | 81,711 | 99.1% | 81.9% | 81.4% | 53.8 | \$54,630 |
| Nassau County | 97,899 | 89.5% | 77.0% | 71.7% | 150.9 | \$44,483 |
| Okaloosa County | 216,482 | 93.0% | 85.2% | 81.1% | 232.7 | \$40,002 |
| Okeechobee County | 40,412 | 73.6% | 81.5% | 68.7% | 52.5 | \$26,904 |
| Orange County | 1,452,726 | 96.6% | 99.7% | 96.3% | 1,610.5 | \$37,330 |
| Osceola County | 422,545 | 96.4% | 98.1% | 94.6% | 318.3 | \$28,690 |
| Palm Beach County | 1,518,477 | 99.0% | 97.8% | 96.9% | 773.0 | \$48,121 |
| Pasco County | 608,794 | 94.4% | 93.9% | 88.8% | 815.4 | \$35,201 |
| Pinellas County | 961,739 | 96.9% | 96.8% | 93.7% | 3,513.8 | \$44,020 |
| Polk County | 787,404 | 93.8% | 95.0% | 89.9% | 438.0 | \$30,262 |
| Putnam County | 74,731 | 67.3% | 75.0% | 56.5% | 102.6 | \$25,966 |
| Santa Rosa County | 198,268 | 89.6% | 89.8% | 83.4% | 195.8 | \$39,143 |
| Sarasota County | 462,286 | 98.8% | 96.3% | 95.2% | 831.4 | \$53,149 |
| Seminole County | 478,772 | 96.5% | 98.8% | 95.4% | 1,547.5 | \$42,281 |
| St. Johns County | 306,841 | 97.1% | 94.6% | 92.8% | 510.9 | \$52,096 |
| St. Lucie County | 358,704 | 97.7% | 97.7% | 95.6% | 627.5 | \$33,847 |
| Sumter County | 144,970 | 85.2% | 96.7% | 83.2% | 260.2 | \$44,431 |
| Suwannee County | 45,411 | 37.3% | 51.3% | 24.2% | 65.9 | \$24,991 |
| Taylor County | 21,283 | 63.3% | 65.4% | 49.1% | 20.4 | \$26,859 |
| Union County | 15,460 | 42.4% | 72.1% | 29.1% | 63.5 | \$24,293 |
| Volusia County | 579,192 | 94.5% | 97.8% | 92.9% | 525.9 | \$35,364 |
| Wakulla County | 35,178 | 70.5% | 71.9% | 58.4% | 58.0 | \$31,683 |
| Walton County | 83,304 | 93.0% | 62.9% | 60.0% | 80.2 | \$45,348 |
| Washington County | 25,414 | 64.5% | 50.6% | 36.6% | 43.5 | \$23,984 |
| Georgia | 10,912,876 | 91.1% | 87.4% | 82.6% | 189.1 | \$37,836 |
| Appling County | 18,428 | 76.8% | 51.0% | 44.9% | 36.3 | \$23,940 |
| Atkinson County | 8,183 | 97.7% | 60.7% | 59.4% | 23.9 | \$23,066 |
| Bacon County | 11,191 | 86.6% | 41.9% | 40.6% | 39.4 | \$24,654 |
| Baker County | 2,788 | 3.6% | 27.6% | 3.6% | 8.2 | \$23,731 |
| Baldwin County | 43,635 | 89.5% | 69.0% | 65.4% | 168.7 | \$31,681 |
| Banks County | 19,328 | 37.4% | 42.8% | 19.2% | 83.1 | \$30,024 |
| Barrow County | 89,299 | 94.5% | 89.9% | 85.1% | 554.5 | \$30,899 |
| Bartow County | 112,816 | 89.3% | 84.7% | 79.6% | 245.8 | \$32,102 |
| Ben Hill County | 17,069 | 80.4% | 60.3% | 53.9% | 68.2 | \$22,625 |
| Berrien County | 18,214 | 57.8% | 58.2% | 43.5% | 40.2 | \$25,100 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Bibb County | 156,197 | 99.3% | 98.9% | 98.2% | 626.3 | \$30,115 |
| Bleckley County | 12,257 | 77.9% | 62.2% | 50.7% | 56.8 | \$28,207 |
| Brantley County | 18,183 | 99.4% | 41.9% | 41.6% | 41.0 | \$22,767 |
| Brooks County | 16,253 | 59.1% | 55.7% | 41.2% | 33.0 | \$28,004 |
| Bryan County | 48,225 | 94.8% | 59.2% | 56.6% | 110.2 | \$39,829 |
| Bulloch County | 83,059 | 100.0% | 64.8% | 64.8% | 122.9 | \$28,484 |
| Burke County | 24,388 | 60.6% | 58.9% | 41.5% | 29.5 | \$29,735 |
| Butts County | 26,649 | 82.3% | 86.3% | 70.6% | 145.1 | \$27,875 |
| Calhoun County | 5,469 | 16.7% | 70.6% | 14.2% | 19.5 | \$18,074 |
| Camden County | 57,013 | 91.4% | 69.5% | 66.6% | 90.4 | \$32,712 |
| Candler County | 11,000 | 99.8% | 52.5% | 52.5% | 45.3 | \$24,477 |
| Carroll County | 124,592 | 82.2% | 74.2% | 63.8% | 249.6 | \$30,827 |
| Catoosa County | 68,826 | 95.3% | 91.6% | 88.6% | 424.4 | \$33,515 |
| Charlton County | 12,781 | 68.9% | 45.4% | 39.2% | 16.4 | \$22,742 |
| Chatham County | 301,107 | 97.1% | 92.1% | 89.5% | 695.2 | \$37,637 |
| Chattahoochee County | 8,819 | 0.0% | 69.6% | 0.0% | 35.5 | \$23,574 |
| Chattooga County | 24,936 | 74.4% | 61.2% | 55.1% | 79.6 | \$21,576 |
| Cherokee County | 281,278 | 96.7% | 95.4% | 93.2% | 668.0 | \$45,334 |
| Clarke County | 129,875 | 93.7% | 94.6% | 88.8% | 1,089.3 | \$30,138 |
| Clay County | 2,845 | 26.3% | 28.8% | 5.7% | 14.6 | \$22,191 |
| Clayton County | 296,564 | 99.3% | 99.2% | 98.5% | 2,093.6 | \$25,549 |
| Clinch County | 6,662 | 31.0% | 66.1% | 26.3% | 8.2 | \$20,294 |
| Cobb County | 771,952 | 99.1% | 99.0% | 98.1% | 2,271.9 | \$48,510 |
| Coffee County | 43,172 | 78.3% | 69.6% | 60.5% | 72.9 | \$23,839 |
| Colquitt County | 45,762 | 69.0% | 53.5% | 40.4% | 83.7 | \$25,766 |
| Columbia County | 162,419 | 98.2% | 98.3% | 96.6% | 559.7 | \$40,677 |
| Cook County | 17,404 | 68.7% | 48.6% | 38.3% | 76.2 | \$24,060 |
| Coweta County | 152,882 | 92.2% | 85.6% | 80.3% | 346.6 | \$41,373 |
| Crawford County | 12,140 | 88.7% | 56.4% | 51.5% | 37.4 | \$31,240 |
| Crisp County | 19,708 | 75.6% | 75.0% | 64.7% | 72.3 | \$28,063 |
| Dade County | 16,081 | 95.6% | 81.8% | 78.0% | 92.4 | \$30,078 |
| Dawson County | 30,138 | 73.3% | 70.1% | 60.6% | 143.0 | \$41,096 |
| DeKalb County | 762,820 | 99.1% | 98.5% | 97.6% | 2,849.1 | \$43,958 |
| Decatur County | 28,982 | 57.9% | 53.5% | 38.0% | 48.5 | \$24,974 |
| Dodge County | 19,802 | 63.5% | 71.2% | 53.9% | 39.9 | \$23,137 |
| Dooly County | 10,572 | 90.7% | 73.4% | 70.8% | 26.9 | \$27,232 |
| Dougherty County | 82,966 | 96.3% | 84.1% | 81.9% | 252.4 | \$26,563 |
| Douglas County | 147,316 | 96.6% | 97.2% | 94.1% | 736.1 | \$34,010 |
| Early County | 10,574 | 13.8% | 57.0% | 10.5% | 20.6 | \$25,929 |
| Echols County | 3,686 | 0.2% | 44.5% | 0.1% | 8.8 | \$24,751 |
| Effingham County | 69,041 | 90.0% | 41.0% | 39.7% | 144.2 | \$36,506 |
| Elbert County | 19,814 | 94.1% | 62.5% | 60.6% | 56.4 | \$27,848 |
| Emanuel County | 22,929 | 99.0% | 55.9% | 55.7% | 33.7 | \$24,696 |
| Evans County | 10,695 | 83.9% | 63.5% | 59.0% | 58.5 | \$25,580 |
| Fannin County | 25,737 | 65.5% | 35.4% | 28.7% | 66.5 | \$36,058 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Fayette County | 122,030 | 96.6% | 97.8% | 94.6% | 627.2 | \$51,004 |
| Floyd County | 99,443 | 87.8% | 87.6% | 82.0% | 195.1 | \$30,523 |
| Forsyth County | 267,237 | 97.7% | 98.1% | 95.9% | 1,189.7 | \$54,002 |
| Franklin County | 24,128 | 62.2% | 51.7% | 34.2% | 92.3 | \$27,671 |
| Fulton County | 1,074,634 | 98.0% | 99.1% | 97.1% | 2,040.3 | \$58,314 |
| Gilmer County | 32,407 | 80.9% | 40.5% | 37.5% | 76.0 | \$34,412 |
| Glascocock County | 2,939 | 10.3% | 33.9% | 6.6% | 20.4 | \$28,733 |
| Glynn County | 85,079 | 98.2% | 80.1% | 79.2% | 202.7 | \$39,221 |
| Gordon County | 58,954 | 75.6% | 64.3% | 54.8% | 165.4 | \$29,787 |
| Grady County | 26,008 | 58.4% | 55.5% | 41.7% | 57.2 | \$26,887 |
| Greene County | 20,139 | 69.0% | 48.7% | 37.2% | 52.0 | \$51,577 |
| Gwinnett County | 975,353 | 98.4% | 98.9% | 97.4% | 2,264.3 | \$36,778 |
| Habersham County | 47,475 | 91.4% | 67.2% | 63.5% | 171.5 | \$29,069 |
| Hall County | 212,692 | 93.2% | 93.0% | 87.6% | 541.2 | \$35,624 |
| Hancock County | 8,387 | 13.4% | 32.9% | 9.7% | 17.8 | \$19,730 |
| Haralson County | 31,337 | 67.0% | 46.0% | 31.9% | 111.1 | \$31,342 |
| Harris County | 36,276 | 76.9% | 51.9% | 39.7% | 78.2 | \$39,851 |
| Hart County | 26,909 | 89.4% | 52.4% | 48.3% | 115.8 | \$30,636 |
| Heard County | 11,725 | 54.9% | 16.9% | 12.1% | 39.6 | \$32,386 |
| Henry County | 248,364 | 96.9% | 98.4% | 95.4% | 779.3 | \$35,065 |
| Houston County | 169,631 | 97.9% | 98.5% | 96.8% | 451.1 | \$35,223 |
| Irwin County | 9,126 | 75.9% | 24.3% | 19.2% | 25.8 | \$23,794 |
| Jackson County | 83,936 | 74.2% | 87.2% | 66.6% | 247.1 | \$34,703 |
| Jasper County | 15,951 | 31.7% | 52.4% | 20.1% | 43.3 | \$31,026 |
| Jeff Davis County | 14,889 | 87.5% | 62.8% | 55.5% | 45.0 | \$22,065 |
| Jefferson County | 15,314 | 67.5% | 72.0% | 52.3% | 29.1 | \$25,820 |
| Jenkins County | 8,689 | 52.2% | 51.2% | 41.5% | 25.0 | \$19,360 |
| Johnson County | 9,242 | 62.2% | 46.7% | 29.7% | 30.5 | \$23,878 |
| Jones County | 28,472 | 90.7% | 83.7% | 75.9% | 72.3 | \$31,934 |
| Lamar County | 19,467 | 79.5% | 52.9% | 46.7% | 106.1 | \$30,978 |
| Lanier County | 10,171 | 67.9% | 20.8% | 14.8% | 51.8 | \$22,128 |
| Laurens County | 49,660 | 79.8% | 64.5% | 54.8% | 61.5 | \$27,565 |
| Lee County | 33,642 | 79.9% | 73.2% | 63.1% | 94.5 | \$34,074 |
| Liberty County | 68,030 | 92.7% | 80.1% | 76.1% | 131.7 | \$26,121 |
| Lincoln County | 7,841 | 99.9% | 55.9% | 55.9% | 37.3 | \$28,414 |
| Long County | 18,348 | 75.5% | 50.0% | 41.0% | 45.8 | \$26,995 |
| Lowndes County | 119,739 | 77.9% | 91.0% | 74.1% | 240.8 | \$27,553 |
| Lumpkin County | 34,796 | 64.3% | 63.7% | 46.9% | 123.0 | \$33,322 |
| Macon County | 11,765 | 50.8% | 65.6% | 35.0% | 29.4 | \$22,681 |
| Madison County | 31,473 | 55.6% | 59.1% | 40.0% | 111.5 | \$27,769 |
| Marion County | 7,449 | 47.7% | 10.1% | 7.2% | 20.4 | \$24,727 |
| McDuffie County | 21,713 | 70.6% | 85.8% | 69.3% | 84.4 | \$28,259 |
| McIntosh County | 11,180 | 100.0% | 46.8% | 46.8% | 25.9 | \$28,773 |
| Meriwether County | 20,845 | 41.7% | 40.2% | 23.6% | 41.6 | \$25,784 |
| Miller County | 5,807 | 40.0% | 42.4% | 33.6% | 20.6 | \$29,135 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Mitchell County | 21,116 | 50.6% | 45.1% | 32.2% | 41.2 | \$24,705 |
| Monroe County | 29,427 | 97.3% | 51.5% | 50.2% | 74.3 | \$40,063 |
| Montgomery County | 8,655 | 45.2% | 62.8% | 35.7% | 35.9 | \$27,994 |
| Morgan County | 21,031 | 57.4% | 47.1% | 29.5% | 60.5 | \$38,932 |
| Murray County | 40,472 | 86.8% | 69.2% | 62.0% | 117.5 | \$27,383 |
| Muscogee County | 202,616 | 96.1% | 99.0% | 95.2% | 935.9 | \$30,980 |
| Newton County | 117,621 | 92.4% | 95.3% | 88.1% | 429.6 | \$30,101 |
| Oconee County | 43,588 | 80.4% | 73.6% | 63.6% | 236.5 | \$53,848 |
| Oglethorpe County | 15,469 | 43.5% | 37.1% | 21.6% | 35.2 | \$30,225 |
| Paulding County | 178,421 | 94.2% | 95.7% | 90.8% | 571.2 | \$35,242 |
| Peach County | 28,562 | 83.5% | 97.4% | 82.3% | 190.1 | \$31,349 |
| Pickens County | 34,826 | 79.2% | 51.7% | 45.2% | 150.1 | \$37,686 |
| Pierce County | 20,168 | 75.0% | 52.4% | 43.8% | 59.2 | \$26,392 |
| Pike County | 19,990 | 43.0% | 45.1% | 18.8% | 92.5 | \$35,993 |
| Polk County | 43,709 | 82.9% | 72.4% | 64.5% | 140.8 | \$26,843 |
| Pulaski County | 9,984 | 85.3% | 79.2% | 74.2% | 40.1 | \$23,007 |
| Putnam County | 22,984 | 77.3% | 52.3% | 43.8% | 66.7 | \$42,468 |
| Quitman County | 2,249 | 38.6% | 34.5% | 12.0% | 14.9 | \$22,189 |
| Rabun County | 17,206 | 62.7% | 50.1% | 35.4% | 46.5 | \$35,889 |
| Randolph County | 6,116 | 71.5% | 41.7% | 36.9% | 14.3 | \$18,208 |
| Richmond County | 206,640 | 99.0% | 98.5% | 97.6% | 637.1 | \$28,480 |
| Rockdale County | 94,984 | 98.4% | 98.3% | 96.7% | 731.7 | \$33,481 |
| Schley County | 4,496 | 47.4% | 51.3% | 37.0% | 26.9 | \$24,255 |
| Screven County | 13,977 | 86.4% | 46.5% | 40.4% | 21.6 | \$28,356 |
| Seminole County | 9,127 | 49.2% | 43.4% | 29.5% | 38.4 | \$36,184 |
| Spalding County | 68,919 | 89.8% | 91.5% | 82.6% | 351.7 | \$35,823 |
| Stephens County | 26,767 | 81.6% | 72.4% | 61.4% | 149.7 | \$26,620 |
| Stewart County | 4,648 | 10.0% | 81.6% | 10.0% | 10.1 | \$21,096 |
| Sumter County | 28,877 | 72.2% | 75.7% | 61.9% | 59.8 | \$23,891 |
| Talbot County | 5,747 | 53.4% | 41.3% | 29.8% | 14.7 | \$28,528 |
| Taliaferro County | 1,600 | 98.7% | 28.8% | 28.8% | 8.2 | \$24,766 |
| Tattnall County | 24,064 | 71.5% | 47.7% | 38.5% | 50.0 | \$21,842 |
| Taylor County | 7,737 | 77.5% | 39.8% | 34.7% | 20.5 | \$24,453 |
| Telfair County | 12,354 | 50.9% | 75.6% | 46.7% | 28.3 | \$17,162 |
| Terrell County | 8,754 | 63.5% | 68.2% | 56.2% | 26.1 | \$24,200 |
| Thomas County | 45,561 | 75.1% | 72.1% | 60.3% | 83.7 | \$32,414 |
| Tift County | 41,412 | 83.8% | 67.7% | 59.9% | 158.7 | \$27,987 |
| Toombs County | 26,837 | 66.1% | 61.7% | 49.9% | 73.7 | \$27,912 |
| Towns County | 12,972 | 87.0% | 62.2% | 57.6% | 77.9 | \$33,443 |
| Treutlen County | 6,365 | 67.4% | 67.9% | 37.5% | 31.9 | \$27,309 |
| Troup County | 70,191 | 86.6% | 76.8% | 67.5% | 169.5 | \$29,562 |
| Turner County | 8,842 | 66.6% | 62.8% | 50.6% | 31.0 | \$21,771 |
| Twiggs County | 7,680 | 39.6% | 91.4% | 34.7% | 21.4 | \$32,105 |
| Union County | 26,388 | 67.3% | 42.4% | 32.2% | 81.9 | \$37,709 |
| Upson County | 28,086 | 87.1% | 58.5% | 56.1% | 86.8 | \$27,906 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Walker County | 68,915 | 90.3% | 88.7% | 83.2% | 154.4 | \$28,554 |
| Walton County | 103,065 | 83.2% | 94.9% | 80.0% | 315.4 | \$34,295 |
| Ware County | 35,614 | 80.9% | 83.2% | 70.5% | 39.6 | \$23,319 |
| Warren County | 5,155 | 0.7% | 6.7% | 0.7% | 18.1 | \$24,249 |
| Washington County | 19,738 | 80.1% | 53.3% | 49.5% | 29.1 | \$23,687 |
| Wayne County | 30,896 | 71.8% | 69.3% | 57.8% | 48.1 | \$24,838 |
| Webster County | 2,328 | 24.9% | 59.5% | 22.1% | 11.1 | \$22,246 |
| Wheeler County | 7,314 | 31.8% | 50.8% | 26.0% | 24.8 | \$17,980 |
| White County | 28,806 | 90.8% | 67.3% | 62.2% | 119.7 | \$32,311 |
| Whitfield County | 103,132 | 94.6% | 84.4% | 81.7% | 355.1 | \$28,594 |
| Wilcox County | 8,761 | 43.6% | 66.6% | 38.2% | 23.2 | \$19,237 |
| Wilkes County | 9,599 | 99.8% | 52.1% | 52.1% | 20.4 | \$29,042 |
| Wilkinson County | 8,681 | 62.0% | 58.4% | 41.2% | 19.3 | \$24,070 |
| Worth County | 20,424 | 72.7% | 59.4% | 49.6% | 35.8 | \$28,119 |
| Guam | 169,086 | 85.9% | 45.1% | 42.4% | 805.7 | NA |
| Guam | 169,086 | 85.9% | 45.1% | 42.4% | 805.7 | NA |
| Hawaii | 1,440,196 | 95.3% | 93.5% | 89.9% | 224.2 | \$42,683 |
| Hawaii County | 206,315 | 88.7% | 75.0% | 68.7% | 51.2 | \$37,236 |
| Honolulu County | 995,638 | 96.7% | 98.3% | 95.1% | 1,657.7 | \$44,026 |
| Kalawao County | 82 | 76.8% | 0.0% | 0.0% | 6.8 | \$54,390 |
| Kauai County | 73,810 | 96.4% | 88.0% | 85.1% | 119.1 | \$39,372 |
| Maui County | 164,351 | 95.1% | 90.2% | 87.3% | 141.5 | \$42,607 |
| Idaho | 1,939,033 | 88.5% | 87.2% | 81.7% | 23.5 | \$34,919 |
| Ada County | 518,907 | 99.3% | 99.7% | 99.0% | 493.3 | \$44,645 |
| Adams County | 4,817 | 21.8% | 63.3% | 17.6% | 3.5 | \$35,844 |
| Bannock County | 89,517 | 95.5% | 98.1% | 95.0% | 80.5 | \$30,257 |
| Bear Lake County | 6,722 | 67.3% | 80.7% | 61.2% | 6.9 | \$30,266 |
| Benewah County | 10,370 | 9.5% | 49.9% | 7.9% | 13.3 | \$28,420 |
| Bingham County | 49,923 | 91.9% | 77.4% | 72.5% | 23.8 | \$29,421 |
| Blaine County | 24,866 | 91.1% | 88.8% | 86.4% | 9.4 | \$47,151 |
| Boise County | 8,333 | 18.9% | 42.9% | 16.5% | 4.4 | \$36,518 |
| Bonner County | 51,414 | 39.3% | 57.3% | 33.9% | 29.7 | \$35,275 |
| Bonneville County | 129,496 | 98.5% | 97.2% | 96.3% | 69.4 | \$33,008 |
| Boundary County | 13,345 | 26.7% | 75.8% | 26.1% | 10.5 | \$27,287 |
| Butte County | 2,684 | 45.7% | 63.3% | 31.1% | 1.2 | \$26,987 |
| Camas County | 1,153 | 5.7% | 19.9% | 0.0% | 1.1 | \$34,790 |
| Canyon County | 251,065 | 94.8% | 98.0% | 93.8% | 427.7 | \$28,569 |
| Caribou County | 7,190 | 15.3% | 55.4% | 10.8% | 4.1 | \$29,819 |
| Cassia County | 25,655 | 97.8% | 69.4% | 68.9% | 10.0 | \$28,986 |
| Clark County | 806 | 59.6% | 64.5% | 57.7% | 0.5 | \$24,370 |
| Clearwater County | 9,015 | 49.8% | 43.4% | 28.8% | 3.7 | \$29,925 |
| Custer County | 4,506 | 59.5% | 65.4% | 50.6% | 0.9 | \$28,913 |
| Elmore County | 29,403 | 90.3% | 95.1% | 88.3% | 9.6 | \$28,599 |
| Franklin County | 15,189 | 88.9% | 71.9% | 68.3% | 22.9 | \$27,316 |
| Fremont County | 13,978 | 70.7% | 92.0% | 66.5% | 7.5 | \$27,427 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|-------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Gem County | 20,418 | 92.6% | 88.1% | 83.1% | 36.5 | \$33,032 |
| Gooding County | 15,715 | 99.3% | 79.1% | 78.8% | 21.5 | \$29,147 |
| Idaho County | 17,593 | 9.7% | 45.1% | 7.5% | 2.1 | \$29,657 |
| Jefferson County | 33,428 | 93.9% | 78.7% | 76.1% | 30.6 | \$29,028 |
| Jerome County | 25,311 | 98.6% | 64.1% | 63.2% | 42.4 | \$28,266 |
| Kootenai County | 183,578 | 82.9% | 76.6% | 70.7% | 148.3 | \$36,718 |
| Latah County | 40,978 | 78.3% | 68.7% | 58.2% | 38.1 | \$33,342 |
| Lemhi County | 8,240 | 44.5% | 67.3% | 41.5% | 1.8 | \$32,446 |
| Lewis County | 3,763 | 0.1% | 62.6% | 0.0% | 7.9 | \$27,519 |
| Lincoln County | 5,329 | 64.3% | 52.4% | 44.1% | 4.4 | \$27,335 |
| Madison County | 54,976 | 97.8% | 98.9% | 96.9% | 117.2 | \$21,394 |
| Minidoka County | 22,194 | 99.7% | 73.0% | 73.0% | 29.3 | \$29,561 |
| Nez Perce County | 43,004 | 89.2% | 89.9% | 85.8% | 50.7 | \$35,387 |
| Oneida County | 4,712 | 94.5% | 51.7% | 47.7% | 3.9 | \$28,592 |
| Owyhee County | 12,613 | 53.5% | 62.1% | 41.7% | 1.6 | \$25,106 |
| Payette County | 26,956 | 99.4% | 88.5% | 88.3% | 66.2 | \$30,102 |
| Power County | 8,068 | 87.6% | 85.7% | 80.9% | 5.7 | \$24,069 |
| Shoshone County | 14,012 | 35.1% | 46.6% | 29.4% | 5.3 | \$26,176 |
| Teton County | 12,544 | 71.2% | 72.0% | 50.4% | 27.9 | \$43,396 |
| Twin Falls County | 93,696 | 99.6% | 76.2% | 75.9% | 48.8 | \$32,393 |
| Valley County | 12,464 | 52.8% | 54.0% | 42.9% | 3.4 | \$34,544 |
| Washington County | 11,087 | 61.5% | 80.6% | 57.9% | 7.6 | \$26,213 |
| Illinois | 12,582,032 | 95.3% | 94.6% | 91.8% | 226.6 | \$43,198 |
| Adams County | 64,725 | 92.1% | 79.5% | 77.0% | 75.7 | \$34,934 |
| Alexander County | 4,858 | 44.2% | 76.6% | 43.8% | 20.6 | \$21,922 |
| Bond County | 16,566 | 60.0% | 77.3% | 50.8% | 43.6 | \$29,944 |
| Boone County | 53,154 | 93.5% | 99.1% | 93.1% | 189.3 | \$37,055 |
| Brown County | 6,330 | 72.5% | 67.4% | 54.7% | 20.7 | \$25,951 |
| Bureau County | 32,828 | 82.4% | 58.4% | 54.9% | 37.8 | \$34,873 |
| Calhoun County | 4,360 | 38.4% | 41.6% | 16.8% | 17.2 | \$33,062 |
| Carroll County | 15,529 | 66.9% | 41.8% | 29.8% | 34.9 | \$31,882 |
| Cass County | 12,657 | 83.9% | 38.9% | 32.2% | 33.7 | \$29,842 |
| Champaign County | 206,542 | 92.0% | 96.7% | 89.5% | 207.3 | \$35,810 |
| Christian County | 33,436 | 78.7% | 73.8% | 66.0% | 47.1 | \$29,960 |
| Clark County | 15,229 | 56.6% | 57.6% | 42.3% | 30.4 | \$33,341 |
| Clay County | 13,047 | 96.8% | 60.7% | 60.6% | 27.9 | \$32,495 |
| Clinton County | 36,909 | 72.6% | 94.4% | 71.9% | 77.9 | \$39,409 |
| Coles County | 46,334 | 81.2% | 85.2% | 77.4% | 91.2 | \$32,395 |
| Cook County | 5,109,292 | 99.6% | 99.9% | 99.5% | 5,407.1 | \$45,646 |
| Crawford County | 18,536 | 70.6% | 68.7% | 59.4% | 41.8 | \$32,786 |
| Cumberland County | 10,324 | 49.4% | 48.8% | 33.4% | 29.8 | \$34,338 |
| De Witt County | 15,310 | 78.6% | 83.4% | 70.1% | 38.5 | \$35,630 |
| DeKalb County | 100,232 | 96.4% | 97.7% | 94.7% | 158.8 | \$34,196 |
| Douglas County | 19,755 | 78.4% | 62.0% | 54.2% | 47.4 | \$32,351 |
| DuPage County | 920,901 | 99.6% | 100.0% | 99.6% | 2,809.3 | \$55,107 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Edgar County | 16,433 | 64.0% | 37.1% | 31.9% | 26.4 | \$31,634 |
| Edwards County | 6,071 | 98.0% | 66.5% | 66.1% | 27.3 | \$31,081 |
| Effingham County | 34,325 | 91.1% | 69.6% | 65.8% | 71.7 | \$37,844 |
| Fayette County | 21,305 | 74.3% | 65.8% | 60.5% | 29.7 | \$28,392 |
| Ford County | 13,249 | 76.7% | 68.8% | 61.1% | 27.3 | \$31,754 |
| Franklin County | 37,242 | 83.0% | 85.2% | 75.2% | 91.1 | \$28,310 |
| Fulton County | 33,021 | 87.3% | 57.9% | 50.6% | 38.1 | \$32,378 |
| Gallatin County | 4,855 | 86.2% | 51.9% | 48.3% | 15.0 | \$36,928 |
| Greene County | 11,651 | 89.2% | 60.0% | 57.6% | 21.5 | \$31,536 |
| Grundy County | 53,041 | 86.9% | 95.3% | 84.7% | 126.9 | \$42,192 |
| Hamilton County | 7,984 | 65.1% | 56.1% | 45.8% | 18.4 | \$29,785 |
| Hancock County | 17,244 | 76.8% | 45.2% | 40.5% | 21.7 | \$35,154 |
| Hardin County | 3,597 | 75.3% | 16.1% | 13.2% | 20.3 | \$31,928 |
| Henderson County | 6,151 | 67.6% | 38.2% | 29.5% | 16.2 | \$34,734 |
| Henry County | 48,419 | 97.3% | 79.4% | 78.5% | 58.8 | \$37,212 |
| Iroquois County | 26,473 | 60.7% | 53.6% | 35.8% | 23.7 | \$33,347 |
| Jackson County | 52,617 | 89.6% | 91.2% | 84.2% | 90.2 | \$29,687 |
| Jasper County | 9,212 | 57.1% | 55.1% | 39.9% | 18.6 | \$33,353 |
| Jefferson County | 36,400 | 80.4% | 78.8% | 68.5% | 63.7 | \$30,167 |
| Jersey County | 21,246 | 84.1% | 75.9% | 67.6% | 57.5 | \$37,352 |
| Jo Daviess County | 21,758 | 71.3% | 54.4% | 43.5% | 36.2 | \$39,477 |
| Johnson County | 13,381 | 69.8% | 70.9% | 56.6% | 38.9 | \$27,096 |
| Kane County | 514,182 | 98.1% | 100.0% | 98.1% | 990.0 | \$44,523 |
| Kankakee County | 106,074 | 89.9% | 95.8% | 88.3% | 156.8 | \$32,941 |
| Kendall County | 137,254 | 97.3% | 99.6% | 97.0% | 428.6 | \$40,761 |
| Knox County | 48,640 | 95.5% | 68.6% | 67.3% | 67.9 | \$28,840 |
| LaSalle County | 108,078 | 84.5% | 87.9% | 78.2% | 95.2 | \$36,060 |
| Lake County | 709,150 | 98.9% | 99.8% | 98.7% | 1,598.6 | \$53,677 |
| Lawrence County | 14,914 | 98.1% | 43.4% | 42.8% | 40.1 | \$30,393 |
| Lee County | 33,848 | 71.6% | 45.5% | 36.8% | 46.7 | \$33,491 |
| Livingston County | 35,521 | 73.0% | 74.5% | 59.7% | 34.0 | \$34,996 |
| Logan County | 27,591 | 93.0% | 77.5% | 74.7% | 44.6 | \$33,280 |
| Macon County | 101,483 | 94.2% | 83.0% | 80.4% | 174.8 | \$34,644 |
| Macoupin County | 44,245 | 79.2% | 70.5% | 62.2% | 51.3 | \$33,665 |
| Madison County | 263,864 | 95.1% | 97.9% | 93.4% | 368.8 | \$38,828 |
| Marion County | 36,914 | 77.0% | 80.8% | 69.6% | 64.5 | \$30,360 |
| Marshall County | 11,678 | 81.4% | 41.8% | 36.8% | 30.2 | \$34,369 |
| Mason County | 12,748 | 76.5% | 66.9% | 59.9% | 23.6 | \$34,223 |
| Massac County | 13,896 | 59.1% | 82.7% | 57.9% | 58.6 | \$28,817 |
| McDonough County | 26,861 | 94.7% | 59.3% | 58.1% | 45.6 | \$29,658 |
| McHenry County | 311,747 | 96.2% | 99.5% | 95.9% | 516.7 | \$46,322 |
| McLean County | 171,141 | 93.2% | 92.7% | 88.7% | 144.6 | \$40,252 |
| Menard County | 12,121 | 70.6% | 62.8% | 52.6% | 38.6 | \$41,497 |
| Mercer County | 15,504 | 91.9% | 51.4% | 49.1% | 27.6 | \$34,455 |
| Monroe County | 35,033 | 75.1% | 92.2% | 73.8% | 90.9 | \$47,248 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Montgomery County | 28,020 | 69.3% | 67.3% | 56.8% | 39.8 | \$30,918 |
| Morgan County | 32,209 | 85.5% | 77.3% | 72.3% | 56.6 | \$34,098 |
| Moultrie County | 14,323 | 69.4% | 50.2% | 42.2% | 42.6 | \$34,849 |
| Ogle County | 51,351 | 74.6% | 80.4% | 62.6% | 67.7 | \$36,436 |
| Peoria County | 178,383 | 97.6% | 82.9% | 81.6% | 288.3 | \$38,581 |
| Perry County | 20,588 | 74.0% | 87.9% | 71.1% | 46.6 | \$27,880 |
| Piatt County | 16,723 | 84.5% | 65.3% | 59.3% | 38.1 | \$41,429 |
| Pike County | 14,484 | 59.4% | 56.7% | 45.3% | 17.4 | \$28,895 |
| Pope County | 3,770 | 48.2% | 35.0% | 23.8% | 10.2 | \$26,251 |
| Pulaski County | 4,991 | 61.2% | 74.4% | 47.9% | 25.0 | \$22,947 |
| Putnam County | 5,572 | 51.4% | 38.6% | 28.8% | 34.8 | \$37,218 |
| Randolph County | 30,068 | 61.1% | 84.4% | 55.9% | 52.3 | \$29,832 |
| Richland County | 15,435 | 98.0% | 71.5% | 71.3% | 42.9 | \$30,975 |
| Rock Island County | 141,527 | 98.5% | 96.3% | 95.1% | 331.1 | \$34,233 |
| Saline County | 23,087 | 85.0% | 47.8% | 44.3% | 60.8 | \$34,340 |
| Sangamon County | 194,534 | 94.6% | 96.4% | 92.3% | 224.1 | \$41,387 |
| Schuyler County | 6,746 | 63.8% | 61.0% | 52.3% | 15.4 | \$31,679 |
| Scott County | 4,790 | 87.7% | 52.0% | 50.7% | 19.1 | \$32,891 |
| Shelby County | 20,761 | 51.9% | 54.2% | 41.3% | 27.4 | \$32,085 |
| St. Clair County | 252,671 | 91.9% | 99.8% | 91.9% | 384.2 | \$36,010 |
| Stark County | 5,345 | 96.4% | 9.1% | 9.1% | 18.6 | \$32,618 |
| Stephenson County | 43,627 | 78.7% | 71.5% | 64.5% | 77.3 | \$32,900 |
| Tazewell County | 129,911 | 92.7% | 84.6% | 81.0% | 201.0 | \$38,573 |
| Union County | 16,767 | 72.4% | 79.8% | 65.3% | 40.6 | \$30,171 |
| Vermilion County | 72,337 | 81.5% | 81.4% | 70.7% | 80.5 | \$28,933 |
| Wabash County | 11,087 | 79.5% | 13.8% | 10.2% | 49.6 | \$33,137 |
| Warren County | 16,354 | 92.5% | 57.9% | 56.7% | 30.2 | \$32,304 |
| Washington County | 13,643 | 56.7% | 80.5% | 48.7% | 24.3 | \$38,112 |
| Wayne County | 15,872 | 93.4% | 50.5% | 48.0% | 22.2 | \$29,124 |
| White County | 13,614 | 94.0% | 49.8% | 48.5% | 27.5 | \$29,977 |
| Whiteside County | 54,658 | 86.1% | 79.7% | 74.1% | 79.9 | \$35,366 |
| Will County | 696,757 | 98.3% | 99.9% | 98.3% | 833.6 | \$44,356 |
| Williamson County | 66,695 | 86.3% | 90.6% | 83.1% | 158.7 | \$34,810 |
| Winnebago County | 282,188 | 96.5% | 99.4% | 96.1% | 550.0 | \$33,474 |
| Woodford County | 38,128 | 82.3% | 70.9% | 62.2% | 72.3 | \$41,400 |
| Indiana | 6,833,037 | 90.4% | 88.7% | 83.3% | 190.7 | \$35,578 |
| Adams County | 36,068 | 69.4% | 82.2% | 61.9% | 106.4 | \$26,489 |
| Allen County | 391,449 | 98.3% | 99.1% | 97.4% | 595.5 | \$35,389 |
| Bartholomew County | 83,540 | 91.5% | 88.2% | 83.1% | 205.3 | \$38,950 |
| Benton County | 8,719 | 67.4% | 39.6% | 28.4% | 21.5 | \$30,372 |
| Blackford County | 11,919 | 56.6% | 90.3% | 54.6% | 72.2 | \$29,751 |
| Boone County | 74,164 | 82.3% | 98.0% | 82.2% | 175.4 | \$54,866 |
| Brown County | 15,570 | 88.5% | 44.8% | 40.6% | 49.9 | \$40,792 |
| Carroll County | 20,555 | 56.0% | 63.4% | 41.6% | 55.2 | \$33,222 |
| Cass County | 37,540 | 74.1% | 81.9% | 70.6% | 91.1 | \$28,391 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Clark County | 124,237 | 90.9% | 95.5% | 88.9% | 333.2 | \$34,946 |
| Clay County | 26,379 | 69.1% | 73.0% | 56.8% | 73.8 | \$33,430 |
| Clinton County | 32,843 | 74.1% | 83.5% | 69.1% | 81.1 | \$28,063 |
| Crawford County | 10,536 | 28.9% | 35.5% | 16.0% | 34.5 | \$29,114 |
| Daviess County | 33,418 | 67.0% | 64.2% | 51.8% | 77.8 | \$28,886 |
| DeKalb County | 43,731 | 99.2% | 88.6% | 88.1% | 120.5 | \$33,164 |
| Dearborn County | 51,138 | 92.7% | 72.9% | 68.7% | 167.6 | \$36,005 |
| Decatur County | 26,416 | 60.6% | 80.5% | 57.6% | 70.9 | \$34,430 |
| Delaware County | 112,031 | 90.2% | 98.6% | 89.8% | 285.7 | \$28,874 |
| Dubois County | 43,632 | 85.5% | 56.1% | 52.8% | 102.1 | \$35,226 |
| Elkhart County | 206,890 | 97.4% | 88.1% | 86.0% | 446.7 | \$30,708 |
| Fayette County | 23,349 | 75.2% | 72.3% | 64.6% | 108.6 | \$27,435 |
| Floyd County | 80,714 | 95.9% | 98.7% | 94.8% | 543.6 | \$38,949 |
| Fountain County | 16,574 | 74.6% | 71.1% | 56.6% | 41.9 | \$30,562 |
| Franklin County | 23,028 | 40.5% | 43.1% | 26.2% | 59.9 | \$36,246 |
| Fulton County | 20,327 | 68.1% | 68.1% | 55.5% | 55.2 | \$32,479 |
| Gibson County | 32,993 | 70.7% | 77.8% | 62.8% | 67.7 | \$31,602 |
| Grant County | 66,022 | 81.3% | 93.1% | 78.1% | 159.4 | \$27,725 |
| Greene County | 31,006 | 61.7% | 61.1% | 50.0% | 57.2 | \$31,155 |
| Hamilton County | 364,921 | 97.4% | 99.9% | 97.4% | 925.3 | \$56,943 |
| Hancock County | 83,070 | 97.6% | 97.4% | 95.4% | 271.5 | \$42,666 |
| Harrison County | 39,851 | 77.4% | 48.6% | 40.3% | 82.3 | \$33,773 |
| Hendricks County | 182,534 | 95.3% | 99.7% | 95.1% | 448.6 | \$43,651 |
| Henry County | 48,915 | 81.1% | 69.6% | 60.8% | 124.8 | \$29,421 |
| Howard County | 83,574 | 91.1% | 94.6% | 87.7% | 285.2 | \$33,391 |
| Huntington County | 36,834 | 92.3% | 84.5% | 80.7% | 96.3 | \$32,046 |
| Jackson County | 46,300 | 97.0% | 76.2% | 74.6% | 90.8 | \$31,743 |
| Jasper County | 33,281 | 63.8% | 60.7% | 49.0% | 59.5 | \$35,793 |
| Jay County | 20,198 | 60.2% | 71.2% | 48.7% | 52.6 | \$27,794 |
| Jefferson County | 32,946 | 74.4% | 63.8% | 55.2% | 91.4 | \$30,450 |
| Jennings County | 27,536 | 84.3% | 58.7% | 53.5% | 73.1 | \$30,254 |
| Johnson County | 165,782 | 97.8% | 98.9% | 97.1% | 517.4 | \$40,055 |
| Knox County | 35,789 | 84.8% | 74.4% | 66.5% | 69.4 | \$33,052 |
| Kosciusko County | 80,826 | 95.4% | 70.0% | 67.7% | 152.1 | \$35,297 |
| LaGrange County | 40,866 | 85.7% | 53.7% | 47.3% | 107.6 | \$31,404 |
| LaPorte County | 111,675 | 85.0% | 89.7% | 76.7% | 186.7 | \$33,048 |
| Lake County | 499,689 | 98.0% | 99.7% | 97.9% | 1,001.9 | \$34,458 |
| Lawrence County | 45,222 | 84.7% | 67.0% | 62.5% | 100.7 | \$32,149 |
| Madison County | 131,744 | 88.6% | 99.4% | 88.5% | 291.5 | \$31,556 |
| Marion County | 969,466 | 99.1% | 100.0% | 99.1% | 2,444.4 | \$34,796 |
| Marshall County | 46,332 | 77.9% | 67.4% | 59.1% | 104.4 | \$32,218 |
| Martin County | 9,803 | 61.5% | 59.0% | 48.0% | 29.2 | \$31,921 |
| Miami County | 35,674 | 66.3% | 70.8% | 54.2% | 95.4 | \$28,221 |
| Monroe County | 139,745 | 96.2% | 88.4% | 86.2% | 354.2 | \$34,750 |
| Montgomery County | 38,273 | 72.0% | 68.2% | 58.0% | 75.8 | \$32,975 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Morgan County | 72,236 | 89.0% | 87.8% | 77.6% | 178.9 | \$37,861 |
| Newton County | 13,823 | 72.2% | 46.5% | 35.2% | 34.4 | \$30,168 |
| Noble County | 47,367 | 97.5% | 65.5% | 65.0% | 115.3 | \$31,953 |
| Ohio County | 6,114 | 58.0% | 50.1% | 44.8% | 71.0 | \$35,310 |
| Orange County | 19,623 | 98.5% | 56.1% | 55.7% | 49.3 | \$30,435 |
| Owen County | 21,482 | 62.9% | 32.5% | 24.8% | 55.8 | \$31,541 |
| Parke County | 16,369 | 51.3% | 46.2% | 28.5% | 36.8 | \$29,961 |
| Perry County | 19,183 | 90.6% | 54.9% | 52.9% | 50.3 | \$29,144 |
| Pike County | 12,168 | 49.6% | 42.8% | 29.8% | 36.4 | \$31,321 |
| Porter County | 174,791 | 95.0% | 98.9% | 94.4% | 418.1 | \$40,792 |
| Posey County | 25,063 | 65.4% | 82.0% | 55.5% | 61.2 | \$37,102 |
| Pulaski County | 12,485 | 44.6% | 39.8% | 24.7% | 28.8 | \$30,068 |
| Putnam County | 37,301 | 70.0% | 57.7% | 44.2% | 77.6 | \$31,015 |
| Randolph County | 24,437 | 62.2% | 67.4% | 53.4% | 54.0 | \$30,253 |
| Ripley County | 29,087 | 81.9% | 62.1% | 54.8% | 65.2 | \$34,578 |
| Rush County | 16,673 | 54.0% | 65.0% | 45.6% | 40.9 | \$29,735 |
| Scott County | 24,588 | 86.5% | 50.4% | 43.0% | 129.1 | \$26,506 |
| Shelby County | 44,991 | 89.1% | 81.3% | 74.6% | 109.4 | \$33,909 |
| Spencer County | 19,967 | 84.0% | 49.7% | 41.8% | 50.3 | \$34,874 |
| St. Joseph County | 272,234 | 96.1% | 96.9% | 93.9% | 594.7 | \$34,266 |
| Starke County | 23,258 | 50.4% | 48.8% | 31.4% | 75.2 | \$28,788 |
| Steuben County | 34,725 | 98.6% | 67.2% | 66.6% | 112.5 | \$36,648 |
| Sullivan County | 20,670 | 54.5% | 65.7% | 42.0% | 46.2 | \$27,792 |
| Switzerland County | 10,006 | 50.2% | 41.0% | 25.0% | 45.3 | \$29,202 |
| Tippecanoe County | 188,717 | 95.4% | 94.6% | 91.5% | 378.3 | \$30,608 |
| Tipton County | 15,361 | 67.1% | 89.4% | 61.7% | 59.0 | \$34,595 |
| Union County | 6,952 | 14.4% | 57.2% | 11.0% | 43.1 | \$33,377 |
| Vanderburgh County | 179,744 | 98.1% | 97.8% | 96.0% | 770.1 | \$33,614 |
| Vermillion County | 15,451 | 73.3% | 52.6% | 43.8% | 60.2 | \$30,071 |
| Vigo County | 106,006 | 87.4% | 90.4% | 82.2% | 262.6 | \$30,240 |
| Wabash County | 30,828 | 74.2% | 75.4% | 64.0% | 74.7 | \$32,763 |
| Warren County | 8,461 | 24.7% | 48.6% | 22.5% | 23.2 | \$38,792 |
| Warrick County | 65,185 | 85.6% | 91.6% | 82.2% | 169.4 | \$46,734 |
| Washington County | 28,224 | 92.6% | 50.8% | 47.0% | 54.9 | \$28,963 |
| Wayne County | 66,273 | 81.5% | 71.3% | 63.4% | 165.0 | \$29,848 |
| Wells County | 28,335 | 89.1% | 81.7% | 74.2% | 77.0 | \$33,020 |
| White County | 24,598 | 83.7% | 71.9% | 64.0% | 48.7 | \$32,001 |
| Whitley County | 34,627 | 90.0% | 83.3% | 76.9% | 103.2 | \$36,515 |
| Iowa | 3,200,517 | 94.2% | 82.0% | 78.9% | 57.3 | \$37,949 |
| Adair County | 7,494 | 94.3% | 57.0% | 56.7% | 13.2 | \$36,118 |
| Adams County | 3,611 | 63.4% | 8.6% | 4.4% | 8.5 | \$39,402 |
| Allamakee County | 13,960 | 88.0% | 48.4% | 47.7% | 21.8 | \$33,214 |
| Appanoose County | 12,094 | 81.7% | 79.1% | 71.4% | 24.3 | \$28,109 |
| Audubon County | 5,598 | 96.3% | 32.0% | 31.7% | 12.6 | \$33,125 |
| Benton County | 25,711 | 87.4% | 72.3% | 67.3% | 35.9 | \$37,926 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Black Hawk County | 130,274 | 98.6% | 90.7% | 89.9% | 230.3 | \$35,400 |
| Boone County | 26,609 | 85.7% | 80.8% | 71.8% | 46.6 | \$38,479 |
| Bremer County | 25,259 | 96.0% | 69.9% | 68.7% | 58.0 | \$40,912 |
| Buchanan County | 20,714 | 91.8% | 72.2% | 68.8% | 36.3 | \$34,579 |
| Buena Vista County | 20,600 | 99.6% | 70.7% | 70.7% | 35.8 | \$31,985 |
| Butler County | 14,269 | 91.7% | 50.8% | 47.4% | 24.6 | \$33,943 |
| Calhoun County | 9,725 | 94.8% | 41.6% | 40.2% | 17.1 | \$34,490 |
| Carroll County | 20,567 | 94.8% | 54.9% | 54.5% | 36.1 | \$36,599 |
| Cass County | 13,104 | 98.0% | 38.2% | 38.0% | 23.2 | \$36,219 |
| Cedar County | 18,399 | 88.5% | 79.7% | 73.7% | 31.8 | \$36,808 |
| Cerro Gordo County | 42,409 | 98.5% | 71.0% | 70.8% | 74.6 | \$38,377 |
| Cherokee County | 11,491 | 90.6% | 46.7% | 45.3% | 19.9 | \$35,939 |
| Chickasaw County | 11,716 | 96.9% | 60.9% | 59.4% | 23.2 | \$35,432 |
| Clarke County | 9,692 | 76.6% | 82.4% | 67.5% | 22.5 | \$32,003 |
| Clay County | 16,475 | 99.1% | 73.6% | 73.5% | 29.0 | \$35,787 |
| Clayton County | 17,027 | 89.0% | 51.0% | 49.2% | 21.9 | \$34,394 |
| Clinton County | 46,344 | 98.2% | 82.6% | 81.7% | 66.7 | \$33,979 |
| Crawford County | 16,123 | 93.2% | 36.0% | 35.3% | 22.6 | \$30,781 |
| Dallas County | 108,016 | 94.1% | 97.2% | 92.1% | 183.6 | \$51,347 |
| Davis County | 9,130 | 96.8% | 50.2% | 49.8% | 18.2 | \$32,889 |
| Decatur County | 7,683 | 97.4% | 67.5% | 66.7% | 14.4 | \$26,334 |
| Delaware County | 17,568 | 96.7% | 66.8% | 64.9% | 30.4 | \$40,709 |
| Des Moines County | 38,293 | 95.0% | 83.5% | 80.5% | 92.0 | \$35,689 |
| Dickinson County | 18,028 | 98.6% | 67.7% | 66.7% | 47.4 | \$45,523 |
| Dubuque County | 98,677 | 98.6% | 83.1% | 82.5% | 162.2 | \$38,705 |
| Emmet County | 9,176 | 99.6% | 76.0% | 75.9% | 23.2 | \$34,657 |
| Fayette County | 19,294 | 93.2% | 63.6% | 63.0% | 26.4 | \$31,566 |
| Floyd County | 15,337 | 92.7% | 55.8% | 53.8% | 30.6 | \$34,900 |
| Franklin County | 9,916 | 88.2% | 57.6% | 54.5% | 17.0 | \$30,733 |
| Fremont County | 6,464 | 93.0% | 16.9% | 13.5% | 12.6 | \$37,236 |
| Greene County | 8,741 | 88.3% | 68.9% | 63.2% | 15.3 | \$32,340 |
| Grundy County | 12,356 | 94.0% | 43.7% | 41.5% | 24.6 | \$38,265 |
| Guthrie County | 10,647 | 93.7% | 53.3% | 50.9% | 18.0 | \$39,571 |
| Hamilton County | 14,820 | 90.2% | 74.5% | 69.5% | 25.7 | \$35,822 |
| Hancock County | 10,685 | 96.8% | 66.4% | 65.5% | 18.7 | \$35,033 |
| Hardin County | 16,567 | 97.4% | 71.7% | 70.6% | 29.1 | \$32,181 |
| Harrison County | 14,658 | 88.0% | 56.5% | 50.9% | 21.0 | \$36,998 |
| Henry County | 20,196 | 94.0% | 82.2% | 80.9% | 46.5 | \$30,151 |
| Howard County | 9,533 | 92.9% | 61.1% | 59.7% | 20.1 | \$32,033 |
| Humboldt County | 9,572 | 98.1% | 81.1% | 80.9% | 22.0 | \$35,837 |
| Ida County | 6,888 | 65.4% | 37.2% | 26.5% | 16.0 | \$35,708 |
| Iowa County | 16,475 | 83.8% | 76.4% | 67.3% | 28.1 | \$40,182 |
| Jackson County | 19,324 | 95.5% | 62.9% | 60.6% | 30.4 | \$34,739 |
| Jasper County | 37,938 | 91.2% | 80.5% | 74.4% | 51.9 | \$35,346 |
| Jefferson County | 15,698 | 74.4% | 81.7% | 69.0% | 36.0 | \$36,111 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Johnson County | 156,420 | 96.8% | 92.5% | 90.3% | 255.2 | \$42,175 |
| Jones County | 20,848 | 98.5% | 64.9% | 64.3% | 36.2 | \$33,996 |
| Keokuk County | 9,904 | 98.3% | 61.5% | 61.2% | 17.1 | \$32,747 |
| Kossuth County | 14,475 | 90.4% | 54.1% | 50.0% | 14.9 | \$34,723 |
| Lee County | 32,840 | 76.0% | 67.0% | 59.1% | 63.5 | \$32,465 |
| Linn County | 229,033 | 96.7% | 95.2% | 93.0% | 319.4 | \$41,446 |
| Louisa County | 10,677 | 80.5% | 77.9% | 68.2% | 26.6 | \$33,296 |
| Lucas County | 8,689 | 70.4% | 76.4% | 64.5% | 20.2 | \$32,575 |
| Lyon County | 12,179 | 97.6% | 54.5% | 53.5% | 20.7 | \$33,428 |
| Madison County | 17,036 | 66.0% | 79.2% | 57.7% | 30.4 | \$39,442 |
| Mahaska County | 21,946 | 88.8% | 68.0% | 63.8% | 38.4 | \$33,812 |
| Marion County | 33,642 | 91.0% | 77.1% | 73.3% | 60.7 | \$38,168 |
| Marshall County | 39,879 | 97.7% | 86.1% | 85.0% | 69.7 | \$31,486 |
| Mills County | 14,553 | 80.7% | 44.0% | 34.0% | 33.3 | \$40,709 |
| Mitchell County | 10,532 | 90.9% | 58.2% | 57.5% | 22.4 | \$36,006 |
| Monona County | 8,486 | 75.6% | 42.1% | 30.6% | 12.2 | \$33,080 |
| Monroe County | 7,550 | 72.6% | 52.6% | 42.9% | 17.4 | \$35,392 |
| Montgomery County | 10,205 | 100.0% | 42.9% | 42.9% | 24.1 | \$36,122 |
| Muscatine County | 42,377 | 91.6% | 84.9% | 80.5% | 96.9 | \$34,055 |
| O'Brien County | 14,060 | 89.2% | 55.6% | 53.6% | 24.5 | \$32,460 |
| Osceola County | 6,036 | 85.4% | 68.7% | 62.7% | 15.1 | \$35,657 |
| Page County | 15,143 | 99.4% | 61.6% | 61.6% | 28.3 | \$32,886 |
| Palo Alto County | 8,764 | 84.9% | 66.8% | 59.5% | 15.5 | \$33,517 |
| Plymouth County | 25,681 | 87.0% | 74.1% | 70.2% | 29.8 | \$40,150 |
| Pocahontas County | 7,053 | 97.5% | 32.5% | 32.5% | 12.2 | \$33,918 |
| Polk County | 501,089 | 97.7% | 99.5% | 97.4% | 875.7 | \$41,894 |
| Pottawattamie County | 93,173 | 99.1% | 89.2% | 88.7% | 97.9 | \$34,701 |
| Poweshiek County | 18,467 | 82.0% | 86.6% | 74.1% | 31.6 | \$37,527 |
| Ringgold County | 4,670 | 97.0% | 37.8% | 37.5% | 8.7 | \$34,138 |
| Sac County | 9,673 | 85.1% | 36.7% | 33.4% | 16.8 | \$38,596 |
| Scott County | 173,924 | 98.1% | 97.1% | 95.7% | 379.7 | \$40,926 |
| Shelby County | 11,645 | 95.4% | 1.4% | 1.4% | 19.7 | \$38,664 |
| Sioux County | 36,050 | 94.1% | 68.5% | 63.7% | 46.9 | \$34,914 |
| Story County | 99,673 | 93.4% | 83.9% | 79.9% | 174.1 | \$35,704 |
| Tama County | 16,903 | 93.7% | 67.1% | 65.9% | 23.4 | \$33,046 |
| Taylor County | 5,858 | 90.8% | 21.5% | 20.2% | 11.0 | \$33,092 |
| Union County | 11,887 | 91.1% | 87.0% | 81.1% | 28.1 | \$30,966 |
| Van Buren County | 7,256 | 80.7% | 53.9% | 42.2% | 15.0 | \$32,188 |
| Wapello County | 35,043 | 89.1% | 89.5% | 83.2% | 81.1 | \$30,025 |
| Warren County | 54,327 | 78.5% | 91.6% | 75.4% | 95.3 | \$41,279 |
| Washington County | 22,571 | 97.5% | 78.4% | 77.1% | 39.7 | \$35,451 |
| Wayne County | 6,467 | 80.5% | 39.8% | 35.5% | 12.3 | \$32,524 |
| Webster County | 36,626 | 93.1% | 84.3% | 78.3% | 51.2 | \$33,836 |
| Winnebago County | 10,617 | 99.9% | 70.9% | 70.9% | 26.5 | \$34,966 |
| Winneshiek County | 19,974 | 92.8% | 37.0% | 35.9% | 29.0 | \$37,561 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Woodbury County | 105,671 | 96.6% | 89.6% | 87.9% | 121.1 | \$33,080 |
| Worth County | 7,319 | 99.6% | 68.5% | 68.4% | 18.3 | \$36,585 |
| Wright County | 12,681 | 96.7% | 73.5% | 71.6% | 21.8 | \$33,964 |
| Kansas | 2,937,150 | 91.8% | 88.5% | 83.8% | 35.9 | \$38,108 |
| Allen County | 12,579 | 80.0% | 88.2% | 74.4% | 25.1 | \$27,155 |
| Anderson County | 7,776 | 56.7% | 63.9% | 48.1% | 13.4 | \$29,665 |
| Atchison County | 16,108 | 95.2% | 85.1% | 83.2% | 37.4 | \$27,644 |
| Barber County | 4,122 | 92.4% | 73.8% | 72.8% | 3.6 | \$32,879 |
| Barton County | 25,080 | 99.6% | 62.5% | 62.5% | 28.0 | \$31,516 |
| Bourbon County | 14,493 | 72.1% | 79.9% | 68.6% | 22.8 | \$29,328 |
| Brown County | 9,364 | 90.4% | 79.9% | 75.7% | 16.4 | \$29,646 |
| Butler County | 68,240 | 91.1% | 95.8% | 89.2% | 47.7 | \$35,209 |
| Chase County | 2,548 | 59.2% | 13.0% | 7.5% | 3.3 | \$32,022 |
| Chautauqua County | 3,415 | 17.0% | 61.3% | 13.5% | 5.3 | \$28,267 |
| Cherokee County | 19,088 | 70.9% | 70.6% | 59.2% | 32.5 | \$26,832 |
| Cheyenne County | 2,583 | 53.8% | 0.0% | 0.0% | 2.5 | \$34,829 |
| Clark County | 1,933 | 92.3% | 84.7% | 82.2% | 2.0 | \$30,253 |
| Clay County | 8,043 | 89.1% | 71.7% | 67.7% | 12.5 | \$32,628 |
| Cloud County | 8,946 | 96.4% | 74.9% | 72.8% | 12.5 | \$28,318 |
| Coffey County | 8,280 | 70.0% | 64.8% | 54.5% | 13.2 | \$35,984 |
| Comanche County | 1,681 | 71.9% | 47.8% | 39.7% | 2.1 | \$30,989 |
| Cowley County | 34,453 | 96.5% | 70.8% | 69.9% | 30.6 | \$29,977 |
| Crawford County | 39,078 | 96.5% | 85.6% | 84.9% | 66.3 | \$28,530 |
| Decatur County | 2,689 | 79.5% | 8.5% | 6.6% | 3.0 | \$33,767 |
| Dickinson County | 18,430 | 85.8% | 80.1% | 68.8% | 21.8 | \$35,615 |
| Doniphan County | 7,440 | 87.8% | 83.7% | 76.9% | 18.9 | \$31,314 |
| Douglas County | 119,964 | 94.3% | 93.7% | 89.2% | 263.2 | \$37,261 |
| Edwards County | 2,739 | 78.6% | 27.5% | 20.5% | 4.4 | \$31,368 |
| Elk County | 2,441 | 60.3% | 27.4% | 24.8% | 3.8 | \$28,159 |
| Ellis County | 28,941 | 99.8% | 83.3% | 83.3% | 32.2 | \$37,217 |
| Ellsworth County | 6,355 | 89.7% | 84.4% | 78.7% | 8.9 | \$29,968 |
| Finney County | 37,650 | 92.4% | 95.6% | 89.4% | 28.9 | \$29,805 |
| Ford County | 33,848 | 91.3% | 93.7% | 87.5% | 30.8 | \$28,502 |
| Franklin County | 25,992 | 68.1% | 74.9% | 61.4% | 45.5 | \$32,997 |
| Geary County | 35,691 | 78.9% | 73.5% | 62.7% | 92.8 | \$27,030 |
| Gove County | 2,717 | 78.3% | 15.8% | 13.5% | 2.5 | \$33,295 |
| Graham County | 2,411 | 99.9% | 53.5% | 53.5% | 2.7 | \$30,222 |
| Grant County | 7,197 | 86.2% | 29.3% | 27.2% | 12.5 | \$36,280 |
| Gray County | 5,729 | 98.7% | 48.9% | 48.6% | 6.6 | \$34,339 |
| Greeley County | 1,223 | 68.5% | 90.7% | 68.5% | 1.6 | \$36,078 |
| Greenwood County | 5,939 | 22.7% | 60.4% | 17.6% | 5.2 | \$34,862 |
| Hamilton County | 2,430 | 78.4% | 88.1% | 78.4% | 2.4 | \$28,145 |
| Harper County | 5,323 | 97.4% | 70.5% | 70.3% | 6.6 | \$26,970 |
| Harvey County | 33,801 | 97.3% | 80.8% | 79.4% | 62.6 | \$33,965 |
| Haskell County | 3,576 | 76.2% | 47.9% | 39.1% | 6.2 | \$32,908 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Hodgeman County | 1,755 | 68.9% | 50.6% | 46.0% | 2.0 | \$33,911 |
| Jackson County | 13,286 | 79.3% | 69.4% | 59.8% | 20.2 | \$32,499 |
| Jefferson County | 18,344 | 82.4% | 75.9% | 64.6% | 34.4 | \$38,535 |
| Jewell County | 2,898 | 93.7% | 6.9% | 6.4% | 3.2 | \$32,759 |
| Johnson County | 619,195 | 97.3% | 99.9% | 97.2% | 1,307.3 | \$56,364 |
| Kearny County | 3,855 | 61.8% | 80.3% | 54.9% | 4.4 | \$29,465 |
| Kingman County | 7,193 | 93.1% | 69.4% | 67.6% | 8.3 | \$33,453 |
| Kiowa County | 2,404 | 66.9% | 19.5% | 10.4% | 3.3 | \$35,199 |
| Labette County | 19,757 | 68.9% | 78.7% | 57.9% | 30.6 | \$29,585 |
| Lane County | 1,556 | 95.3% | 92.2% | 89.8% | 2.2 | \$35,779 |
| Leavenworth County | 82,892 | 88.3% | 96.4% | 85.4% | 178.9 | \$37,482 |
| Lincoln County | 2,899 | 77.1% | 7.5% | 3.8% | 4.0 | \$31,383 |
| Linn County | 9,796 | 61.3% | 50.7% | 41.7% | 16.5 | \$34,053 |
| Logan County | 2,705 | 86.8% | 11.6% | 10.9% | 2.5 | \$38,363 |
| Lyon County | 31,898 | 91.9% | 84.4% | 83.1% | 37.6 | \$29,425 |
| Marion County | 11,868 | 69.3% | 67.7% | 55.4% | 12.6 | \$33,087 |
| Marshall County | 9,982 | 72.9% | 55.1% | 43.3% | 11.1 | \$36,854 |
| McPherson County | 30,012 | 92.3% | 69.4% | 64.4% | 33.4 | \$34,116 |
| Meade County | 3,897 | 78.8% | 67.8% | 62.3% | 4.0 | \$47,644 |
| Miami County | 34,867 | 30.8% | 88.2% | 30.1% | 60.5 | \$40,169 |
| Mitchell County | 5,738 | 95.4% | 69.3% | 68.8% | 8.2 | \$35,258 |
| Montgomery County | 30,996 | 78.2% | 59.5% | 51.4% | 48.2 | \$28,270 |
| Morris County | 5,349 | 96.9% | 66.9% | 64.9% | 7.7 | \$32,462 |
| Morton County | 2,599 | 76.2% | 91.5% | 73.6% | 3.6 | \$27,423 |
| Nemaha County | 10,115 | 77.2% | 59.5% | 51.9% | 14.1 | \$36,959 |
| Neosho County | 15,606 | 75.3% | 67.2% | 57.6% | 27.3 | \$29,850 |
| Ness County | 2,645 | 95.3% | 75.5% | 72.9% | 2.5 | \$39,978 |
| Norton County | 5,301 | 83.2% | 63.2% | 59.1% | 6.0 | \$28,514 |
| Osage County | 15,654 | 64.3% | 78.1% | 56.1% | 22.2 | \$32,120 |
| Osborne County | 3,490 | 99.9% | 61.1% | 61.1% | 3.9 | \$34,669 |
| Ottawa County | 5,795 | 84.7% | 69.7% | 61.3% | 8.0 | \$34,893 |
| Pawnee County | 6,179 | 96.6% | 17.9% | 17.8% | 8.2 | \$32,542 |
| Phillips County | 4,809 | 81.3% | 56.2% | 51.7% | 5.4 | \$34,396 |
| Pottawatomie County | 26,273 | 95.2% | 70.9% | 66.8% | 31.2 | \$35,715 |
| Pratt County | 9,067 | 94.3% | 82.3% | 81.3% | 12.3 | \$31,949 |
| Rawlins County | 2,528 | 54.0% | 8.1% | 3.5% | 2.4 | \$33,003 |
| Reno County | 61,516 | 89.3% | 65.0% | 61.9% | 49.0 | \$31,695 |
| Republic County | 4,642 | 81.2% | 69.9% | 60.9% | 6.5 | \$31,626 |
| Rice County | 9,407 | 88.9% | 46.7% | 43.1% | 13.0 | \$32,074 |
| Riley County | 71,108 | 97.3% | 90.6% | 89.3% | 116.6 | \$33,147 |
| Rooks County | 4,813 | 88.4% | 78.7% | 72.5% | 5.4 | \$33,751 |
| Rush County | 2,927 | 90.5% | 8.1% | 7.7% | 4.1 | \$37,166 |
| Russell County | 6,639 | 99.9% | 50.1% | 50.0% | 7.5 | \$30,680 |
| Saline County | 53,596 | 99.6% | 93.3% | 93.2% | 74.4 | \$32,504 |
| Scott County | 5,014 | 80.2% | 94.8% | 80.2% | 7.0 | \$29,999 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Sedgwick County | 525,525 | 99.2% | 99.6% | 98.8% | 527.1 | \$35,338 |
| Seward County | 21,358 | 93.0% | 96.4% | 91.6% | 33.4 | \$25,391 |
| Shawnee County | 177,480 | 98.5% | 96.9% | 95.6% | 326.2 | \$36,011 |
| Sheridan County | 2,425 | 79.6% | 57.7% | 55.1% | 2.7 | \$41,462 |
| Sherman County | 5,830 | 85.2% | 87.1% | 82.9% | 5.5 | \$37,930 |
| Smith County | 3,533 | 93.1% | 57.5% | 53.4% | 3.9 | \$33,881 |
| Stafford County | 3,993 | 94.6% | 7.5% | 7.2% | 5.0 | \$32,921 |
| Stanton County | 1,963 | 76.5% | 28.7% | 24.7% | 2.9 | \$39,063 |
| Stevens County | 5,175 | 72.6% | 84.5% | 72.6% | 7.1 | \$25,674 |
| Sumner County | 22,473 | 49.6% | 49.3% | 24.4% | 19.0 | \$31,072 |
| Thomas County | 7,893 | 89.7% | 78.5% | 74.4% | 7.3 | \$37,610 |
| Trego County | 2,752 | 99.5% | 30.5% | 30.5% | 3.1 | \$42,029 |
| Wabaunsee County | 7,019 | 89.3% | 64.5% | 59.9% | 8.8 | \$34,243 |
| Wallace County | 1,488 | 51.2% | 5.4% | 0.0% | 1.6 | \$34,406 |
| Washington County | 5,501 | 39.9% | 43.4% | 14.7% | 6.1 | \$32,781 |
| Wichita County | 2,064 | 72.9% | 10.8% | 6.5% | 2.9 | \$36,589 |
| Wilson County | 8,622 | 60.9% | 67.8% | 55.5% | 15.1 | \$32,008 |
| Woodson County | 3,109 | 43.2% | 57.1% | 43.2% | 6.2 | \$28,380 |
| Wyandotte County | 165,746 | 96.8% | 99.6% | 96.4% | 1,093.0 | \$27,534 |
| Kentucky | 4,512,310 | 85.2% | 75.3% | 68.8% | 114.3 | \$33,515 |
| Adair County | 19,067 | 55.4% | 48.7% | 41.1% | 47.0 | \$26,098 |
| Allen County | 21,275 | 98.8% | 48.1% | 47.8% | 61.8 | \$28,307 |
| Anderson County | 24,224 | 71.0% | 78.5% | 66.0% | 119.8 | \$33,513 |
| Ballard County | 7,650 | 100.0% | 38.4% | 38.4% | 31.0 | \$31,315 |
| Barren County | 44,854 | 83.3% | 49.8% | 42.6% | 92.0 | \$27,732 |
| Bath County | 12,829 | 68.0% | 49.8% | 39.2% | 46.0 | \$27,018 |
| Bell County | 23,568 | 90.6% | 64.6% | 60.7% | 65.6 | \$19,262 |
| Boone County | 139,093 | 98.3% | 95.7% | 94.2% | 564.8 | \$41,281 |
| Bourbon County | 20,093 | 68.8% | 88.9% | 67.4% | 69.3 | \$30,123 |
| Boyd County | 48,110 | 93.4% | 67.8% | 66.0% | 300.9 | \$30,993 |
| Boyle County | 30,904 | 75.3% | 74.7% | 63.9% | 171.4 | \$29,955 |
| Bracken County | 8,452 | 44.1% | 73.7% | 41.4% | 41.7 | \$29,164 |
| Breathitt County | 13,351 | 65.9% | 29.6% | 28.4% | 27.1 | \$21,985 |
| Breckinridge County | 20,943 | 53.3% | 53.1% | 26.2% | 36.8 | \$27,733 |
| Bullitt County | 83,836 | 92.9% | 94.4% | 89.0% | 282.2 | \$34,362 |
| Butler County | 12,295 | 37.0% | 48.0% | 27.5% | 28.9 | \$23,862 |
| Caldwell County | 12,570 | 65.2% | 63.8% | 54.0% | 36.5 | \$31,255 |
| Calloway County | 37,685 | 85.9% | 65.1% | 57.6% | 97.9 | \$27,850 |
| Campbell County | 93,300 | 98.9% | 95.0% | 94.0% | 616.5 | \$42,846 |
| Carlisle County | 4,720 | 70.3% | 18.8% | 10.7% | 24.9 | \$31,403 |
| Carroll County | 10,938 | 68.8% | 83.7% | 65.1% | 85.0 | \$27,858 |
| Carter County | 26,395 | 59.1% | 55.7% | 42.5% | 64.5 | \$24,949 |
| Casey County | 15,920 | 50.3% | 23.8% | 19.4% | 35.8 | \$22,970 |
| Christian County | 73,037 | 86.7% | 87.7% | 79.4% | 101.8 | \$25,973 |
| Clark County | 37,061 | 79.9% | 88.7% | 75.0% | 146.8 | \$36,028 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Clay County | 19,913 | 85.8% | 21.8% | 21.0% | 42.4 | \$19,579 |
| Clinton County | 9,123 | 62.3% | 51.6% | 37.4% | 46.3 | \$23,905 |
| Crittenden County | 8,981 | 41.9% | 49.7% | 37.2% | 24.9 | \$28,035 |
| Cumberland County | 5,946 | 44.2% | 42.1% | 31.2% | 19.5 | \$22,668 |
| Daviess County | 103,222 | 86.4% | 87.1% | 78.7% | 225.2 | \$33,599 |
| Edmonson County | 12,269 | 48.7% | 28.6% | 14.9% | 40.5 | \$26,781 |
| Elliott County | 7,293 | 100.0% | 0.1% | 0.1% | 31.1 | \$17,242 |
| Estill County | 14,044 | 76.4% | 33.6% | 29.9% | 55.5 | \$21,880 |
| Fayette County | 320,347 | 98.2% | 99.9% | 98.2% | 1,129.4 | \$40,953 |
| Fleming County | 15,288 | 55.7% | 53.2% | 37.0% | 43.9 | \$26,230 |
| Floyd County | 34,978 | 90.2% | 11.8% | 10.3% | 88.9 | \$22,179 |
| Franklin County | 51,607 | 57.9% | 88.1% | 54.2% | 248.3 | \$38,104 |
| Fulton County | 6,382 | 73.7% | 68.4% | 59.0% | 31.0 | \$19,960 |
| Gallatin County | 8,763 | 81.4% | 91.3% | 75.9% | 89.1 | \$27,398 |
| Garrard County | 17,589 | 58.6% | 58.3% | 42.7% | 76.4 | \$30,728 |
| Grant County | 25,502 | 90.9% | 78.8% | 73.1% | 98.9 | \$29,113 |
| Graves County | 36,412 | 93.3% | 56.8% | 54.2% | 66.0 | \$28,978 |
| Grayson County | 26,631 | 80.8% | 35.2% | 29.9% | 53.3 | \$25,565 |
| Green County | 11,365 | 39.5% | 27.1% | 17.4% | 39.7 | \$24,090 |
| Greenup County | 35,403 | 82.9% | 73.3% | 68.5% | 102.8 | \$32,070 |
| Hancock County | 9,021 | 21.0% | 31.0% | 8.2% | 48.1 | \$30,579 |
| Hardin County | 111,862 | 89.8% | 88.1% | 82.0% | 179.4 | \$35,226 |
| Harlan County | 25,662 | 69.3% | 27.6% | 20.3% | 55.1 | \$20,511 |
| Harrison County | 19,103 | 43.1% | 72.6% | 40.8% | 62.3 | \$29,748 |
| Hart County | 19,600 | 67.8% | 24.2% | 20.2% | 47.5 | \$23,837 |
| Henderson County | 44,046 | 78.8% | 83.6% | 69.0% | 100.9 | \$30,949 |
| Henry County | 15,771 | 55.0% | 73.6% | 46.9% | 55.1 | \$28,842 |
| Hickman County | 4,422 | 42.8% | 57.6% | 34.4% | 18.3 | \$38,895 |
| Hopkins County | 44,812 | 76.2% | 78.3% | 64.3% | 82.7 | \$27,878 |
| Jackson County | 12,973 | 100.0% | 2.3% | 2.3% | 37.6 | \$21,876 |
| Jefferson County | 773,399 | 97.9% | 99.9% | 97.8% | 2,031.0 | \$39,994 |
| Jessamine County | 54,254 | 91.5% | 96.6% | 90.3% | 315.1 | \$37,703 |
| Johnson County | 22,244 | 97.1% | 23.6% | 23.4% | 84.9 | \$22,931 |
| Kenton County | 170,313 | 99.2% | 96.9% | 96.2% | 1,062.5 | \$40,780 |
| Knott County | 13,874 | 99.3% | 9.3% | 9.2% | 39.5 | \$20,536 |
| Knox County | 29,791 | 85.9% | 39.1% | 36.6% | 77.1 | \$20,658 |
| Larue County | 15,163 | 65.5% | 44.7% | 36.6% | 58.0 | \$28,038 |
| Laurel County | 62,885 | 90.0% | 44.8% | 42.9% | 144.9 | \$26,829 |
| Lawrence County | 16,109 | 99.8% | 34.0% | 33.8% | 38.8 | \$21,163 |
| Lee County | 7,261 | 52.9% | 23.5% | 13.6% | 34.8 | \$18,651 |
| Leslie County | 10,093 | 40.9% | 4.8% | 2.1% | 25.2 | \$18,739 |
| Letcher County | 20,893 | 97.0% | 17.6% | 17.5% | 61.8 | \$23,522 |
| Lewis County | 12,954 | 53.0% | 56.7% | 41.4% | 26.8 | \$20,579 |
| Lincoln County | 24,360 | 50.5% | 54.2% | 33.1% | 73.2 | \$25,972 |
| Livingston County | 8,963 | 45.9% | 42.9% | 24.4% | 28.6 | \$31,024 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Logan County | 27,877 | 73.5% | 54.6% | 47.0% | 50.5 | \$27,741 |
| Lyon County | 9,101 | 43.6% | 47.1% | 20.6% | 42.6 | \$30,441 |
| Madison County | 95,187 | 91.5% | 83.3% | 79.4% | 217.6 | \$31,290 |
| Magoffin County | 11,357 | 100.0% | 17.7% | 17.7% | 36.8 | \$19,582 |
| Marion County | 19,775 | 70.6% | 50.8% | 44.0% | 57.6 | \$25,133 |
| Marshall County | 31,777 | 84.0% | 51.4% | 44.8% | 105.1 | \$32,853 |
| Martin County | 11,095 | 36.1% | 7.1% | 3.3% | 48.3 | \$21,276 |
| Mason County | 16,930 | 73.4% | 84.7% | 68.8% | 70.5 | \$33,842 |
| McCracken County | 67,490 | 96.6% | 81.9% | 80.0% | 271.3 | \$36,401 |
| McCreary County | 16,701 | 99.9% | 39.1% | 39.1% | 39.1 | \$17,450 |
| McLean County | 9,105 | 38.0% | 47.1% | 23.8% | 36.1 | \$32,382 |
| Meade County | 30,001 | 98.5% | 49.2% | 48.5% | 98.2 | \$34,781 |
| Menifee County | 6,250 | 100.0% | 32.9% | 32.9% | 30.7 | \$22,682 |
| Mercer County | 22,902 | 66.7% | 69.4% | 53.6% | 92.0 | \$30,424 |
| Metcalfe County | 10,370 | 53.3% | 21.3% | 15.2% | 35.8 | \$23,380 |
| Monroe County | 11,355 | 52.7% | 10.8% | 8.5% | 34.5 | \$26,549 |
| Montgomery County | 28,367 | 77.6% | 72.6% | 61.6% | 143.7 | \$26,423 |
| Morgan County | 14,120 | 100.0% | 12.0% | 12.0% | 37.0 | \$23,257 |
| Muhlenberg County | 30,455 | 70.6% | 49.2% | 37.6% | 65.2 | \$31,621 |
| Nelson County | 47,392 | 93.1% | 74.8% | 72.3% | 113.5 | \$33,585 |
| Nicholas County | 7,805 | 33.9% | 66.0% | 33.6% | 40.0 | \$24,714 |
| Ohio County | 23,527 | 43.4% | 53.8% | 32.8% | 40.1 | \$26,712 |
| Oldham County | 69,431 | 89.6% | 97.2% | 87.8% | 370.8 | \$50,534 |
| Owen County | 11,290 | 47.6% | 68.7% | 41.2% | 32.2 | \$28,446 |
| Owsley County | 3,929 | 99.5% | 31.7% | 31.7% | 19.9 | \$19,405 |
| Pendleton County | 14,676 | 82.6% | 59.4% | 52.5% | 53.0 | \$28,919 |
| Perry County | 27,361 | 89.0% | 18.2% | 17.8% | 80.5 | \$27,913 |
| Pike County | 56,286 | 67.9% | 13.4% | 8.2% | 71.5 | \$25,153 |
| Powell County | 13,083 | 47.8% | 61.8% | 36.4% | 73.1 | \$23,336 |
| Pulaski County | 65,795 | 80.5% | 66.6% | 60.8% | 99.9 | \$29,215 |
| Robertson County | 2,229 | 8.6% | 29.4% | 4.4% | 22.3 | \$24,146 |
| Rockcastle County | 16,242 | 55.1% | 54.6% | 39.1% | 51.3 | \$26,640 |
| Rowan County | 24,388 | 88.6% | 60.9% | 58.7% | 87.1 | \$28,578 |
| Russell County | 18,178 | 94.7% | 32.9% | 32.2% | 71.7 | \$25,790 |
| Scott County | 59,099 | 79.7% | 93.7% | 78.7% | 209.7 | \$38,391 |
| Shelby County | 48,886 | 71.8% | 88.3% | 68.9% | 128.7 | \$37,918 |
| Simpson County | 19,949 | 96.3% | 80.5% | 79.0% | 85.2 | \$27,951 |
| Spencer County | 20,204 | 63.1% | 50.7% | 35.6% | 108.2 | \$39,997 |
| Taylor County | 26,407 | 75.5% | 52.2% | 48.8% | 99.1 | \$29,899 |
| Todd County | 12,404 | 44.3% | 51.3% | 28.8% | 33.1 | \$30,252 |
| Trigg County | 14,332 | 53.0% | 49.5% | 34.9% | 32.5 | \$30,172 |
| Trimble County | 8,539 | 62.9% | 53.4% | 33.1% | 56.3 | \$28,958 |
| Union County | 12,961 | 70.6% | 64.2% | 53.6% | 37.8 | \$28,196 |
| Warren County | 139,843 | 92.4% | 87.3% | 81.4% | 258.1 | \$34,201 |
| Washington County | 12,061 | 52.2% | 64.3% | 38.0% | 40.6 | \$30,217 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Wayne County | 19,681 | 72.9% | 47.2% | 42.3% | 43.0 | \$27,016 |
| Webster County | 12,726 | 53.4% | 52.3% | 31.9% | 38.3 | \$25,177 |
| Whitley County | 36,873 | 75.9% | 34.9% | 28.2% | 84.2 | \$22,310 |
| Wolfe County | 6,400 | 100.0% | 28.1% | 28.1% | 28.8 | \$14,727 |
| Woodford County | 27,062 | 82.2% | 92.4% | 80.3% | 142.3 | \$38,567 |
| Louisiana | 4,590,241 | 83.4% | 87.3% | 77.7% | 106.2 | \$32,981 |
| Acadia Parish | 56,744 | 71.4% | 74.8% | 60.7% | 86.6 | \$25,731 |
| Allen Parish | 22,320 | 19.3% | 73.6% | 17.1% | 29.3 | \$23,971 |
| Ascension Parish | 130,458 | 99.7% | 98.6% | 98.4% | 449.9 | \$41,355 |
| Assumption Parish | 20,604 | 95.4% | 74.9% | 71.5% | 59.9 | \$28,758 |
| Avoyelles Parish | 38,751 | 0.6% | 73.1% | 0.6% | 46.6 | \$23,597 |
| Beauregard Parish | 36,570 | 29.6% | 56.0% | 22.9% | 31.6 | \$33,582 |
| Bienville Parish | 12,641 | 16.0% | 44.6% | 15.3% | 15.6 | \$22,269 |
| Bossier Parish | 129,276 | 80.1% | 82.0% | 70.8% | 154.0 | \$33,873 |
| Caddo Parish | 229,025 | 95.3% | 81.3% | 79.3% | 260.4 | \$31,612 |
| Calcasieu Parish | 202,418 | 82.3% | 92.8% | 78.5% | 190.2 | \$33,486 |
| Caldwell Parish | 9,554 | 42.5% | 65.3% | 38.5% | 18.0 | \$28,491 |
| Cameron Parish | 4,902 | 66.3% | 58.0% | 37.5% | 3.8 | \$33,858 |
| Catahoula Parish | 8,566 | 5.1% | 58.4% | 5.1% | 12.1 | \$24,910 |
| Claiborne Parish | 13,744 | 44.0% | 42.3% | 33.7% | 18.2 | \$18,721 |
| Concordia Parish | 18,116 | 25.5% | 87.6% | 24.4% | 26.0 | \$21,941 |
| De Soto Parish | 26,853 | 64.6% | 59.1% | 49.4% | 30.6 | \$28,772 |
| East Baton Rouge Parish | 450,544 | 100.0% | 99.0% | 99.0% | 989.1 | \$37,540 |
| East Carroll Parish | 6,990 | 64.7% | 86.7% | 63.6% | 16.6 | \$19,646 |
| East Feliciana Parish | 19,135 | 10.8% | 60.7% | 9.5% | 42.2 | \$32,720 |
| Evangeline Parish | 31,986 | 34.8% | 59.3% | 22.5% | 48.3 | \$21,877 |
| Franklin Parish | 19,308 | 50.4% | 60.5% | 37.1% | 30.9 | \$23,658 |
| Grant Parish | 22,000 | 23.9% | 37.4% | 15.8% | 34.2 | \$25,077 |
| Iberia Parish | 68,327 | 71.6% | 87.5% | 68.7% | 119.1 | \$28,315 |
| Iberville Parish | 29,506 | 90.2% | 86.6% | 77.9% | 47.7 | \$28,538 |
| Jackson Parish | 14,839 | 2.6% | 50.7% | 2.3% | 26.1 | \$22,804 |
| Jefferson Davis Parish | 32,026 | 63.2% | 71.7% | 49.4% | 49.2 | \$30,081 |
| Jefferson Parish | 425,884 | 99.9% | 100.0% | 99.9% | 1,415.1 | \$35,720 |
| LaSalle Parish | 14,729 | 0.0% | 53.1% | 0.0% | 23.6 | \$29,769 |
| Lafayette Parish | 247,866 | 98.3% | 96.8% | 95.8% | 922.0 | \$38,161 |
| Lafourche Parish | 95,870 | 72.5% | 88.9% | 65.7% | 89.8 | \$32,716 |
| Lincoln Parish | 48,129 | 61.9% | 71.1% | 50.5% | 102.0 | \$24,411 |
| Livingston Parish | 148,425 | 97.1% | 90.2% | 88.1% | 229.0 | \$34,237 |
| Madison Parish | 9,478 | 74.2% | 84.3% | 72.6% | 15.2 | \$18,314 |
| Morehouse Parish | 24,446 | 86.2% | 65.6% | 57.9% | 30.8 | \$22,534 |
| Natchitoches Parish | 36,663 | 60.0% | 49.1% | 39.4% | 29.3 | \$25,302 |
| Orleans Parish | 369,749 | 99.9% | 100.0% | 99.9% | 2,181.5 | \$37,013 |
| Ouachita Parish | 157,702 | 91.8% | 86.0% | 83.0% | 258.4 | \$29,670 |
| Plaquemines Parish | 22,516 | 61.9% | 96.8% | 61.9% | 28.9 | \$35,413 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Pointe Coupee Parish | 20,151 | 85.5% | 70.0% | 62.2% | 36.2 | \$31,595 |
| Rapides Parish | 127,189 | 69.9% | 72.5% | 55.2% | 96.3 | \$31,010 |
| Red River Parish | 7,420 | 21.8% | 16.1% | 1.7% | 19.1 | \$23,162 |
| Richland Parish | 19,826 | 49.5% | 76.9% | 47.1% | 35.7 | \$25,285 |
| Sabine Parish | 21,985 | 6.2% | 16.3% | 2.6% | 25.4 | \$24,911 |
| St. Bernard Parish | 44,479 | 99.9% | 100.0% | 99.8% | 117.8 | \$28,451 |
| St. Charles Parish | 50,998 | 99.5% | 96.9% | 96.3% | 183.6 | \$38,220 |
| St. Helena Parish | 10,822 | 32.2% | 35.3% | 11.0% | 26.5 | \$24,660 |
| St. James Parish | 19,423 | 84.3% | 97.6% | 82.4% | 81.7 | \$33,616 |
| St. John the Baptist Parish | 39,864 | 98.2% | 99.5% | 98.2% | 185.9 | \$30,643 |
| St. Landry Parish | 81,773 | 76.3% | 78.1% | 62.9% | 88.5 | \$24,413 |
| St. Martin Parish | 51,236 | 82.9% | 81.5% | 70.0% | 69.5 | \$28,679 |
| St. Mary Parish | 47,789 | 91.9% | 94.2% | 87.8% | 86.0 | \$26,949 |
| St. Tammany Parish | 273,263 | 93.6% | 95.3% | 89.9% | 323.3 | \$40,393 |
| Tangipahoa Parish | 137,048 | 88.4% | 90.3% | 81.8% | 173.2 | \$29,192 |
| Tensas Parish | 3,846 | 14.1% | 17.7% | 1.6% | 6.4 | \$21,019 |
| Terrebonne Parish | 104,786 | 98.6% | 90.8% | 89.7% | 85.2 | \$32,143 |
| Union Parish | 20,721 | 24.8% | 39.2% | 16.6% | 23.6 | \$28,575 |
| Vermilion Parish | 56,952 | 71.3% | 77.9% | 61.1% | 48.5 | \$29,293 |
| Vernon Parish | 47,247 | 33.5% | 71.3% | 30.6% | 35.6 | \$28,797 |
| Washington Parish | 45,025 | 15.0% | 77.9% | 14.8% | 67.2 | \$24,287 |
| Webster Parish | 35,643 | 50.9% | 59.6% | 35.6% | 60.1 | \$22,706 |
| West Baton Rouge Parish | 28,034 | 100.0% | 93.0% | 92.9% | 145.7 | \$33,445 |
| West Carroll Parish | 9,475 | 29.8% | 53.1% | 21.4% | 26.3 | \$25,949 |
| West Feliciana Parish | 15,381 | 13.4% | 68.6% | 10.3% | 38.1 | \$30,055 |
| Winn Parish | 13,205 | 23.2% | 56.9% | 23.0% | 13.9 | \$25,617 |
| Maine | 1,385,340 | 88.2% | 64.7% | 60.2% | 44.9 | \$39,718 |
| Androscoggin County | 113,023 | 96.9% | 75.9% | 74.0% | 241.5 | \$34,273 |
| Aroostook County | 67,255 | 71.4% | 57.8% | 48.0% | 10.1 | \$31,001 |
| Cumberland County | 307,451 | 97.6% | 72.4% | 71.1% | 367.7 | \$51,405 |
| Franklin County | 30,474 | 80.6% | 58.9% | 54.7% | 18.0 | \$33,161 |
| Hancock County | 56,701 | 77.5% | 47.4% | 39.4% | 35.7 | \$38,785 |
| Kennebec County | 125,540 | 92.5% | 72.1% | 67.4% | 144.7 | \$36,009 |
| Knox County | 41,164 | 86.5% | 54.9% | 48.4% | 112.7 | \$39,379 |
| Lincoln County | 36,215 | 86.3% | 31.1% | 28.1% | 79.4 | \$43,436 |
| Oxford County | 59,495 | 75.9% | 62.2% | 51.6% | 28.6 | \$30,884 |
| Penobscot County | 153,704 | 84.9% | 65.3% | 60.0% | 45.2 | \$34,423 |
| Piscataquis County | 17,417 | 65.2% | 37.9% | 27.7% | 4.4 | \$32,843 |
| Sagadahoc County | 37,393 | 94.0% | 64.8% | 63.2% | 147.2 | \$40,950 |
| Somerset County | 51,098 | 74.5% | 60.7% | 52.0% | 13.0 | \$31,348 |
| Waldo County | 40,241 | 54.0% | 43.6% | 27.6% | 55.1 | \$35,677 |
| Washington County | 31,437 | 68.4% | 34.1% | 28.1% | 12.3 | \$30,731 |
| York County | 216,732 | 96.4% | 70.2% | 68.0% | 218.7 | \$42,053 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|-------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Maryland | 6,164,660 | 97.5% | 94.3% | 92.5% | 634.8 | \$49,865 |
| Allegany County | 67,267 | 91.3% | 87.4% | 81.8% | 159.3 | \$29,343 |
| Anne Arundel County | 593,286 | 99.7% | 96.3% | 96.0% | 1,430.3 | \$56,187 |
| Baltimore County | 846,161 | 99.0% | 98.3% | 97.4% | 1,414.1 | \$46,603 |
| Baltimore city | 569,931 | 99.7% | 99.8% | 99.5% | 7,040.9 | \$37,845 |
| Calvert County | 94,573 | 98.0% | 83.7% | 82.1% | 443.6 | \$54,038 |
| Caroline County | 33,433 | 77.1% | 85.2% | 67.9% | 104.7 | \$34,655 |
| Carroll County | 175,305 | 90.6% | 92.2% | 84.2% | 391.6 | \$49,434 |
| Cecil County | 104,942 | 94.0% | 87.3% | 83.1% | 303.0 | \$40,520 |
| Charles County | 170,102 | 95.7% | 87.7% | 85.1% | 371.5 | \$47,977 |
| Dorchester County | 32,726 | 80.8% | 85.4% | 75.4% | 60.5 | \$33,950 |
| Frederick County | 287,079 | 95.1% | 89.1% | 86.0% | 434.6 | \$51,169 |
| Garrett County | 28,579 | 68.3% | 65.8% | 49.5% | 44.0 | \$41,130 |
| Harford County | 263,867 | 97.8% | 94.5% | 92.6% | 603.6 | \$48,615 |
| Howard County | 335,411 | 99.4% | 97.8% | 97.4% | 1,336.6 | \$63,441 |
| Kent County | 19,320 | 89.4% | 62.9% | 58.8% | 69.7 | \$44,283 |
| Montgomery County | 1,052,521 | 99.7% | 94.2% | 94.0% | 2,134.5 | \$64,126 |
| Prince George's County | 946,971 | 99.6% | 96.5% | 96.2% | 1,962.0 | \$43,833 |
| Queen Anne's County | 51,711 | 90.0% | 78.7% | 71.2% | 139.1 | \$52,652 |
| Somerset County | 24,546 | 78.1% | 73.0% | 61.6% | 76.8 | \$24,176 |
| St. Mary's County | 114,877 | 91.9% | 83.3% | 77.9% | 320.3 | \$49,755 |
| Talbot County | 37,932 | 89.2% | 72.1% | 68.6% | 141.2 | \$52,555 |
| Washington County | 155,590 | 90.3% | 95.2% | 86.9% | 339.9 | \$36,528 |
| Wicomico County | 104,664 | 93.5% | 94.1% | 89.6% | 279.5 | \$35,658 |
| Worcester County | 53,866 | 87.3% | 84.5% | 77.6% | 115.0 | \$48,769 |
| Massachusetts | 6,981,974 | 98.7% | 92.1% | 91.0% | 895.0 | \$53,513 |
| Barnstable County | 232,457 | 99.5% | 85.8% | 85.4% | 589.7 | \$55,940 |
| Berkshire County | 127,859 | 92.0% | 74.3% | 68.8% | 137.9 | \$45,300 |
| Bristol County | 580,068 | 99.6% | 93.5% | 93.1% | 1,048.7 | \$42,006 |
| Dukes County | 20,868 | 97.7% | 63.0% | 61.8% | 202.2 | \$60,845 |
| Essex County | 806,765 | 99.8% | 94.5% | 94.3% | 1,638.0 | \$50,932 |
| Franklin County | 70,894 | 95.2% | 64.8% | 62.9% | 101.4 | \$40,282 |
| Hampden County | 461,041 | 98.7% | 93.2% | 92.1% | 747.2 | \$35,884 |
| Hampshire County | 162,588 | 97.8% | 89.2% | 87.3% | 308.4 | \$43,639 |
| Middlesex County | 1,617,105 | 99.7% | 94.8% | 94.6% | 1,977.2 | \$64,197 |
| Nantucket County | 14,421 | 99.4% | 57.7% | 57.6% | 312.2 | \$62,153 |
| Norfolk County | 725,531 | 99.4% | 94.6% | 94.0% | 1,831.7 | \$66,685 |
| Plymouth County | 533,069 | 99.5% | 87.8% | 87.4% | 809.5 | \$53,423 |
| Suffolk County | 766,381 | 99.9% | 99.1% | 99.0% | 13,155.9 | \$53,173 |
| Worcester County | 862,927 | 94.4% | 86.0% | 81.2% | 571.2 | \$45,433 |
| Michigan | 10,034,113 | 90.8% | 88.3% | 82.9% | 177.3 | \$37,929 |
| Alcona County | 10,417 | 46.5% | 22.7% | 9.2% | 15.4 | \$31,167 |
| Alger County | 8,807 | 57.7% | 39.6% | 30.2% | 9.6 | \$25,099 |
| Allegan County | 121,210 | 65.4% | 72.6% | 52.1% | 146.9 | \$35,220 |
| Alpena County | 28,847 | 99.6% | 65.5% | 65.2% | 50.4 | \$30,893 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Antrim County | 24,249 | 72.4% | 51.8% | 40.7% | 51.0 | \$39,166 |
| Arenac County | 15,089 | 53.0% | 38.2% | 19.8% | 41.5 | \$29,246 |
| Baraga County | 8,277 | 72.1% | 34.2% | 24.3% | 9.2 | \$28,665 |
| Barry County | 63,554 | 62.4% | 58.0% | 38.9% | 114.9 | \$38,843 |
| Bay County | 102,821 | 84.3% | 96.8% | 83.5% | 232.4 | \$33,331 |
| Benzie County | 18,297 | 67.0% | 50.8% | 37.9% | 57.2 | \$38,875 |
| Berrien County | 152,900 | 95.5% | 83.2% | 80.4% | 269.3 | \$36,764 |
| Branch County | 44,531 | 71.8% | 58.1% | 50.0% | 87.9 | \$29,824 |
| Calhoun County | 133,289 | 86.9% | 80.8% | 74.8% | 188.7 | \$32,047 |
| Cass County | 51,403 | 89.0% | 54.6% | 48.7% | 104.9 | \$36,851 |
| Charlevoix County | 26,293 | 89.5% | 57.4% | 52.3% | 63.2 | \$43,782 |
| Cheboygan County | 25,940 | 62.9% | 52.3% | 37.9% | 36.3 | \$32,679 |
| Chippewa County | 36,293 | 56.0% | 58.7% | 41.4% | 23.3 | \$31,167 |
| Clare County | 31,352 | 72.4% | 52.0% | 42.9% | 55.6 | \$27,147 |
| Clinton County | 79,748 | 84.8% | 90.5% | 77.4% | 140.8 | \$41,790 |
| Crawford County | 13,491 | 52.5% | 48.9% | 33.1% | 24.2 | \$30,379 |
| Delta County | 36,741 | 79.1% | 62.6% | 55.7% | 31.4 | \$32,311 |
| Dickinson County | 25,874 | 78.0% | 73.9% | 65.3% | 34.0 | \$35,722 |
| Eaton County | 108,992 | 84.1% | 90.4% | 79.1% | 189.5 | \$39,207 |
| Emmet County | 34,163 | 87.7% | 54.5% | 47.3% | 73.1 | \$42,373 |
| Genesee County | 401,983 | 96.1% | 99.1% | 95.5% | 631.1 | \$33,562 |
| Gladwin County | 25,728 | 71.7% | 42.2% | 35.9% | 51.3 | \$30,893 |
| Gogebic County | 14,319 | 72.5% | 75.3% | 62.4% | 13.0 | \$33,516 |
| Grand Traverse County | 96,464 | 85.9% | 57.2% | 50.5% | 207.7 | \$40,644 |
| Gratiot County | 41,100 | 98.4% | 71.3% | 70.9% | 72.3 | \$28,123 |
| Hillsdale County | 45,762 | 88.2% | 60.0% | 56.0% | 76.5 | \$30,409 |
| Houghton County | 37,035 | 78.1% | 72.2% | 63.5% | 36.7 | \$29,173 |
| Huron County | 31,248 | 59.6% | 40.1% | 26.8% | 37.4 | \$32,069 |
| Ingham County | 284,108 | 93.2% | 97.5% | 91.9% | 510.9 | \$36,077 |
| Ionia County | 66,809 | 89.1% | 86.2% | 77.3% | 116.9 | \$29,736 |
| Iosco County | 25,521 | 74.5% | 55.2% | 45.6% | 46.5 | \$28,301 |
| Iron County | 11,622 | 53.5% | 52.9% | 43.0% | 10.0 | \$31,990 |
| Isabella County | 64,447 | 94.3% | 72.5% | 70.4% | 112.5 | \$28,809 |
| Jackson County | 160,066 | 81.3% | 87.1% | 72.6% | 228.0 | \$33,065 |
| Kalamazoo County | 261,173 | 96.1% | 84.0% | 81.1% | 464.8 | \$37,852 |
| Kalkaska County | 18,182 | 47.3% | 42.8% | 23.9% | 32.5 | \$31,074 |
| Kent County | 659,083 | 95.6% | 96.6% | 92.9% | 776.4 | \$39,342 |
| Keweenaw County | 2,180 | 47.1% | 40.3% | 34.7% | 4.0 | \$41,795 |
| Lake County | 12,594 | 32.5% | 43.9% | 16.8% | 22.2 | \$25,695 |
| Lapeer County | 88,780 | 61.3% | 83.4% | 54.0% | 137.2 | \$37,419 |
| Leelanau County | 22,870 | 69.4% | 35.9% | 25.1% | 65.9 | \$48,491 |
| Lenawee County | 98,567 | 97.1% | 72.4% | 71.2% | 131.5 | \$32,976 |
| Livingston County | 196,161 | 89.9% | 91.6% | 83.2% | 347.0 | \$47,253 |
| Luce County | 5,330 | 53.3% | 24.8% | 17.6% | 5.9 | \$23,599 |
| Mackinac County | 10,941 | 55.1% | 44.7% | 31.4% | 10.7 | \$35,512 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Macomb County | 874,195 | 99.0% | 99.5% | 98.6% | 1,823.7 | \$38,015 |
| Manistee County | 25,287 | 56.0% | 48.6% | 32.9% | 46.6 | \$33,818 |
| Marquette County | 66,661 | 79.7% | 67.2% | 60.8% | 36.8 | \$32,711 |
| Mason County | 29,409 | 59.8% | 66.0% | 46.2% | 59.4 | \$34,386 |
| Mecosta County | 40,720 | 93.2% | 54.1% | 52.4% | 73.3 | \$27,692 |
| Menominee County | 23,266 | 54.4% | 56.7% | 43.9% | 22.3 | \$31,313 |
| Midland County | 83,674 | 80.4% | 93.0% | 77.4% | 161.7 | \$41,594 |
| Missaukee County | 15,213 | 33.3% | 44.5% | 16.8% | 26.9 | \$29,386 |
| Monroe County | 155,609 | 91.9% | 93.3% | 86.3% | 283.3 | \$37,704 |
| Montcalm County | 67,433 | 97.2% | 72.2% | 70.8% | 95.6 | \$28,370 |
| Montmorency County | 9,569 | 57.2% | 28.0% | 17.7% | 17.5 | \$28,394 |
| Muskegon County | 176,565 | 90.3% | 73.3% | 67.7% | 350.4 | \$30,812 |
| Newaygo County | 50,886 | 65.1% | 46.4% | 32.9% | 60.7 | \$29,687 |
| Oakland County | 1,269,431 | 98.9% | 99.2% | 98.1% | 1,463.7 | \$53,157 |
| Oceana County | 26,973 | 76.6% | 54.1% | 43.6% | 50.1 | \$28,786 |
| Ogemaw County | 20,970 | 63.5% | 43.8% | 30.9% | 37.2 | \$28,837 |
| Ontonagon County | 5,863 | 58.6% | 39.9% | 29.2% | 4.5 | \$30,182 |
| Osceola County | 23,274 | 72.2% | 66.7% | 52.5% | 41.1 | \$27,211 |
| Oscoda County | 8,404 | 60.3% | 32.5% | 26.0% | 14.9 | \$26,129 |
| Otsego County | 25,644 | 68.4% | 56.2% | 44.7% | 49.8 | \$34,190 |
| Ottawa County | 300,873 | 92.4% | 90.0% | 83.5% | 533.9 | \$39,116 |
| Presque Isle County | 13,361 | 57.5% | 40.1% | 29.1% | 20.3 | \$34,698 |
| Roscommon County | 23,708 | 85.0% | 56.7% | 47.5% | 45.6 | \$34,587 |
| Saginaw County | 188,330 | 87.8% | 96.6% | 85.7% | 235.2 | \$32,839 |
| Sanilac County | 40,657 | 50.3% | 27.7% | 17.0% | 42.2 | \$30,904 |
| Schoolcraft County | 8,188 | 51.1% | 42.9% | 30.7% | 7.0 | \$33,805 |
| Shiawassee County | 68,022 | 69.9% | 95.0% | 67.8% | 128.1 | \$33,328 |
| St. Clair County | 160,151 | 79.7% | 90.8% | 73.9% | 222.0 | \$35,483 |
| St. Joseph County | 60,874 | 95.0% | 68.1% | 64.8% | 121.6 | \$30,171 |
| Tuscola County | 52,945 | 66.4% | 39.4% | 28.6% | 65.8 | \$30,698 |
| Van Buren County | 75,692 | 69.8% | 57.6% | 42.4% | 124.5 | \$32,361 |
| Washtenaw County | 366,376 | 93.6% | 98.4% | 92.6% | 518.9 | \$49,568 |
| Wayne County | 1,757,043 | 99.4% | 99.6% | 99.1% | 2,871.7 | \$32,643 |
| Wexford County | 34,196 | 62.0% | 61.8% | 44.3% | 60.5 | \$29,617 |
| Minnesota | 5,717,184 | 94.3% | 88.8% | 85.4% | 71.8 | \$44,947 |
| Aitkin County | 16,126 | 69.5% | 48.5% | 38.5% | 8.9 | \$32,980 |
| Anoka County | 368,864 | 97.5% | 97.0% | 94.8% | 874.2 | \$43,106 |
| Becker County | 35,371 | 81.0% | 49.9% | 44.2% | 26.9 | \$38,444 |
| Beltrami County | 46,799 | 99.2% | 54.5% | 54.4% | 18.7 | \$32,055 |
| Benton County | 41,463 | 88.4% | 94.1% | 83.1% | 101.6 | \$35,885 |
| Big Stone County | 5,144 | 98.9% | 24.3% | 24.0% | 10.3 | \$35,797 |
| Blue Earth County | 69,631 | 97.0% | 82.9% | 80.4% | 93.1 | \$35,182 |
| Brown County | 25,723 | 94.5% | 72.6% | 70.9% | 42.1 | \$35,340 |
| Carlton County | 36,708 | 60.6% | 58.8% | 41.7% | 42.6 | \$35,642 |
| Carver County | 110,034 | 98.9% | 99.0% | 98.0% | 310.8 | \$55,216 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Cass County | 31,274 | 63.7% | 55.3% | 39.9% | 15.5 | \$34,505 |
| Chippewa County | 12,284 | 99.1% | 66.4% | 65.9% | 21.1 | \$32,772 |
| Chisago County | 57,988 | 76.2% | 92.4% | 72.4% | 139.8 | \$41,814 |
| Clay County | 65,929 | 99.3% | 90.1% | 89.9% | 63.1 | \$36,586 |
| Clearwater County | 8,649 | 99.2% | 53.3% | 53.0% | 8.7 | \$31,879 |
| Cook County | 5,708 | 95.2% | 54.0% | 53.3% | 3.9 | \$44,316 |
| Cottonwood County | 11,356 | 88.7% | 76.6% | 71.1% | 17.7 | \$32,818 |
| Crow Wing County | 67,948 | 88.2% | 71.0% | 65.6% | 68.1 | \$36,878 |
| Dakota County | 443,341 | 99.2% | 99.3% | 98.6% | 788.1 | \$48,894 |
| Dodge County | 20,981 | 99.9% | 72.1% | 72.1% | 47.8 | \$42,838 |
| Douglas County | 39,668 | 84.6% | 56.2% | 51.2% | 62.3 | \$41,889 |
| Faribault County | 13,926 | 86.2% | 49.2% | 43.2% | 19.5 | \$35,307 |
| Fillmore County | 21,414 | 86.0% | 63.4% | 58.6% | 24.9 | \$35,645 |
| Freeborn County | 30,718 | 99.4% | 70.6% | 70.2% | 43.4 | \$36,751 |
| Goodhue County | 48,013 | 94.0% | 73.5% | 71.7% | 63.5 | \$40,087 |
| Grant County | 6,136 | 82.2% | 39.1% | 36.7% | 11.2 | \$36,750 |
| Hennepin County | 1,260,121 | 99.3% | 99.8% | 99.1% | 2,274.4 | \$55,199 |
| Houston County | 18,800 | 84.5% | 49.1% | 46.9% | 34.1 | \$39,340 |
| Hubbard County | 21,960 | 92.3% | 56.2% | 52.7% | 23.7 | \$36,944 |
| Isanti County | 42,727 | 59.7% | 83.9% | 56.8% | 98.1 | \$38,609 |
| Itasca County | 45,205 | 92.8% | 62.3% | 59.4% | 16.9 | \$34,528 |
| Jackson County | 9,893 | 95.5% | 56.6% | 54.1% | 14.1 | \$37,818 |
| Kanabec County | 16,463 | 27.4% | 59.8% | 25.1% | 31.6 | \$33,805 |
| Kandiyohi County | 43,839 | 95.7% | 85.8% | 82.5% | 55.0 | \$35,814 |
| Kittson County | 4,059 | 95.2% | 34.0% | 33.9% | 3.7 | \$35,565 |
| Koochiching County | 11,844 | 83.1% | 52.0% | 49.2% | 3.8 | \$36,515 |
| Lac qui Parle County | 6,689 | 100.0% | 43.7% | 43.7% | 8.7 | \$37,520 |
| Lake County | 10,939 | 90.6% | 75.2% | 71.5% | 5.2 | \$39,930 |
| Lake of the Woods County | 3,871 | 80.9% | 57.6% | 53.3% | 3.0 | \$35,308 |
| Le Sueur County | 29,153 | 98.5% | 78.0% | 77.3% | 65.0 | \$41,400 |
| Lincoln County | 5,580 | 99.1% | 41.6% | 41.1% | 10.4 | \$35,638 |
| Lyon County | 25,262 | 99.9% | 78.0% | 77.9% | 35.4 | \$35,256 |
| Mahnomen County | 5,328 | 71.3% | 38.0% | 32.8% | 9.6 | \$24,710 |
| Marshall County | 8,861 | 94.6% | 45.3% | 44.7% | 5.0 | \$35,920 |
| Martin County | 19,650 | 98.6% | 62.1% | 61.9% | 27.6 | \$35,152 |
| McLeod County | 36,714 | 97.5% | 97.2% | 95.0% | 74.7 | \$39,361 |
| Meeker County | 23,496 | 92.9% | 80.5% | 75.5% | 38.6 | \$37,233 |
| Mille Lacs County | 27,280 | 81.7% | 76.8% | 65.9% | 47.7 | \$33,933 |
| Morrison County | 34,246 | 82.0% | 63.8% | 54.0% | 30.4 | \$34,269 |
| Mower County | 40,140 | 98.7% | 75.6% | 75.4% | 56.4 | \$33,921 |
| Murray County | 8,060 | 98.8% | 61.3% | 60.8% | 11.4 | \$38,783 |
| Nicollet County | 34,441 | 93.0% | 83.4% | 79.2% | 76.8 | \$41,658 |
| Nobles County | 21,947 | 96.0% | 79.7% | 77.3% | 30.7 | \$29,786 |
| Norman County | 6,377 | 87.7% | 50.2% | 46.9% | 7.3 | \$36,245 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Olmsted County | 164,020 | 99.1% | 97.5% | 96.9% | 251.0 | \$49,799 |
| Otter Tail County | 60,519 | 75.9% | 49.4% | 41.8% | 30.7 | \$37,202 |
| Pennington County | 13,845 | 98.7% | 75.0% | 74.4% | 22.5 | \$37,342 |
| Pine County | 29,446 | 48.8% | 57.7% | 37.6% | 20.9 | \$32,335 |
| Pipestone County | 9,355 | 99.0% | 59.8% | 59.5% | 20.1 | \$34,973 |
| Polk County | 30,731 | 99.0% | 66.9% | 66.7% | 15.6 | \$34,273 |
| Pope County | 11,431 | 91.6% | 35.0% | 32.7% | 17.1 | \$38,905 |
| Ramsey County | 536,413 | 99.6% | 99.9% | 99.5% | 3,523.3 | \$43,203 |
| Red Lake County | 3,874 | 94.7% | 62.2% | 61.7% | 9.0 | \$35,198 |
| Redwood County | 15,361 | 80.5% | 54.7% | 49.8% | 17.5 | \$33,175 |
| Renville County | 14,525 | 97.9% | 61.4% | 60.7% | 14.8 | \$34,554 |
| Rice County | 67,693 | 96.4% | 93.5% | 90.5% | 136.5 | \$37,050 |
| Rock County | 9,537 | 97.7% | 22.9% | 21.9% | 19.8 | \$38,472 |
| Roseau County | 15,292 | 94.8% | 61.3% | 58.8% | 9.1 | \$36,125 |
| Scott County | 154,520 | 98.9% | 99.2% | 98.2% | 433.7 | \$51,259 |
| Sherburne County | 100,824 | 89.1% | 95.7% | 85.9% | 232.9 | \$41,412 |
| Sibley County | 14,955 | 94.6% | 73.1% | 71.3% | 25.4 | \$37,919 |
| St. Louis County | 199,532 | 79.2% | 86.3% | 74.0% | 31.9 | \$37,850 |
| Stearns County | 160,405 | 92.5% | 95.3% | 88.7% | 119.5 | \$36,087 |
| Steele County | 37,398 | 100.0% | 68.8% | 68.8% | 87.0 | \$40,146 |
| Stevens County | 9,637 | 98.2% | 24.3% | 24.2% | 17.1 | \$38,425 |
| Swift County | 9,755 | 99.2% | 27.4% | 27.2% | 13.1 | \$35,595 |
| Todd County | 25,538 | 63.9% | 52.8% | 39.9% | 27.0 | \$30,812 |
| Traverse County | 3,275 | 82.3% | 45.5% | 43.3% | 5.7 | \$36,023 |
| Wabasha County | 21,658 | 93.7% | 57.9% | 57.3% | 41.4 | \$40,471 |
| Wadena County | 14,307 | 99.3% | 36.9% | 36.8% | 26.7 | \$28,011 |
| Waseca County | 18,893 | 100.0% | 77.5% | 77.5% | 44.6 | \$35,814 |
| Washington County | 275,912 | 94.8% | 97.7% | 93.2% | 717.2 | \$54,418 |
| Watonwan County | 11,075 | 100.0% | 76.0% | 76.0% | 25.5 | \$34,363 |
| Wilkin County | 6,350 | 84.5% | 63.6% | 58.8% | 8.5 | \$38,317 |
| Winona County | 49,478 | 97.1% | 51.7% | 51.1% | 79.0 | \$34,889 |
| Wright County | 148,003 | 86.9% | 98.8% | 86.5% | 223.9 | \$43,067 |
| Yellow Medicine County | 9,486 | 99.5% | 56.3% | 56.0% | 12.5 | \$36,737 |
| Mississippi | 2,940,057 | 78.9% | 70.3% | 61.4% | 62.7 | \$29,209 |
| Adams County | 28,408 | 77.7% | 72.2% | 64.2% | 61.4 | \$22,924 |
| Alcorn County | 34,204 | 99.9% | 63.2% | 63.1% | 85.5 | \$27,320 |
| Amite County | 12,619 | 0.6% | 30.3% | 0.6% | 17.3 | \$24,135 |
| Attala County | 17,509 | 55.4% | 57.2% | 43.3% | 23.8 | \$27,625 |
| Benton County | 7,550 | 37.9% | 35.9% | 12.6% | 18.6 | \$24,690 |
| Bolivar County | 29,370 | 79.8% | 53.4% | 48.6% | 33.5 | \$25,440 |
| Calhoun County | 12,781 | 83.7% | 55.6% | 52.9% | 21.8 | \$24,192 |
| Carroll County | 9,731 | 86.0% | 34.8% | 28.8% | 15.5 | \$29,588 |
| Chickasaw County | 16,812 | 85.5% | 51.7% | 45.4% | 33.5 | \$21,968 |
| Choctaw County | 8,037 | 57.3% | 17.8% | 10.6% | 19.2 | \$27,628 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Claiborne County | 8,805 | 5.3% | 56.7% | 1.7% | 18.1 | \$17,250 |
| Clarke County | 15,271 | 71.1% | 49.9% | 40.9% | 22.1 | \$26,435 |
| Clay County | 18,380 | 92.4% | 61.9% | 60.4% | 44.8 | \$24,702 |
| Coahoma County | 20,197 | 75.5% | 80.1% | 71.4% | 36.5 | \$22,701 |
| Copiah County | 27,719 | 28.3% | 61.0% | 24.3% | 35.7 | \$28,072 |
| Covington County | 18,098 | 11.1% | 44.1% | 6.3% | 43.7 | \$24,147 |
| DeSoto County | 191,723 | 94.2% | 93.6% | 89.6% | 402.5 | \$34,989 |
| Forrest County | 78,110 | 90.7% | 86.1% | 80.8% | 167.6 | \$28,197 |
| Franklin County | 7,642 | 35.4% | 42.6% | 25.1% | 13.6 | \$26,844 |
| George County | 25,206 | 48.4% | 35.6% | 18.1% | 52.7 | \$24,756 |
| Greene County | 13,552 | 4.2% | 37.6% | 1.1% | 19.0 | \$18,257 |
| Grenada County | 21,088 | 80.7% | 55.7% | 49.5% | 50.0 | \$27,128 |
| Hancock County | 46,094 | 98.8% | 64.9% | 64.0% | 97.3 | \$36,883 |
| Harrison County | 211,044 | 96.8% | 90.4% | 89.4% | 367.9 | \$30,120 |
| Hinds County | 217,730 | 89.3% | 96.2% | 88.9% | 250.3 | \$27,943 |
| Holmes County | 16,121 | 66.1% | 63.7% | 50.5% | 21.3 | \$20,132 |
| Humphreys County | 7,333 | 73.1% | 62.4% | 52.6% | 17.5 | \$24,506 |
| Issaquena County | 1,273 | 0.0% | 27.3% | 0.0% | 3.1 | \$13,539 |
| Itawamba County | 23,903 | 92.0% | 50.8% | 48.1% | 44.9 | \$33,243 |
| Jackson County | 144,975 | 92.6% | 86.6% | 82.2% | 200.6 | \$31,509 |
| Jasper County | 16,167 | 43.8% | 30.5% | 17.0% | 23.9 | \$24,068 |
| Jefferson County | 7,087 | 0.1% | 23.4% | 0.0% | 13.6 | \$19,366 |
| Jefferson Davis County | 11,088 | 23.2% | 37.3% | 8.3% | 27.1 | \$22,693 |
| Jones County | 66,569 | 91.0% | 49.2% | 46.3% | 95.8 | \$26,063 |
| Kemper County | 8,654 | 72.1% | 45.0% | 34.1% | 11.3 | \$22,046 |
| Lafayette County | 57,615 | 93.9% | 76.7% | 71.5% | 91.2 | \$32,536 |
| Lamar County | 65,783 | 70.2% | 76.7% | 65.8% | 132.5 | \$37,681 |
| Lauderdale County | 70,904 | 96.3% | 77.4% | 75.2% | 100.8 | \$26,590 |
| Lawrence County | 11,713 | 2.3% | 41.8% | 1.8% | 27.2 | \$24,809 |
| Leake County | 21,135 | 27.8% | 62.0% | 26.6% | 36.3 | \$25,662 |
| Lee County | 82,959 | 97.9% | 56.2% | 55.4% | 184.4 | \$33,209 |
| Leflore County | 26,570 | 80.6% | 78.9% | 68.4% | 44.7 | \$23,281 |
| Lincoln County | 34,717 | 41.3% | 40.2% | 26.9% | 59.2 | \$25,775 |
| Lowndes County | 57,603 | 99.3% | 72.2% | 72.0% | 114.0 | \$29,750 |
| Madison County | 111,113 | 88.6% | 93.0% | 86.2% | 155.5 | \$46,538 |
| Marion County | 24,050 | 51.4% | 22.2% | 7.6% | 44.3 | \$23,055 |
| Marshall County | 34,110 | 60.8% | 61.2% | 42.1% | 48.3 | \$27,680 |
| Monroe County | 33,577 | 86.6% | 54.0% | 47.1% | 43.9 | \$27,619 |
| Montgomery County | 9,530 | 81.5% | 58.3% | 50.2% | 23.4 | \$24,126 |
| Neshoba County | 28,673 | 41.1% | 52.4% | 29.4% | 50.3 | \$23,538 |
| Newton County | 21,029 | 38.9% | 57.7% | 30.4% | 36.4 | \$28,364 |
| Noxubee County | 9,990 | 32.0% | 61.4% | 13.9% | 14.4 | \$19,804 |
| Oktibbeha County | 51,427 | 93.4% | 72.2% | 67.4% | 112.2 | \$28,221 |
| Panola County | 32,661 | 89.6% | 52.0% | 48.5% | 47.7 | \$25,822 |
| Pearl River County | 57,261 | 85.7% | 45.3% | 36.2% | 70.6 | \$27,549 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Perry County | 11,368 | 67.0% | 20.3% | 16.9% | 17.6 | \$24,935 |
| Pike County | 39,644 | 64.6% | 56.2% | 46.5% | 96.9 | \$23,013 |
| Pontotoc County | 31,389 | 76.8% | 59.8% | 47.1% | 63.1 | \$26,359 |
| Prentiss County | 24,792 | 98.4% | 48.3% | 48.3% | 59.7 | \$27,979 |
| Quitman County | 5,701 | 74.3% | 69.0% | 63.1% | 14.1 | \$18,546 |
| Rankin County | 158,979 | 88.4% | 93.0% | 85.3% | 205.0 | \$36,605 |
| Scott County | 27,707 | 46.3% | 63.2% | 39.9% | 45.5 | \$23,043 |
| Sharkey County | 3,488 | 62.6% | 55.7% | 50.8% | 8.1 | \$22,203 |
| Simpson County | 25,587 | 8.3% | 60.7% | 6.7% | 43.4 | \$27,920 |
| Smith County | 14,092 | 34.5% | 40.8% | 17.5% | 22.1 | \$25,394 |
| Stone County | 18,669 | 43.7% | 48.2% | 28.4% | 41.9 | \$25,768 |
| Sunflower County | 24,811 | 67.7% | 51.3% | 44.4% | 35.6 | \$18,851 |
| Tallahatchie County | 12,035 | 57.0% | 65.3% | 45.3% | 18.7 | \$20,348 |
| Tate County | 28,296 | 73.5% | 59.3% | 50.4% | 69.9 | \$28,306 |
| Tippah County | 21,431 | 96.2% | 45.8% | 44.2% | 46.8 | \$27,762 |
| Tishomingo County | 18,619 | 99.4% | 57.5% | 57.1% | 43.9 | \$26,896 |
| Tunica County | 9,458 | 57.7% | 54.1% | 42.8% | 20.8 | \$20,086 |
| Union County | 28,125 | 77.0% | 57.0% | 47.5% | 67.7 | \$27,373 |
| Walthall County | 13,761 | 0.5% | 28.6% | 0.3% | 34.1 | \$25,673 |
| Warren County | 42,649 | 80.8% | 73.5% | 65.0% | 72.5 | \$31,701 |
| Washington County | 42,514 | 80.4% | 69.8% | 59.9% | 58.7 | \$23,190 |
| Wayne County | 19,681 | 91.1% | 44.2% | 42.4% | 24.3 | \$24,479 |
| Webster County | 9,993 | 91.6% | 46.8% | 44.8% | 23.7 | \$27,836 |
| Wilkinson County | 8,143 | 0.9% | 27.6% | 0.9% | 12.0 | \$22,479 |
| Winston County | 17,543 | 62.5% | 42.5% | 34.9% | 28.9 | \$27,743 |
| Yalobusha County | 12,364 | 54.9% | 48.8% | 37.5% | 26.5 | \$24,719 |
| Yazoo County | 25,948 | 47.7% | 48.9% | 36.7% | 28.1 | \$19,836 |
| Missouri | 6,177,957 | 89.0% | 88.6% | 82.0% | 89.9 | \$36,754 |
| Adair County | 25,165 | 89.4% | 79.8% | 75.9% | 44.4 | \$28,976 |
| Andrew County | 18,003 | 88.9% | 76.1% | 68.6% | 41.6 | \$33,722 |
| Atchison County | 5,182 | 46.7% | 9.0% | 2.5% | 9.5 | \$32,549 |
| Audrain County | 24,434 | 68.5% | 74.7% | 61.1% | 35.3 | \$27,133 |
| Barry County | 34,926 | 68.7% | 70.7% | 49.2% | 44.9 | \$30,932 |
| Barton County | 11,694 | 32.9% | 66.3% | 21.0% | 19.8 | \$25,637 |
| Bates County | 16,177 | 58.3% | 74.0% | 52.0% | 19.3 | \$27,333 |
| Benton County | 20,224 | 35.6% | 56.6% | 18.5% | 28.7 | \$31,484 |
| Bollinger County | 10,518 | 5.2% | 50.3% | 2.6% | 17.0 | \$24,647 |
| Boone County | 187,690 | 91.4% | 81.4% | 77.9% | 273.8 | \$37,393 |
| Buchanan County | 82,911 | 98.0% | 95.7% | 94.1% | 203.1 | \$31,886 |
| Butler County | 42,179 | 71.4% | 76.1% | 62.4% | 60.7 | \$25,242 |
| Caldwell County | 8,933 | 44.2% | 77.0% | 39.1% | 21.0 | \$29,673 |
| Callaway County | 44,762 | 97.9% | 72.9% | 71.0% | 53.6 | \$31,874 |
| Camden County | 43,768 | 100.0% | 75.3% | 75.3% | 66.7 | \$35,927 |
| Cape Girardeau County | 82,899 | 85.3% | 88.5% | 79.7% | 143.3 | \$32,619 |
| Carroll County | 8,423 | 67.7% | 70.5% | 53.6% | 12.1 | \$30,403 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Carter County | 5,268 | 8.0% | 56.4% | 6.7% | 10.4 | \$27,150 |
| Cass County | 110,394 | 91.3% | 97.5% | 90.0% | 158.5 | \$38,766 |
| Cedar County | 14,601 | 74.2% | 47.0% | 39.4% | 30.8 | \$27,243 |
| Chariton County | 7,386 | 66.7% | 74.2% | 54.7% | 9.8 | \$28,616 |
| Christian County | 93,114 | 79.3% | 95.1% | 78.1% | 165.5 | \$35,587 |
| Clark County | 6,723 | 50.0% | 59.2% | 33.3% | 13.3 | \$26,417 |
| Clay County | 257,033 | 97.5% | 99.4% | 97.0% | 646.4 | \$40,278 |
| Clinton County | 21,328 | 84.9% | 84.4% | 76.3% | 50.9 | \$31,924 |
| Cole County | 76,969 | 100.0% | 85.6% | 85.6% | 196.6 | \$35,519 |
| Cooper County | 16,772 | 81.5% | 63.4% | 56.2% | 29.7 | \$27,471 |
| Crawford County | 22,659 | 100.0% | 56.7% | 56.7% | 30.5 | \$29,581 |
| Dade County | 7,660 | 51.7% | 47.4% | 33.6% | 15.6 | \$28,731 |
| Dallas County | 17,626 | 46.6% | 58.2% | 36.0% | 32.6 | \$24,646 |
| Daviss County | 8,435 | 63.0% | 62.7% | 42.6% | 15.0 | \$29,497 |
| DeKalb County | 11,336 | 88.6% | 75.3% | 68.8% | 26.9 | \$25,591 |
| Dent County | 14,467 | 100.0% | 46.2% | 46.2% | 19.2 | \$27,342 |
| Douglas County | 11,975 | 38.0% | 29.3% | 17.2% | 14.7 | \$27,762 |
| Dunklin County | 27,406 | 91.5% | 82.4% | 78.1% | 50.6 | \$26,123 |
| Franklin County | 105,879 | 100.0% | 89.9% | 89.9% | 114.8 | \$35,679 |
| Gasconade County | 14,768 | 100.0% | 65.7% | 65.7% | 28.5 | \$34,414 |
| Gentry County | 6,253 | 92.1% | 70.2% | 67.4% | 12.7 | \$28,968 |
| Greene County | 303,293 | 96.3% | 97.8% | 94.7% | 449.1 | \$33,275 |
| Grundy County | 9,838 | 83.8% | 71.6% | 63.8% | 22.6 | \$27,809 |
| Harrison County | 8,199 | 74.3% | 62.3% | 52.0% | 11.3 | \$24,530 |
| Henry County | 22,438 | 40.9% | 85.7% | 40.9% | 32.2 | \$31,801 |
| Hickory County | 8,630 | 19.7% | 53.1% | 13.5% | 21.6 | \$21,476 |
| Holt County | 4,262 | 29.2% | 40.2% | 24.7% | 9.2 | \$33,121 |
| Howard County | 10,168 | 75.7% | 47.3% | 41.1% | 21.9 | \$27,474 |
| Howell County | 40,631 | 69.9% | 64.4% | 53.6% | 43.8 | \$24,389 |
| Iron County | 9,414 | 100.0% | 51.9% | 51.9% | 17.1 | \$26,798 |
| Jackson County | 716,531 | 97.2% | 99.8% | 97.1% | 1,185.3 | \$36,890 |
| Jasper County | 124,075 | 86.0% | 92.9% | 82.0% | 194.3 | \$28,371 |
| Jefferson County | 229,336 | 88.9% | 96.9% | 87.4% | 349.4 | \$36,184 |
| Johnson County | 54,368 | 74.4% | 79.3% | 64.2% | 65.6 | \$30,639 |
| Knox County | 3,776 | 29.4% | 10.3% | 1.6% | 7.5 | \$22,902 |
| Laclede County | 36,313 | 100.0% | 43.4% | 43.4% | 47.5 | \$27,790 |
| Lafayette County | 32,961 | 63.4% | 88.3% | 59.9% | 52.5 | \$34,166 |
| Lawrence County | 38,683 | 62.3% | 81.1% | 55.0% | 63.2 | \$26,407 |
| Lewis County | 9,891 | 52.0% | 69.8% | 44.3% | 19.6 | \$24,407 |
| Lincoln County | 63,155 | 79.5% | 89.3% | 74.5% | 100.8 | \$33,925 |
| Linn County | 11,820 | 86.2% | 78.4% | 70.4% | 19.2 | \$32,065 |
| Livingston County | 14,402 | 77.9% | 77.2% | 67.2% | 27.1 | \$31,495 |
| Macon County | 15,049 | 73.1% | 62.4% | 51.8% | 18.8 | \$27,227 |
| Madison County | 12,753 | 67.1% | 69.5% | 59.3% | 25.8 | \$31,299 |
| Maries County | 8,431 | 100.0% | 39.4% | 39.4% | 16.0 | \$30,095 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Marion County | 28,438 | 83.1% | 89.8% | 78.8% | 65.1 | \$30,455 |
| McDonald County | 23,588 | 26.1% | 65.0% | 21.7% | 43.7 | \$23,210 |
| Mercer County | 3,437 | 92.3% | 49.8% | 47.9% | 7.6 | \$26,850 |
| Miller County | 25,403 | 100.0% | 69.5% | 69.5% | 42.9 | \$29,347 |
| Mississippi County | 11,688 | 90.7% | 86.5% | 78.2% | 28.4 | \$21,070 |
| Moniteau County | 15,220 | 88.2% | 69.3% | 61.5% | 36.7 | \$28,546 |
| Monroe County | 8,652 | 54.2% | 67.4% | 48.8% | 13.4 | \$28,787 |
| Montgomery County | 11,470 | 65.0% | 63.8% | 45.5% | 21.4 | \$29,570 |
| Morgan County | 21,785 | 100.0% | 57.8% | 57.8% | 36.5 | \$27,836 |
| New Madrid County | 15,695 | 95.6% | 79.0% | 75.9% | 23.3 | \$26,357 |
| Newton County | 60,011 | 70.6% | 86.3% | 65.3% | 96.1 | \$32,893 |
| Nodaway County | 20,670 | 93.4% | 57.8% | 56.0% | 23.6 | \$28,136 |
| Oregon County | 8,732 | 41.6% | 47.4% | 31.4% | 11.1 | \$21,405 |
| Osage County | 13,399 | 100.0% | 55.1% | 55.1% | 22.1 | \$38,553 |
| Ozark County | 8,940 | 3.6% | 36.8% | 1.0% | 12.0 | \$26,638 |
| Pemiscot County | 14,841 | 97.5% | 69.5% | 67.7% | 30.1 | \$24,295 |
| Perry County | 18,858 | 70.9% | 69.3% | 59.2% | 39.8 | \$30,731 |
| Pettis County | 43,353 | 78.4% | 87.2% | 74.4% | 63.5 | \$30,991 |
| Phelps County | 45,313 | 100.0% | 70.6% | 70.6% | 67.5 | \$28,335 |
| Pike County | 17,664 | 75.8% | 64.7% | 58.5% | 26.3 | \$26,206 |
| Platte County | 110,534 | 95.0% | 97.1% | 92.7% | 263.3 | \$47,440 |
| Polk County | 32,693 | 72.7% | 68.0% | 58.7% | 51.4 | \$26,804 |
| Pulaski County | 53,941 | 100.0% | 67.4% | 67.4% | 98.6 | \$27,098 |
| Putnam County | 4,666 | 97.7% | 64.3% | 64.2% | 9.0 | \$33,176 |
| Ralls County | 10,420 | 95.9% | 63.4% | 61.3% | 22.2 | \$29,625 |
| Randolph County | 24,622 | 72.7% | 76.5% | 61.9% | 51.0 | \$25,496 |
| Ray County | 23,107 | 66.8% | 87.5% | 63.3% | 40.6 | \$35,601 |
| Reynolds County | 6,006 | 100.0% | 25.1% | 25.1% | 7.4 | \$25,204 |
| Ripley County | 10,703 | 30.1% | 42.7% | 17.8% | 17.0 | \$22,076 |
| Saline County | 23,007 | 81.4% | 85.8% | 77.0% | 30.5 | \$26,704 |
| Schuyler County | 4,002 | 72.2% | 54.4% | 31.4% | 13.0 | \$22,625 |
| Scotland County | 4,643 | 93.2% | 47.3% | 47.3% | 10.6 | \$27,808 |
| Scott County | 37,840 | 96.1% | 85.2% | 81.9% | 90.1 | \$29,687 |
| Shannon County | 7,193 | 100.0% | 51.5% | 51.5% | 7.2 | \$23,661 |
| Shelby County | 5,982 | 44.8% | 70.2% | 38.9% | 11.9 | \$27,547 |
| St. Charles County | 413,803 | 95.6% | 99.4% | 95.3% | 738.3 | \$47,746 |
| St. Clair County | 9,576 | 29.3% | 38.6% | 11.9% | 14.2 | \$24,845 |
| St. Francois County | 66,969 | 85.7% | 87.5% | 80.0% | 148.2 | \$25,304 |
| St. Louis County | 990,414 | 97.9% | 99.7% | 97.8% | 1,950.1 | \$49,009 |
| St. Louis city | 286,578 | 97.4% | 100.0% | 97.4% | 4,642.0 | \$36,722 |
| Ste. Genevieve County | 18,644 | 69.4% | 69.8% | 55.4% | 37.4 | \$33,060 |
| Stoddard County | 28,377 | 81.3% | 78.0% | 66.5% | 34.5 | \$26,614 |
| Stone County | 32,136 | 24.9% | 66.5% | 21.9% | 69.3 | \$31,865 |
| Sullivan County | 5,840 | 81.0% | 59.0% | 52.1% | 9.0 | \$25,882 |
| Taney County | 56,821 | 82.9% | 76.9% | 67.4% | 89.9 | \$28,267 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Texas County | 25,336 | 100.0% | 44.2% | 44.2% | 21.5 | \$23,621 |
| Vernon County | 19,651 | 73.8% | 71.6% | 60.6% | 23.8 | \$26,515 |
| Warren County | 37,260 | 59.9% | 82.4% | 56.4% | 86.9 | \$34,909 |
| Washington County | 23,441 | 100.0% | 63.1% | 63.1% | 30.8 | \$28,191 |
| Wayne County | 10,792 | 25.4% | 30.1% | 17.0% | 14.2 | \$23,041 |
| Webster County | 40,335 | 53.5% | 63.5% | 46.6% | 68.1 | \$27,611 |
| Worth County | 1,955 | 74.3% | 56.8% | 47.1% | 7.3 | \$30,800 |
| Wright County | 19,156 | 100.0% | 52.2% | 52.2% | 28.1 | \$22,602 |
| Montana | 1,122,867 | 75.2% | 82.0% | 66.4% | 7.7 | \$37,837 |
| Beaverhead County | 9,719 | 69.6% | 68.1% | 50.5% | 1.8 | \$34,640 |
| Big Horn County | 12,851 | 55.5% | 69.8% | 44.9% | 2.6 | \$21,849 |
| Blaine County | 6,936 | 76.4% | 48.1% | 32.2% | 1.6 | \$24,353 |
| Broadwater County | 7,793 | 29.2% | 56.4% | 20.8% | 6.5 | \$34,956 |
| Carbon County | 11,179 | 31.9% | 75.8% | 29.3% | 5.5 | \$40,838 |
| Carter County | 1,382 | 42.9% | 1.9% | 0.4% | 0.4 | \$28,824 |
| Cascade County | 84,864 | 83.5% | 82.8% | 71.7% | 31.5 | \$34,481 |
| Chouteau County | 5,898 | 87.4% | 39.7% | 39.0% | 1.5 | \$28,980 |
| Custer County | 12,032 | 73.6% | 91.6% | 70.8% | 3.2 | \$34,830 |
| Daniels County | 1,628 | 93.0% | 0.0% | 0.0% | 1.1 | \$33,757 |
| Dawson County | 8,830 | 71.7% | 39.5% | 29.7% | 3.7 | \$37,705 |
| Deer Lodge County | 9,510 | 81.4% | 91.2% | 77.8% | 12.9 | \$30,185 |
| Fallon County | 3,011 | 68.5% | 26.6% | 19.1% | 1.9 | \$42,516 |
| Fergus County | 11,663 | 71.3% | 76.3% | 56.8% | 2.7 | \$34,932 |
| Flathead County | 111,814 | 66.4% | 85.6% | 59.8% | 22.0 | \$37,984 |
| Gallatin County | 124,857 | 91.1% | 94.2% | 88.2% | 47.9 | \$47,269 |
| Garfield County | 1,218 | 45.3% | 46.4% | 38.7% | 0.3 | \$33,745 |
| Glacier County | 13,681 | 32.0% | 58.2% | 28.6% | 4.6 | \$21,438 |
| Golden Valley County | 835 | 74.3% | 36.2% | 30.9% | 0.7 | \$31,204 |
| Granite County | 3,502 | 5.8% | 69.2% | 4.2% | 2.0 | \$33,776 |
| Hill County | 16,068 | 90.3% | 74.7% | 71.4% | 5.5 | \$27,996 |
| Jefferson County | 12,826 | 37.6% | 75.3% | 29.7% | 7.7 | \$39,963 |
| Judith Basin County | 2,105 | 88.0% | 48.2% | 44.1% | 1.1 | \$36,713 |
| Lake County | 32,853 | 61.4% | 69.9% | 50.7% | 22.0 | \$31,177 |
| Lewis and Clark County | 73,832 | 79.1% | 92.6% | 76.0% | 21.3 | \$41,274 |
| Liberty County | 1,972 | 76.4% | 41.5% | 38.5% | 1.4 | \$34,682 |
| Lincoln County | 21,525 | 57.7% | 64.6% | 47.9% | 6.0 | \$29,387 |
| Madison County | 9,265 | 74.7% | 71.5% | 56.4% | 2.6 | \$40,358 |
| McCone County | 1,709 | 48.8% | 46.5% | 37.2% | 0.6 | \$39,284 |
| Meagher County | 2,013 | 84.6% | 74.8% | 70.9% | 0.8 | \$37,498 |
| Mineral County | 5,058 | 10.6% | 78.8% | 10.6% | 4.1 | \$32,940 |
| Missoula County | 121,041 | 83.8% | 86.9% | 75.4% | 46.7 | \$40,311 |
| Musselshell County | 5,197 | 55.1% | 23.8% | 16.2% | 2.8 | \$32,506 |
| Park County | 17,790 | 61.5% | 81.7% | 59.9% | 6.3 | \$44,273 |
| Petroleum County | 524 | 45.8% | 44.5% | 36.1% | 0.3 | \$32,590 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Phillips County | 4,240 | 81.6% | 63.2% | 61.7% | 0.8 | \$32,450 |
| Pondera County | 6,078 | 37.8% | 53.4% | 23.4% | 3.7 | \$30,424 |
| Powder River County | 1,725 | 17.1% | 7.8% | 1.8% | 0.5 | \$38,588 |
| Powell County | 7,051 | 45.2% | 85.9% | 44.9% | 3.0 | \$29,675 |
| Prairie County | 1,107 | 27.1% | 22.6% | 12.1% | 0.6 | \$28,287 |
| Ravalli County | 47,298 | 90.4% | 74.6% | 70.0% | 19.8 | \$38,555 |
| Richland County | 11,237 | 64.2% | 61.5% | 45.1% | 5.4 | \$34,169 |
| Roosevelt County | 10,572 | 64.4% | 71.7% | 58.8% | 4.5 | \$20,564 |
| Rosebud County | 8,088 | 11.3% | 63.3% | 8.4% | 1.6 | \$27,655 |
| Sanders County | 13,442 | 47.4% | 63.4% | 36.0% | 4.9 | \$29,707 |
| Sheridan County | 3,564 | 76.7% | 59.5% | 51.8% | 2.1 | \$42,653 |
| Silver Bow County | 36,068 | 84.4% | 97.0% | 84.0% | 50.2 | \$35,047 |
| Stillwater County | 9,177 | 45.2% | 67.0% | 35.9% | 5.1 | \$45,245 |
| Sweet Grass County | 3,715 | 80.1% | 74.1% | 69.0% | 2.0 | \$35,495 |
| Teton County | 6,368 | 89.4% | 66.2% | 61.0% | 2.8 | \$30,874 |
| Toole County | 5,082 | 2.4% | 74.3% | 0.6% | 2.7 | \$28,621 |
| Treasure County | 758 | 9.4% | 46.6% | 6.2% | 0.8 | \$37,349 |
| Valley County | 7,513 | 57.3% | 46.1% | 39.1% | 1.5 | \$30,941 |
| Wheatland County | 2,032 | 94.3% | 72.5% | 71.3% | 1.4 | \$28,410 |
| Wibaux County | 919 | 11.2% | 68.7% | 2.2% | 1.0 | \$31,089 |
| Yellowstone County | 169,852 | 87.4% | 94.4% | 84.2% | 64.5 | \$40,978 |
| N. Mariana Isl. | 51,475 | 31.9% | 0.2% | 0.2% | 282.3 | NA |
| Rota Municipality | 2,194 | 100.0% | 0.0% | 0.0% | 66.8 | NA |
| Saipan Municipality | 46,769 | 27.3% | 0.3% | 0.2% | 1,018.8 | NA |
| Tinian Municipality | 2,512 | 57.9% | 0.0% | 0.0% | 60.1 | NA |
| Nebraska | 1,967,923 | 94.4% | 73.1% | 71.5% | 25.6 | \$38,585 |
| Adams County | 30,970 | 99.7% | 72.5% | 72.5% | 55.0 | \$34,688 |
| Antelope County | 6,293 | 88.0% | 8.8% | 7.9% | 7.3 | \$32,172 |
| Arthur County | 433 | 44.8% | 0.0% | 0.0% | 0.6 | \$31,210 |
| Banner County | 660 | 66.5% | 0.3% | 0.2% | 0.9 | \$38,474 |
| Blaine County | 453 | 43.0% | 0.0% | 0.0% | 0.6 | \$40,093 |
| Boone County | 5,385 | 68.6% | 0.0% | 0.0% | 7.8 | \$36,583 |
| Box Butte County | 10,672 | 96.3% | 0.4% | 0.4% | 9.9 | \$32,141 |
| Boyd County | 1,741 | 99.9% | 7.4% | 7.4% | 3.2 | \$35,198 |
| Brown County | 2,872 | 83.0% | 2.1% | 2.1% | 2.4 | \$31,772 |
| Buffalo County | 50,586 | 91.3% | 79.5% | 74.7% | 52.2 | \$36,327 |
| Burt County | 6,755 | 95.6% | 42.2% | 41.3% | 13.7 | \$33,457 |
| Butler County | 8,427 | 96.7% | 0.2% | 0.2% | 14.4 | \$39,639 |
| Cass County | 27,122 | 87.9% | 46.9% | 42.7% | 48.7 | \$40,941 |
| Cedar County | 8,371 | 79.3% | 23.2% | 18.7% | 11.3 | \$35,820 |
| Chase County | 3,772 | 88.0% | 50.8% | 50.6% | 4.2 | \$34,477 |
| Cherry County | 5,464 | 68.5% | 52.4% | 45.4% | 0.9 | \$31,424 |
| Cheyenne County | 9,511 | 87.0% | 69.1% | 67.8% | 8.0 | \$30,467 |
| Clay County | 6,049 | 97.6% | 5.9% | 5.6% | 10.6 | \$36,425 |
| Colfax County | 10,444 | 92.8% | 16.7% | 16.0% | 25.4 | \$29,436 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Cuming County | 8,929 | 99.1% | 13.8% | 13.8% | 15.7 | \$34,825 |
| Custer County | 10,476 | 58.2% | 67.0% | 47.8% | 4.1 | \$35,562 |
| Dakota County | 21,042 | 95.7% | 91.2% | 88.8% | 79.6 | \$29,584 |
| Dawes County | 8,241 | 72.7% | 3.9% | 2.8% | 5.9 | \$27,256 |
| Dawson County | 23,884 | 86.9% | 82.4% | 77.5% | 23.6 | \$34,648 |
| Deuel County | 1,902 | 73.7% | 52.8% | 50.0% | 4.3 | \$38,667 |
| Dixon County | 5,464 | 95.3% | 25.9% | 24.0% | 11.5 | \$36,911 |
| Dodge County | 36,997 | 96.2% | 84.1% | 82.1% | 69.9 | \$33,674 |
| Douglas County | 586,327 | 99.6% | 99.9% | 99.5% | 1,796.3 | \$42,802 |
| Dundy County | 1,590 | 95.0% | 0.0% | 0.0% | 1.7 | \$36,436 |
| Fillmore County | 5,553 | 95.1% | 0.0% | 0.0% | 9.7 | \$41,909 |
| Franklin County | 2,873 | 67.1% | 0.4% | 0.0% | 5.0 | \$34,650 |
| Frontier County | 2,633 | 58.8% | 0.0% | 0.0% | 2.7 | \$30,189 |
| Furnas County | 4,575 | 79.1% | 0.0% | 0.0% | 6.4 | \$32,494 |
| Gage County | 21,583 | 93.1% | 6.5% | 6.4% | 25.3 | \$33,435 |
| Garden County | 1,837 | 55.7% | 0.0% | 0.0% | 1.1 | \$28,787 |
| Garfield County | 1,801 | 68.1% | 0.0% | 0.0% | 3.2 | \$31,710 |
| Gosper County | 1,808 | 56.9% | 0.1% | 0.0% | 3.9 | \$38,057 |
| Grant County | 576 | 13.9% | 0.0% | 0.0% | 0.7 | \$32,905 |
| Greeley County | 2,227 | 48.6% | 47.0% | 38.1% | 3.9 | \$28,736 |
| Hall County | 62,097 | 96.5% | 84.4% | 82.8% | 113.6 | \$32,671 |
| Hamilton County | 9,429 | 98.9% | 10.7% | 10.2% | 17.4 | \$34,813 |
| Harlan County | 3,054 | 71.4% | 0.3% | 0.0% | 5.5 | \$38,129 |
| Hayes County | 849 | 27.0% | 0.0% | 0.0% | 1.2 | \$35,135 |
| Hitchcock County | 2,598 | 26.9% | 0.0% | 0.0% | 3.7 | \$30,595 |
| Holt County | 10,043 | 72.1% | 76.3% | 59.6% | 4.2 | \$34,952 |
| Hooker County | 686 | 14.1% | 0.0% | 0.0% | 1.0 | \$29,390 |
| Howard County | 6,515 | 57.3% | 56.3% | 35.5% | 11.4 | \$33,509 |
| Jefferson County | 7,154 | 87.0% | 0.1% | 0.0% | 12.5 | \$30,363 |
| Johnson County | 5,287 | 95.6% | 38.7% | 37.8% | 14.1 | \$28,046 |
| Kearney County | 6,690 | 75.2% | 84.5% | 68.5% | 13.0 | \$37,233 |
| Keith County | 8,269 | 87.5% | 61.6% | 59.9% | 7.8 | \$34,905 |
| Keya Paha County | 787 | 94.2% | 8.5% | 8.5% | 1.0 | \$33,995 |
| Kimball County | 3,315 | 88.3% | 4.9% | 4.3% | 3.5 | \$31,290 |
| Knox County | 8,336 | 53.3% | 37.3% | 20.7% | 7.5 | \$31,269 |
| Lancaster County | 324,756 | 98.8% | 97.7% | 96.8% | 387.7 | \$38,509 |
| Lincoln County | 33,685 | 88.8% | 6.0% | 5.9% | 13.1 | \$33,437 |
| Logan County | 675 | 38.1% | 0.6% | 0.4% | 1.2 | \$35,645 |
| Loup County | 599 | 46.2% | 0.0% | 0.0% | 1.1 | \$28,251 |
| Madison County | 35,368 | 95.6% | 8.4% | 7.9% | 61.8 | \$34,690 |
| McPherson County | 372 | 19.6% | 30.6% | 1.1% | 0.4 | \$32,675 |
| Merrick County | 7,721 | 83.4% | 51.8% | 48.2% | 15.8 | \$31,349 |
| Morrill County | 4,527 | 84.9% | 0.0% | 0.0% | 3.2 | \$29,741 |
| Nance County | 3,326 | 75.3% | 38.8% | 32.9% | 7.5 | \$32,568 |
| Nemaha County | 7,035 | 96.0% | 50.8% | 50.8% | 17.3 | \$36,367 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Nuckolls County | 4,041 | 86.2% | 0.0% | 0.0% | 7.0 | \$39,201 |
| Otoe County | 16,198 | 95.7% | 61.9% | 61.1% | 26.3 | \$36,817 |
| Pawnee County | 2,528 | 94.4% | 42.1% | 42.1% | 5.9 | \$29,091 |
| Perkins County | 2,829 | 75.8% | 47.5% | 45.8% | 3.2 | \$34,696 |
| Phelps County | 8,988 | 83.1% | 75.4% | 67.3% | 16.7 | \$38,930 |
| Pierce County | 7,332 | 90.3% | 54.2% | 52.7% | 12.8 | \$33,513 |
| Platte County | 34,296 | 94.4% | 4.2% | 3.8% | 50.9 | \$35,991 |
| Polk County | 5,166 | 91.1% | 0.0% | 0.0% | 11.8 | \$34,344 |
| Red Willow County | 10,573 | 79.4% | 0.3% | 0.1% | 14.7 | \$34,401 |
| Richardson County | 7,705 | 94.5% | 13.0% | 12.9% | 14.0 | \$32,336 |
| Rock County | 1,245 | 4.7% | 0.0% | 0.0% | 1.2 | \$34,660 |
| Saline County | 14,116 | 88.8% | 0.6% | 0.3% | 24.6 | \$32,563 |
| Sarpy County | 196,553 | 98.4% | 98.9% | 97.5% | 825.5 | \$43,845 |
| Saunders County | 23,118 | 89.9% | 24.1% | 23.1% | 30.9 | \$41,364 |
| Scotts Bluff County | 35,603 | 99.6% | 11.3% | 11.3% | 48.1 | \$33,158 |
| Seward County | 17,692 | 92.1% | 7.9% | 5.9% | 31.0 | \$36,054 |
| Sheridan County | 4,996 | 50.1% | 4.5% | 2.0% | 2.0 | \$31,699 |
| Sherman County | 2,980 | 57.7% | 49.1% | 42.2% | 5.3 | \$31,023 |
| Sioux County | 1,127 | 63.6% | 5.1% | 4.9% | 0.5 | \$26,748 |
| Stanton County | 5,717 | 95.4% | 4.7% | 4.0% | 13.4 | \$36,737 |
| Thayer County | 4,885 | 80.1% | 6.6% | 4.6% | 8.5 | \$32,028 |
| Thomas County | 671 | 39.6% | 0.3% | 0.3% | 0.9 | \$42,187 |
| Thurston County | 6,507 | 44.9% | 38.3% | 6.2% | 16.5 | \$23,785 |
| Valley County | 4,073 | 59.7% | 60.2% | 49.5% | 7.2 | \$34,637 |
| Washington County | 21,167 | 85.5% | 42.4% | 36.5% | 54.3 | \$44,206 |
| Wayne County | 9,871 | 98.5% | 64.1% | 64.1% | 22.3 | \$29,985 |
| Webster County | 3,336 | 86.5% | 29.9% | 28.0% | 5.8 | \$34,652 |
| Wheeler County | 785 | 56.1% | 1.5% | 0.0% | 1.4 | \$35,158 |
| York County | 14,354 | 99.6% | 56.4% | 56.3% | 25.1 | \$39,507 |
| Nevada | 3,177,772 | 97.7% | 98.4% | 96.8% | 28.9 | \$37,945 |
| Carson City | 58,130 | 99.9% | 99.7% | 99.7% | 402.2 | \$37,677 |
| Churchill County | 25,843 | 87.4% | 89.7% | 81.9% | 5.2 | \$35,869 |
| Clark County | 2,322,985 | 98.8% | 99.7% | 98.8% | 294.4 | \$36,615 |
| Douglas County | 49,628 | 98.8% | 90.3% | 89.1% | 69.9 | \$49,115 |
| Elko County | 54,046 | 94.4% | 88.8% | 86.3% | 3.1 | \$39,001 |
| Esmeralda County | 744 | 0.1% | 62.0% | 0.1% | 0.2 | \$31,776 |
| Eureka County | 1,863 | 83.3% | 85.8% | 72.6% | 0.4 | \$32,187 |
| Humboldt County | 17,272 | 88.3% | 72.0% | 67.6% | 1.8 | \$35,979 |
| Lander County | 5,766 | 93.8% | 55.7% | 52.7% | 1.0 | \$41,561 |
| Lincoln County | 4,482 | 39.6% | 22.0% | 7.4% | 0.4 | \$32,459 |
| Lyon County | 61,585 | 99.4% | 95.1% | 94.6% | 30.7 | \$36,330 |
| Mineral County | 4,525 | 69.0% | 77.0% | 69.0% | 1.2 | \$26,662 |
| Nye County | 54,738 | 74.9% | 94.4% | 74.7% | 3.0 | \$30,751 |
| Pershing County | 6,462 | 19.6% | 72.2% | 13.1% | 1.1 | \$25,896 |
| Storey County | 4,170 | 97.5% | 78.0% | 76.0% | 15.8 | \$44,539 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|----------------|-------------------|
| Washoe County | 496,745 | 99.5% | 98.8% | 98.4% | 78.7 | \$44,448 |
| White Pine County | 8,788 | 0.1% | 81.7% | 0.0% | 1.0 | \$30,668 |
| New Hampshire | 1,395,231 | 95.1% | 66.5% | 64.7% | 155.8 | \$48,250 |
| Belknap County | 64,781 | 91.0% | 64.2% | 60.4% | 161.2 | \$43,670 |
| Carroll County | 52,199 | 88.3% | 45.7% | 41.3% | 56.0 | \$48,199 |
| Cheshire County | 77,350 | 88.8% | 54.3% | 49.4% | 109.5 | \$40,196 |
| Coos County | 31,504 | 66.7% | 45.5% | 38.2% | 17.6 | \$32,570 |
| Grafton County | 91,126 | 84.9% | 53.4% | 49.1% | 53.3 | \$47,080 |
| Hillsborough County | 426,594 | 98.8% | 77.3% | 76.6% | 486.7 | \$49,675 |
| Merrimack County | 156,020 | 95.6% | 44.1% | 42.8% | 167.2 | \$44,391 |
| Rockingham County | 319,424 | 99.0% | 73.1% | 72.5% | 459.3 | \$56,321 |
| Strafford County | 132,275 | 96.9% | 76.3% | 75.0% | 360.0 | \$43,338 |
| Sullivan County | 43,958 | 90.4% | 54.2% | 51.5% | 81.7 | \$39,087 |
| New Jersey | 9,261,699 | 96.5% | 96.9% | 93.7% | 1,259.3 | \$50,995 |
| Atlantic County | 275,638 | 98.9% | 94.3% | 93.6% | 496.2 | \$39,699 |
| Bergen County | 952,997 | 97.4% | 99.2% | 96.6% | 4,093.8 | \$60,222 |
| Burlington County | 466,103 | 98.1% | 95.0% | 94.2% | 583.1 | \$51,549 |
| Camden County | 524,907 | 99.7% | 99.0% | 98.7% | 2,371.3 | \$42,398 |
| Cape May County | 95,634 | 98.6% | 93.7% | 92.7% | 380.2 | \$51,344 |
| Cumberland County | 151,356 | 94.3% | 86.8% | 84.5% | 313.1 | \$32,551 |
| Essex County | 849,477 | 93.8% | 99.8% | 93.6% | 6,737.4 | \$45,946 |
| Gloucester County | 306,601 | 99.4% | 95.6% | 95.1% | 952.2 | \$45,933 |
| Hudson County | 703,366 | 99.4% | 99.9% | 99.2% | 15,226.5 | \$51,277 |
| Hunterdon County | 129,777 | 96.7% | 72.5% | 70.6% | 303.3 | \$68,112 |
| Mercer County | 380,688 | 98.7% | 98.6% | 97.3% | 1,696.2 | \$50,053 |
| Middlesex County | 861,418 | 95.5% | 99.0% | 94.5% | 2,785.8 | \$47,196 |
| Monmouth County | 644,098 | 97.9% | 96.2% | 94.2% | 1,375.7 | \$62,998 |
| Morris County | 511,151 | 96.1% | 93.4% | 89.8% | 1,108.9 | \$67,555 |
| Ocean County | 655,735 | 97.8% | 98.5% | 96.3% | 1,043.7 | \$42,497 |
| Passaic County | 513,936 | 88.4% | 98.5% | 87.0% | 2,762.9 | \$38,932 |
| Salem County | 65,117 | 94.3% | 84.7% | 80.7% | 196.2 | \$37,904 |
| Somerset County | 346,875 | 97.6% | 95.9% | 93.6% | 1,149.1 | \$67,554 |
| Sussex County | 146,084 | 86.2% | 80.8% | 70.9% | 281.7 | \$54,124 |
| Union County | 569,815 | 96.0% | 99.5% | 95.5% | 5,544.8 | \$49,666 |
| Warren County | 110,926 | 91.6% | 90.6% | 84.3% | 311.1 | \$45,517 |
| New Mexico | 2,113,344 | 83.5% | 89.0% | 78.6% | 17.4 | \$32,667 |
| Bernalillo County | 672,508 | 97.3% | 98.3% | 96.7% | 579.1 | \$36,996 |
| Catron County | 3,827 | 0.0% | 14.2% | 0.0% | 0.6 | \$26,678 |
| Chaves County | 63,894 | 88.5% | 75.4% | 69.4% | 10.5 | \$26,568 |
| Cibola County | 26,950 | 57.3% | 76.8% | 51.5% | 5.9 | \$22,394 |
| Colfax County | 12,246 | 21.3% | 81.5% | 16.0% | 3.3 | \$28,275 |
| Curry County | 47,532 | 94.1% | 94.6% | 90.1% | 33.8 | \$28,045 |
| De Baca County | 1,693 | 86.6% | 43.1% | 40.1% | 0.7 | \$27,710 |
| Doña Ana County | 223,337 | 85.4% | 90.2% | 80.2% | 58.6 | \$26,900 |
| Eddy County | 60,400 | 89.3% | 87.4% | 81.7% | 14.5 | \$36,274 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|-------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Grant County | 27,686 | 70.9% | 89.0% | 68.9% | 7.0 | \$29,123 |
| Guadalupe County | 4,310 | 84.1% | 84.6% | 71.6% | 1.4 | \$27,526 |
| Harding County | 628 | 71.8% | 47.6% | 38.2% | 0.3 | \$68,690 |
| Hidalgo County | 4,003 | 4.0% | 68.0% | 0.3% | 1.2 | \$25,476 |
| Lea County | 72,452 | 97.5% | 82.6% | 81.7% | 16.5 | \$29,635 |
| Lincoln County | 20,411 | 82.4% | 74.5% | 68.6% | 4.2 | \$31,332 |
| Los Alamos County | 19,187 | 98.4% | 98.0% | 96.4% | 175.8 | \$71,527 |
| Luna County | 25,749 | 0.4% | 80.3% | 0.2% | 8.7 | \$20,799 |
| McKinley County | 69,830 | 37.6% | 69.3% | 37.3% | 12.8 | \$19,188 |
| Mora County | 4,169 | 76.7% | 34.8% | 29.7% | 2.2 | \$28,356 |
| Otero County | 68,823 | 71.3% | 67.6% | 46.5% | 10.4 | \$26,319 |
| Quay County | 8,546 | 86.0% | 87.2% | 76.4% | 3.0 | \$25,348 |
| Rio Arriba County | 40,048 | 57.7% | 76.5% | 49.6% | 6.8 | \$27,878 |
| Roosevelt County | 18,934 | 85.3% | 86.7% | 77.1% | 7.7 | \$24,954 |
| San Juan County | 120,418 | 86.9% | 92.0% | 82.2% | 21.8 | \$25,008 |
| San Miguel County | 26,953 | 74.5% | 79.4% | 67.3% | 5.7 | \$26,314 |
| Sandoval County | 153,501 | 87.4% | 93.3% | 85.8% | 41.4 | \$36,603 |
| Santa Fe County | 155,664 | 89.4% | 91.2% | 84.8% | 81.5 | \$45,402 |
| Sierra County | 11,436 | 72.5% | 86.6% | 70.3% | 2.7 | \$26,396 |
| Socorro County | 16,115 | 55.1% | 71.9% | 54.8% | 2.4 | \$21,792 |
| Taos County | 34,580 | 26.0% | 45.6% | 13.1% | 15.7 | \$36,361 |
| Torrance County | 15,454 | 25.3% | 69.8% | 21.3% | 4.6 | \$24,657 |
| Union County | 3,980 | 69.3% | 76.8% | 60.5% | 1.0 | \$20,779 |
| Valencia County | 78,080 | 76.0% | 95.0% | 73.8% | 73.2 | \$28,817 |
| New York | 19,677,151 | 96.1% | 93.8% | 90.7% | 417.6 | \$47,173 |
| Albany County | 315,811 | 97.0% | 95.4% | 93.1% | 604.0 | \$44,101 |
| Allegany County | 46,694 | 88.6% | 60.4% | 54.4% | 45.4 | \$28,506 |
| Bronx County | 1,379,946 | 97.0% | 100.0% | 97.0% | 32,722.0 | \$25,845 |
| Broome County | 197,117 | 96.8% | 90.3% | 87.9% | 279.3 | \$33,674 |
| Cattaraugus County | 76,439 | 82.1% | 65.0% | 57.3% | 58.4 | \$30,286 |
| Cayuga County | 74,998 | 92.8% | 76.5% | 72.6% | 108.4 | \$35,579 |
| Chautauqua County | 126,027 | 89.5% | 76.9% | 71.4% | 118.8 | \$30,718 |
| Chemung County | 81,426 | 94.0% | 86.1% | 81.1% | 199.9 | \$34,304 |
| Chenango County | 46,458 | 80.5% | 57.0% | 48.7% | 52.0 | \$32,708 |
| Clinton County | 78,753 | 92.8% | 44.8% | 42.2% | 75.9 | \$34,834 |
| Columbia County | 61,286 | 91.4% | 61.4% | 56.7% | 96.6 | \$49,093 |
| Cortland County | 46,126 | 91.6% | 79.8% | 73.9% | 92.5 | \$31,594 |
| Delaware County | 44,740 | 92.9% | 51.5% | 48.5% | 31.0 | \$33,332 |
| Dutchess County | 297,545 | 93.0% | 81.9% | 76.8% | 374.0 | \$49,379 |
| Erie County | 950,312 | 96.9% | 97.4% | 94.8% | 911.4 | \$39,703 |
| Essex County | 36,910 | 83.7% | 27.1% | 24.2% | 20.6 | \$39,049 |
| Franklin County | 46,373 | 74.8% | 36.8% | 28.3% | 28.5 | \$30,411 |
| Fulton County | 52,669 | 88.8% | 78.1% | 71.9% | 106.3 | \$33,282 |
| Genesee County | 57,535 | 91.9% | 82.2% | 76.2% | 116.7 | \$35,053 |
| Greene County | 48,061 | 93.0% | 56.8% | 53.4% | 74.3 | \$38,587 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|-------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Hamilton County | 5,118 | 67.3% | 32.8% | 26.2% | 3.0 | \$37,326 |
| Herkimer County | 59,822 | 90.1% | 80.9% | 74.7% | 42.4 | \$34,394 |
| Jefferson County | 116,637 | 92.5% | 80.6% | 75.4% | 91.9 | \$32,775 |
| Kings County | 2,590,516 | 97.9% | 100.0% | 97.9% | 37,339.9 | \$43,165 |
| Lewis County | 26,699 | 78.4% | 38.0% | 32.3% | 20.9 | \$31,127 |
| Livingston County | 61,516 | 81.2% | 72.6% | 63.6% | 97.4 | \$35,673 |
| Madison County | 67,097 | 90.7% | 83.0% | 77.2% | 102.5 | \$37,666 |
| Monroe County | 752,035 | 97.2% | 98.6% | 95.8% | 1,144.7 | \$40,937 |
| Montgomery County | 49,623 | 83.9% | 80.7% | 70.8% | 123.1 | \$29,961 |
| Nassau County | 1,383,726 | 98.2% | 99.3% | 97.5% | 4,863.0 | \$60,456 |
| New York County | 1,596,273 | 99.4% | 100.0% | 99.4% | 70,456.1 | \$89,702 |
| Niagara County | 210,880 | 95.0% | 95.3% | 90.5% | 403.7 | \$36,556 |
| Oneida County | 228,846 | 92.4% | 90.1% | 84.3% | 188.8 | \$35,284 |
| Onondaga County | 468,249 | 97.7% | 98.8% | 96.6% | 601.6 | \$39,371 |
| Ontario County | 112,707 | 95.3% | 89.5% | 85.9% | 175.0 | \$43,046 |
| Orange County | 405,941 | 88.6% | 84.1% | 73.9% | 499.7 | \$40,410 |
| Orleans County | 39,318 | 91.4% | 76.0% | 69.6% | 100.5 | \$33,054 |
| Oswego County | 118,287 | 94.2% | 81.0% | 77.4% | 124.3 | \$33,904 |
| Otsego County | 60,636 | 82.8% | 66.8% | 58.0% | 60.5 | \$34,573 |
| Putnam County | 98,045 | 97.7% | 89.7% | 87.8% | 425.9 | \$53,105 |
| Queens County | 2,278,029 | 99.2% | 100.0% | 99.1% | 20,952.4 | \$39,201 |
| Rensselaer County | 159,853 | 96.6% | 88.9% | 86.2% | 245.0 | \$42,728 |
| Richmond County | 491,133 | 99.3% | 98.1% | 97.4% | 8,538.1 | \$43,199 |
| Rockland County | 339,022 | 95.9% | 97.1% | 93.0% | 1,954.6 | \$44,212 |
| Saratoga County | 238,797 | 96.1% | 89.3% | 86.1% | 294.8 | \$51,931 |
| Schenectady County | 160,093 | 97.3% | 95.2% | 92.7% | 782.5 | \$39,791 |
| Schoharie County | 30,063 | 90.6% | 51.7% | 45.7% | 48.3 | \$37,280 |
| Schuyler County | 17,650 | 89.5% | 62.2% | 58.4% | 53.8 | \$35,062 |
| Seneca County | 32,882 | 94.2% | 77.9% | 75.7% | 101.6 | \$34,212 |
| St. Lawrence County | 107,733 | 86.2% | 49.9% | 45.3% | 40.2 | \$29,827 |
| Steuben County | 92,599 | 89.3% | 66.1% | 62.5% | 66.6 | \$35,282 |
| Suffolk County | 1,525,465 | 96.1% | 95.5% | 91.9% | 1,674.2 | \$54,127 |
| Sullivan County | 79,658 | 91.0% | 62.9% | 58.0% | 82.3 | \$37,854 |
| Tioga County | 47,772 | 91.2% | 70.5% | 66.0% | 92.1 | \$37,691 |
| Tompkins County | 104,777 | 91.2% | 86.9% | 79.7% | 220.7 | \$40,781 |
| Ulster County | 182,319 | 91.8% | 67.1% | 61.0% | 162.2 | \$43,168 |
| Warren County | 65,599 | 92.9% | 73.8% | 70.2% | 75.6 | \$44,183 |
| Washington County | 60,841 | 87.6% | 65.9% | 59.4% | 73.2 | \$34,233 |
| Wayne County | 91,125 | 92.1% | 72.7% | 67.8% | 150.9 | \$36,834 |
| Westchester County | 990,427 | 92.3% | 95.9% | 88.3% | 2,299.5 | \$67,776 |
| Wyoming County | 39,666 | 81.1% | 57.2% | 50.6% | 66.9 | \$35,228 |
| Yates County | 24,451 | 85.4% | 72.7% | 63.6% | 72.3 | \$32,291 |
| North Carolina | 10,698,973 | 89.1% | 86.2% | 79.6% | 220.0 | \$37,641 |
| Alamance County | 176,353 | 92.9% | 95.7% | 89.6% | 416.5 | \$32,105 |
| Alexander County | 36,512 | 66.2% | 72.3% | 54.0% | 140.4 | \$30,510 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Alleghany County | 11,185 | 98.6% | 17.5% | 17.4% | 47.6 | \$32,330 |
| Anson County | 22,202 | 58.2% | 55.2% | 37.9% | 41.8 | \$22,854 |
| Ashe County | 27,110 | 99.5% | 21.1% | 20.9% | 63.6 | \$29,683 |
| Avery County | 17,571 | 70.1% | 67.0% | 53.6% | 71.0 | \$30,578 |
| Beaufort County | 44,272 | 56.0% | 57.0% | 40.0% | 53.2 | \$32,936 |
| Bertie County | 17,240 | 62.6% | 45.2% | 33.2% | 24.7 | \$27,311 |
| Bladen County | 29,446 | 66.1% | 58.4% | 42.5% | 33.7 | \$26,544 |
| Brunswick County | 153,064 | 98.6% | 80.8% | 80.0% | 180.1 | \$42,263 |
| Buncombe County | 273,589 | 93.4% | 88.2% | 83.3% | 416.7 | \$39,495 |
| Burke County | 87,881 | 79.6% | 79.6% | 65.4% | 173.6 | \$30,633 |
| Cabarrus County | 235,797 | 95.9% | 98.4% | 94.7% | 652.8 | \$38,690 |
| Caldwell County | 80,492 | 90.1% | 82.0% | 76.6% | 170.6 | \$29,125 |
| Camden County | 11,088 | 73.5% | 43.1% | 35.7% | 46.1 | \$34,117 |
| Carteret County | 69,380 | 95.3% | 84.5% | 80.6% | 136.7 | \$39,817 |
| Caswell County | 22,614 | 52.1% | 32.3% | 24.3% | 53.2 | \$27,503 |
| Catawba County | 163,462 | 91.5% | 84.8% | 78.1% | 407.3 | \$34,369 |
| Chatham County | 79,864 | 71.7% | 63.0% | 50.2% | 117.2 | \$53,291 |
| Cherokee County | 29,512 | 58.7% | 33.2% | 23.6% | 64.8 | \$28,752 |
| Chowan County | 13,940 | 63.6% | 43.9% | 31.0% | 80.7 | \$32,479 |
| Clay County | 11,614 | 59.0% | 21.3% | 15.7% | 54.0 | \$34,382 |
| Cleveland County | 100,670 | 85.2% | 84.9% | 75.9% | 216.8 | \$27,522 |
| Columbus County | 49,885 | 87.5% | 44.1% | 38.7% | 53.2 | \$24,236 |
| Craven County | 100,874 | 79.7% | 86.5% | 72.6% | 142.8 | \$33,963 |
| Cumberland County | 336,699 | 95.1% | 96.8% | 92.6% | 516.0 | \$29,681 |
| Currituck County | 31,015 | 87.7% | 77.7% | 68.6% | 118.4 | \$40,352 |
| Dare County | 37,956 | 96.3% | 68.8% | 66.1% | 99.0 | \$45,669 |
| Davidson County | 172,586 | 96.5% | 94.1% | 91.4% | 312.0 | \$31,024 |
| Davie County | 44,090 | 96.7% | 90.2% | 87.9% | 167.2 | \$36,570 |
| Duplin County | 48,990 | 53.3% | 77.8% | 45.3% | 60.1 | \$25,428 |
| Durham County | 332,680 | 94.2% | 98.8% | 93.5% | 1,161.1 | \$43,945 |
| Edgecombe County | 48,301 | 67.3% | 77.7% | 60.7% | 95.6 | \$25,813 |
| Forsyth County | 389,157 | 97.7% | 99.4% | 97.2% | 954.2 | \$35,600 |
| Franklin County | 74,539 | 73.5% | 66.7% | 54.5% | 151.6 | \$33,313 |
| Gaston County | 234,215 | 95.4% | 98.7% | 94.3% | 658.4 | \$33,806 |
| Gates County | 10,383 | 51.1% | 32.7% | 17.0% | 30.5 | \$28,091 |
| Graham County | 7,980 | 43.0% | 28.1% | 23.6% | 27.3 | \$25,835 |
| Granville County | 61,903 | 66.6% | 65.7% | 50.6% | 116.4 | \$31,604 |
| Greene County | 20,211 | 36.3% | 80.8% | 30.9% | 75.8 | \$21,972 |
| Guilford County | 546,101 | 96.2% | 99.1% | 95.5% | 845.5 | \$36,563 |
| Halifax County | 47,848 | 59.2% | 71.3% | 51.9% | 66.1 | \$25,504 |
| Harnett County | 138,832 | 82.2% | 70.7% | 60.6% | 233.4 | \$29,678 |
| Haywood County | 62,609 | 84.8% | 71.3% | 64.2% | 113.1 | \$34,609 |
| Henderson County | 118,106 | 80.5% | 87.9% | 75.0% | 316.7 | \$37,457 |
| Hertford County | 20,875 | 72.4% | 68.7% | 53.4% | 59.1 | \$25,313 |
| Hoke County | 53,787 | 82.0% | 89.5% | 78.4% | 137.9 | \$27,991 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Hyde County | 4,576 | 1.3% | 26.1% | 0.0% | 7.5 | \$19,258 |
| Iredell County | 195,897 | 93.8% | 94.3% | 88.9% | 341.0 | \$40,959 |
| Jackson County | 42,955 | 35.2% | 57.1% | 25.3% | 87.5 | \$31,384 |
| Johnston County | 234,778 | 87.3% | 73.8% | 65.4% | 296.4 | \$35,078 |
| Jones County | 9,233 | 83.7% | 57.8% | 45.9% | 19.6 | \$28,373 |
| Lee County | 65,476 | 83.4% | 63.9% | 56.2% | 256.7 | \$30,083 |
| Lenoir County | 54,633 | 74.4% | 84.6% | 64.7% | 136.9 | \$26,697 |
| Lincoln County | 93,095 | 88.7% | 78.6% | 71.5% | 314.7 | \$40,574 |
| Macon County | 38,065 | 47.6% | 36.6% | 26.9% | 73.8 | \$32,623 |
| Madison County | 21,768 | 91.2% | 37.3% | 35.1% | 48.4 | \$33,821 |
| Martin County | 21,508 | 51.2% | 51.3% | 36.8% | 47.1 | \$25,769 |
| McDowell County | 44,753 | 62.6% | 72.8% | 50.3% | 101.7 | \$29,047 |
| Mecklenburg County | 1,145,392 | 97.9% | 99.9% | 97.8% | 2,187.5 | \$48,625 |
| Mitchell County | 15,094 | 91.9% | 56.0% | 52.6% | 68.2 | \$31,696 |
| Montgomery County | 25,894 | 50.9% | 53.5% | 34.3% | 52.7 | \$29,346 |
| Moore County | 105,531 | 78.7% | 37.6% | 32.3% | 151.3 | \$42,094 |
| Nash County | 95,789 | 69.0% | 77.6% | 57.6% | 177.2 | \$31,987 |
| New Hanover County | 234,921 | 97.0% | 96.3% | 93.3% | 1,221.9 | \$43,378 |
| Northampton County | 16,779 | 70.0% | 37.4% | 30.8% | 31.3 | \$29,047 |
| Onslow County | 207,298 | 91.5% | 82.9% | 75.8% | 272.0 | \$29,214 |
| Orange County | 150,477 | 84.3% | 89.2% | 78.4% | 378.5 | \$50,449 |
| Pamlico County | 12,381 | 68.7% | 39.2% | 29.1% | 36.8 | \$32,677 |
| Pasquotank County | 40,938 | 88.6% | 76.1% | 68.5% | 180.4 | \$31,762 |
| Pender County | 65,737 | 77.6% | 77.6% | 64.7% | 75.4 | \$36,352 |
| Perquimans County | 13,210 | 57.0% | 36.5% | 28.4% | 53.4 | \$31,919 |
| Person County | 39,386 | 71.1% | 46.6% | 38.8% | 100.4 | \$33,456 |
| Pitt County | 173,542 | 84.2% | 90.4% | 78.4% | 266.0 | \$32,224 |
| Polk County | 19,986 | 50.7% | 55.7% | 31.1% | 84.1 | \$35,916 |
| Randolph County | 146,043 | 90.2% | 84.8% | 76.9% | 186.7 | \$29,131 |
| Richmond County | 42,778 | 84.0% | 48.2% | 40.5% | 90.3 | \$24,416 |
| Robeson County | 116,663 | 82.0% | 62.7% | 52.7% | 123.2 | \$21,998 |
| Rockingham County | 91,957 | 84.1% | 65.9% | 58.6% | 162.6 | \$29,239 |
| Rowan County | 149,645 | 92.3% | 95.2% | 88.9% | 292.5 | \$31,108 |
| Rutherford County | 64,963 | 63.3% | 80.8% | 57.9% | 114.9 | \$28,873 |
| Sampson County | 59,120 | 69.2% | 69.8% | 50.2% | 62.5 | \$25,969 |
| Scotland County | 34,162 | 75.1% | 79.1% | 62.2% | 107.0 | \$24,464 |
| Stanly County | 64,153 | 82.5% | 83.4% | 70.9% | 162.4 | \$30,857 |
| Stokes County | 45,175 | 83.2% | 79.4% | 68.3% | 100.5 | \$32,601 |
| Surry County | 71,403 | 95.1% | 68.4% | 66.0% | 134.1 | \$30,274 |
| Swain County | 13,967 | 37.0% | 46.0% | 28.2% | 26.5 | \$28,624 |
| Transylvania County | 33,355 | 83.2% | 41.1% | 38.5% | 88.2 | \$36,660 |
| Tyrrell County | 3,365 | 33.9% | 29.2% | 20.0% | 8.6 | \$22,403 |
| Union County | 249,070 | 92.6% | 95.8% | 90.2% | 393.6 | \$43,957 |
| Vance County | 42,138 | 79.3% | 68.1% | 59.3% | 167.0 | \$26,771 |
| Wake County | 1,175,021 | 97.7% | 99.6% | 97.4% | 1,407.9 | \$50,188 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Warren County | 18,713 | 31.7% | 36.0% | 14.4% | 43.6 | \$29,771 |
| Washington County | 10,828 | 67.6% | 29.0% | 24.3% | 31.2 | \$26,209 |
| Watauga County | 55,089 | 93.1% | 69.5% | 65.4% | 176.3 | \$30,807 |
| Wayne County | 117,286 | 87.9% | 87.7% | 78.1% | 211.7 | \$30,540 |
| Wilkes County | 65,784 | 95.1% | 45.1% | 43.0% | 87.3 | \$27,592 |
| Wilson County | 78,449 | 95.2% | 86.2% | 82.6% | 213.4 | \$28,715 |
| Yadkin County | 37,463 | 92.1% | 83.4% | 77.8% | 111.8 | \$32,680 |
| Yancey County | 18,811 | 94.5% | 56.2% | 54.2% | 60.2 | \$31,037 |
| North Dakota | 779,261 | 98.2% | 79.2% | 78.3% | 11.3 | \$40,748 |
| Adams County | 2,115 | 100.0% | 7.2% | 7.2% | 2.1 | \$35,830 |
| Barnes County | 10,758 | 97.6% | 81.2% | 79.9% | 7.2 | \$38,626 |
| Benson County | 5,770 | 75.6% | 59.5% | 44.3% | 4.2 | \$24,490 |
| Billings County | 1,018 | 49.3% | 47.9% | 27.5% | 0.9 | \$36,923 |
| Bottineau County | 6,376 | 98.2% | 55.4% | 55.1% | 3.8 | \$45,506 |
| Bowman County | 2,894 | 100.0% | 63.2% | 63.2% | 2.5 | \$38,585 |
| Burke County | 2,155 | 96.5% | 56.7% | 55.8% | 2.0 | \$50,714 |
| Burleigh County | 99,280 | 99.1% | 76.2% | 75.4% | 60.8 | \$43,615 |
| Cass County | 192,734 | 99.6% | 96.9% | 96.7% | 109.2 | \$43,474 |
| Cavalier County | 3,597 | 99.7% | 72.5% | 72.5% | 2.4 | \$44,346 |
| Dickey County | 4,923 | 99.4% | 75.4% | 74.8% | 4.4 | \$35,649 |
| Divide County | 2,187 | 95.4% | 72.1% | 70.9% | 1.7 | \$43,850 |
| Dunn County | 4,015 | 97.9% | 45.6% | 45.3% | 2.0 | \$50,132 |
| Eddy County | 2,314 | 90.6% | 82.5% | 76.7% | 3.7 | \$34,852 |
| Emmons County | 3,250 | 100.0% | 55.9% | 55.9% | 2.2 | \$38,027 |
| Foster County | 3,378 | 100.0% | 67.3% | 67.3% | 5.3 | \$41,796 |
| Golden Valley County | 1,744 | 81.3% | 64.3% | 56.0% | 1.7 | \$35,953 |
| Grand Forks County | 72,413 | 99.9% | 93.3% | 93.3% | 50.4 | \$37,159 |
| Grant County | 2,243 | 96.6% | 51.1% | 50.5% | 1.4 | \$37,252 |
| Griggs County | 2,252 | 99.7% | 73.5% | 73.4% | 3.2 | \$43,383 |
| Hettinger County | 2,406 | 100.0% | 53.0% | 53.0% | 2.1 | \$40,931 |
| Kidder County | 2,393 | 100.0% | 58.3% | 58.3% | 1.8 | \$32,974 |
| LaMoure County | 4,098 | 100.0% | 55.6% | 55.6% | 3.6 | \$37,453 |
| Logan County | 1,855 | 100.0% | 37.7% | 37.7% | 1.9 | \$33,240 |
| McHenry County | 5,189 | 95.2% | 61.0% | 59.1% | 2.8 | \$39,973 |
| McIntosh County | 2,475 | 100.0% | 37.9% | 37.9% | 2.5 | \$37,236 |
| McKenzie County | 13,908 | 89.8% | 64.4% | 62.0% | 5.0 | \$44,409 |
| McLean County | 9,824 | 95.5% | 61.7% | 60.4% | 4.7 | \$40,448 |
| Mercer County | 8,333 | 100.0% | 68.2% | 68.2% | 8.0 | \$39,783 |
| Morton County | 33,710 | 99.7% | 69.9% | 69.6% | 17.5 | \$42,603 |
| Mountrail County | 9,290 | 93.6% | 79.8% | 76.9% | 5.1 | \$39,603 |
| Nelson County | 2,995 | 86.9% | 30.1% | 25.7% | 3.1 | \$37,130 |
| Oliver County | 1,856 | 100.0% | 39.9% | 39.9% | 2.6 | \$36,532 |
| Pembina County | 6,763 | 100.0% | 42.8% | 42.8% | 6.0 | \$39,230 |
| Pierce County | 3,942 | 79.8% | 74.8% | 66.5% | 3.9 | \$35,931 |
| Ramsey County | 11,515 | 91.9% | 85.5% | 80.4% | 9.7 | \$35,624 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|-------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Ransom County | 5,640 | 99.4% | 59.8% | 59.6% | 6.5 | \$36,706 |
| Renville County | 2,220 | 95.6% | 57.9% | 56.3% | 2.5 | \$37,370 |
| Richland County | 16,580 | 98.0% | 70.0% | 69.3% | 11.5 | \$38,265 |
| Rolette County | 11,933 | 99.6% | 52.7% | 52.5% | 13.2 | \$23,160 |
| Sargent County | 3,795 | 99.9% | 35.1% | 35.1% | 4.4 | \$42,970 |
| Sheridan County | 1,295 | 96.0% | 57.8% | 56.3% | 1.3 | \$40,365 |
| Sioux County | 3,711 | 98.1% | 12.3% | 12.1% | 3.4 | \$17,185 |
| Slope County | 672 | 99.7% | 38.1% | 38.1% | 0.6 | \$40,987 |
| Stark County | 32,803 | 98.9% | 85.4% | 84.9% | 24.6 | \$40,025 |
| Steele County | 1,788 | 100.0% | 17.3% | 17.3% | 2.5 | \$40,435 |
| Stutsman County | 21,487 | 100.0% | 76.3% | 76.3% | 9.7 | \$37,288 |
| Towner County | 2,064 | 94.8% | 63.2% | 61.4% | 2.0 | \$37,116 |
| Traill County | 7,958 | 98.9% | 73.0% | 72.7% | 9.2 | \$40,942 |
| Walsh County | 10,438 | 100.0% | 82.5% | 82.5% | 8.1 | \$37,344 |
| Ward County | 68,870 | 98.6% | 82.0% | 81.0% | 34.2 | \$40,896 |
| Wells County | 3,930 | 89.0% | 32.3% | 29.4% | 3.1 | \$41,957 |
| Williams County | 38,109 | 95.3% | 67.1% | 65.3% | 18.3 | \$44,076 |
| Ohio | 11,756,058 | 92.0% | 91.8% | 86.7% | 287.7 | \$37,729 |
| Adams County | 27,420 | 41.4% | 47.2% | 26.7% | 47.0 | \$25,428 |
| Allen County | 101,115 | 92.7% | 70.3% | 67.0% | 251.2 | \$31,523 |
| Ashland County | 52,181 | 83.9% | 91.2% | 78.4% | 123.4 | \$30,303 |
| Ashtabula County | 97,014 | 85.1% | 79.7% | 70.3% | 138.2 | \$29,586 |
| Athens County | 58,979 | 74.0% | 71.5% | 59.8% | 117.1 | \$27,366 |
| Auglaize County | 45,948 | 87.4% | 50.6% | 47.3% | 114.5 | \$36,849 |
| Belmont County | 65,509 | 76.3% | 71.7% | 60.6% | 123.1 | \$30,563 |
| Brown County | 43,680 | 65.5% | 63.7% | 46.6% | 89.2 | \$31,823 |
| Butler County | 388,420 | 97.6% | 99.0% | 96.7% | 832.6 | \$37,650 |
| Carroll County | 26,659 | 51.9% | 67.4% | 40.4% | 67.6 | \$33,798 |
| Champaign County | 38,709 | 81.7% | 70.1% | 60.6% | 90.2 | \$33,377 |
| Clark County | 134,831 | 95.6% | 98.2% | 94.1% | 339.7 | \$31,099 |
| Clermont County | 210,805 | 96.8% | 95.7% | 92.9% | 465.8 | \$41,566 |
| Clinton County | 41,964 | 76.5% | 87.0% | 68.7% | 102.7 | \$32,533 |
| Columbiana County | 100,511 | 76.7% | 87.8% | 71.7% | 189.0 | \$30,553 |
| Coshocton County | 36,571 | 59.0% | 65.2% | 50.2% | 64.8 | \$27,280 |
| Crawford County | 41,522 | 80.1% | 72.5% | 61.6% | 103.3 | \$29,566 |
| Cuyahoga County | 1,236,041 | 99.1% | 99.8% | 99.0% | 2,703.4 | \$39,807 |
| Darke County | 51,529 | 73.7% | 56.4% | 45.5% | 86.2 | \$32,732 |
| Defiance County | 38,187 | 98.5% | 53.8% | 53.4% | 92.8 | \$33,533 |
| Delaware County | 226,296 | 96.7% | 99.4% | 96.2% | 510.7 | \$56,963 |
| Erie County | 74,501 | 95.0% | 93.1% | 88.6% | 296.5 | \$38,158 |
| Fairfield County | 162,898 | 91.4% | 94.7% | 88.1% | 323.0 | \$38,783 |
| Fayette County | 28,839 | 74.1% | 75.9% | 60.6% | 71.0 | \$30,666 |
| Franklin County | 1,321,820 | 99.0% | 100.0% | 99.0% | 2,482.7 | \$41,148 |
| Fulton County | 42,171 | 99.7% | 82.2% | 82.0% | 104.0 | \$35,230 |
| Gallia County | 29,068 | 24.6% | 58.8% | 21.3% | 62.3 | \$28,943 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Geauga County | 95,469 | 85.7% | 97.7% | 84.6% | 238.5 | \$48,582 |
| Greene County | 168,456 | 91.5% | 98.1% | 90.3% | 407.3 | \$42,862 |
| Guernsey County | 38,098 | 71.4% | 57.4% | 46.1% | 72.9 | \$29,642 |
| Hamilton County | 825,037 | 98.9% | 99.0% | 97.9% | 2,035.1 | \$42,555 |
| Hancock County | 74,861 | 99.7% | 76.9% | 76.7% | 140.9 | \$37,479 |
| Hardin County | 30,416 | 97.2% | 65.2% | 64.1% | 64.7 | \$27,566 |
| Harrison County | 14,378 | 50.9% | 17.8% | 12.7% | 35.7 | \$30,163 |
| Henry County | 27,512 | 99.5% | 54.6% | 54.4% | 66.1 | \$36,504 |
| Highland County | 43,391 | 58.3% | 67.2% | 47.9% | 78.5 | \$27,971 |
| Hocking County | 27,858 | 58.7% | 49.6% | 41.8% | 66.1 | \$29,490 |
| Holmes County | 44,390 | 34.5% | 69.5% | 25.7% | 105.0 | \$29,238 |
| Huron County | 58,218 | 80.4% | 87.1% | 74.3% | 118.3 | \$30,792 |
| Jackson County | 32,586 | 64.6% | 61.5% | 49.6% | 77.5 | \$28,570 |
| Jefferson County | 64,330 | 85.9% | 70.3% | 66.0% | 157.6 | \$30,501 |
| Knox County | 63,183 | 63.7% | 89.8% | 62.4% | 120.2 | \$32,543 |
| Lake County | 231,842 | 97.8% | 99.7% | 97.6% | 1,011.2 | \$41,195 |
| Lawrence County | 56,653 | 83.2% | 70.9% | 66.6% | 125.0 | \$29,226 |
| Licking County | 181,359 | 89.5% | 92.9% | 86.4% | 265.8 | \$39,760 |
| Logan County | 46,040 | 89.8% | 59.5% | 56.4% | 100.4 | \$36,215 |
| Lorain County | 316,268 | 93.5% | 99.1% | 92.7% | 644.7 | \$37,171 |
| Lucas County | 426,643 | 99.5% | 97.8% | 97.3% | 1,256.1 | \$34,399 |
| Madison County | 43,540 | 72.5% | 98.0% | 71.1% | 93.5 | \$33,512 |
| Mahoning County | 225,636 | 96.1% | 99.4% | 95.7% | 548.3 | \$32,591 |
| Marion County | 64,642 | 95.0% | 77.6% | 75.1% | 160.1 | \$29,257 |
| Medina County | 183,512 | 96.4% | 99.8% | 96.2% | 435.4 | \$45,038 |
| Meigs County | 21,969 | 39.3% | 34.0% | 16.2% | 51.1 | \$26,103 |
| Mercer County | 42,348 | 89.1% | 48.4% | 46.1% | 91.6 | \$33,892 |
| Miami County | 110,247 | 90.9% | 97.6% | 89.6% | 271.2 | \$37,701 |
| Monroe County | 13,234 | 21.3% | 35.3% | 7.1% | 29.0 | \$33,127 |
| Montgomery County | 533,892 | 96.8% | 99.6% | 96.7% | 1,157.2 | \$35,767 |
| Morgan County | 13,668 | 35.4% | 29.8% | 20.8% | 32.8 | \$25,973 |
| Morrow County | 35,339 | 80.7% | 87.3% | 71.5% | 87.0 | \$32,987 |
| Muskingum County | 86,113 | 80.8% | 72.3% | 63.8% | 129.6 | \$31,436 |
| Noble County | 14,335 | 36.0% | 55.0% | 26.1% | 36.0 | \$28,676 |
| Ottawa County | 39,978 | 83.2% | 80.4% | 68.6% | 157.0 | \$44,479 |
| Paulding County | 18,757 | 95.3% | 41.7% | 41.6% | 45.0 | \$34,050 |
| Perry County | 35,480 | 56.1% | 57.1% | 38.8% | 87.0 | \$29,675 |
| Pickaway County | 60,023 | 77.8% | 87.9% | 69.0% | 119.8 | \$32,689 |
| Pike County | 27,005 | 63.1% | 46.0% | 34.8% | 61.3 | \$29,273 |
| Portage County | 161,745 | 95.2% | 98.2% | 93.5% | 331.8 | \$37,771 |
| Preble County | 40,596 | 77.0% | 80.4% | 65.8% | 95.7 | \$33,627 |
| Putnam County | 34,334 | 98.3% | 40.0% | 39.7% | 71.2 | \$36,877 |
| Richland County | 125,319 | 88.5% | 93.5% | 83.2% | 253.1 | \$29,570 |
| Ross County | 76,606 | 77.4% | 70.0% | 58.0% | 111.2 | \$29,718 |
| Sandusky County | 58,667 | 86.0% | 86.3% | 75.2% | 143.7 | \$32,788 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Scioto County | 72,194 | 80.0% | 64.4% | 56.0% | 118.3 | \$25,279 |
| Seneca County | 54,632 | 91.2% | 70.6% | 67.6% | 99.1 | \$31,770 |
| Shelby County | 47,671 | 79.5% | 67.0% | 59.6% | 116.9 | \$35,363 |
| Stark County | 372,657 | 90.0% | 99.3% | 89.5% | 647.8 | \$34,652 |
| Summit County | 535,882 | 98.5% | 100.0% | 98.5% | 1,298.2 | \$40,786 |
| Trumbull County | 200,643 | 91.4% | 98.0% | 90.9% | 324.6 | \$30,294 |
| Tuscarawas County | 91,937 | 79.2% | 81.6% | 70.7% | 162.0 | \$31,736 |
| Union County | 66,898 | 95.1% | 84.2% | 80.3% | 154.9 | \$48,025 |
| Van Wert County | 28,769 | 99.3% | 63.0% | 62.6% | 70.3 | \$31,831 |
| Vinton County | 12,565 | 32.4% | 30.1% | 20.8% | 30.5 | \$27,587 |
| Warren County | 249,778 | 95.2% | 97.2% | 92.6% | 622.2 | \$49,360 |
| Washington County | 58,901 | 67.9% | 60.5% | 49.3% | 93.2 | \$33,987 |
| Wayne County | 116,559 | 76.4% | 94.4% | 73.0% | 210.1 | \$32,908 |
| Williams County | 36,652 | 99.1% | 42.3% | 42.1% | 87.1 | \$31,189 |
| Wood County | 131,592 | 97.4% | 87.9% | 85.5% | 213.2 | \$39,771 |
| Wyandot County | 21,567 | 98.9% | 62.5% | 62.2% | 53.0 | \$33,994 |
| Oklahoma | 4,019,800 | 88.9% | 89.8% | 82.8% | 58.6 | \$33,630 |
| Adair County | 19,576 | 99.8% | 56.6% | 56.6% | 34.1 | \$20,710 |
| Alfalfa County | 5,637 | 55.1% | 61.9% | 27.7% | 6.5 | \$28,976 |
| Atoka County | 14,262 | 79.6% | 63.9% | 54.7% | 14.6 | \$25,353 |
| Beaver County | 5,016 | 88.1% | 42.5% | 41.4% | 2.8 | \$29,533 |
| Beckham County | 22,009 | 99.0% | 88.1% | 87.7% | 24.4 | \$26,231 |
| Blaine County | 8,409 | 88.3% | 49.2% | 46.8% | 9.1 | \$30,442 |
| Bryan County | 48,182 | 91.6% | 73.1% | 70.7% | 53.3 | \$29,516 |
| Caddo County | 26,198 | 71.1% | 78.4% | 55.9% | 20.5 | \$25,559 |
| Canadian County | 169,149 | 98.6% | 98.2% | 97.4% | 188.7 | \$36,884 |
| Carter County | 48,510 | 95.9% | 77.9% | 76.1% | 59.0 | \$31,036 |
| Cherokee County | 48,098 | 94.2% | 72.9% | 69.6% | 64.2 | \$28,178 |
| Choctaw County | 14,358 | 44.9% | 38.1% | 20.6% | 18.6 | \$25,283 |
| Cimarron County | 2,252 | 80.7% | 61.1% | 57.6% | 1.2 | \$33,925 |
| Cleveland County | 299,587 | 98.4% | 98.1% | 96.9% | 555.9 | \$36,913 |
| Coal County | 5,313 | 63.1% | 63.6% | 49.1% | 10.3 | \$26,899 |
| Comanche County | 123,046 | 96.2% | 96.7% | 93.4% | 115.1 | \$29,980 |
| Cotton County | 5,477 | 93.2% | 84.3% | 81.4% | 8.7 | \$31,989 |
| Craig County | 14,123 | 68.4% | 72.3% | 60.4% | 18.6 | \$24,199 |
| Creek County | 72,699 | 71.4% | 84.5% | 66.2% | 76.5 | \$31,222 |
| Custer County | 27,886 | 98.5% | 85.6% | 85.5% | 28.2 | \$30,880 |
| Delaware County | 41,413 | 73.2% | 63.1% | 52.4% | 56.1 | \$34,489 |
| Dewey County | 4,401 | 77.1% | 65.0% | 58.2% | 4.4 | \$31,951 |
| Ellis County | 3,657 | 25.1% | 49.2% | 14.6% | 3.0 | \$31,331 |
| Garfield County | 61,920 | 99.1% | 89.5% | 89.2% | 58.5 | \$32,579 |
| Garvin County | 25,713 | 56.7% | 78.9% | 49.1% | 32.1 | \$29,270 |
| Grady County | 56,658 | 77.7% | 88.9% | 69.0% | 51.5 | \$34,607 |
| Grant County | 4,124 | 75.9% | 53.4% | 46.9% | 4.1 | \$33,685 |
| Greer County | 5,547 | 91.7% | 87.3% | 86.1% | 8.7 | \$22,721 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Harmon County | 2,428 | 1.2% | 74.2% | 1.2% | 4.5 | \$31,814 |
| Harper County | 3,129 | 52.0% | 74.5% | 38.8% | 3.0 | \$26,279 |
| Haskell County | 11,641 | 56.1% | 54.3% | 42.5% | 20.2 | \$25,234 |
| Hughes County | 13,407 | 34.5% | 60.7% | 22.3% | 16.7 | \$22,887 |
| Jackson County | 24,556 | 99.4% | 80.2% | 80.2% | 30.6 | \$31,421 |
| Jefferson County | 5,389 | 91.3% | 70.8% | 67.1% | 7.1 | \$30,099 |
| Johnston County | 10,406 | 60.0% | 64.5% | 46.6% | 16.2 | \$24,457 |
| Kay County | 43,668 | 98.5% | 94.6% | 94.3% | 47.5 | \$29,800 |
| Kingfisher County | 15,293 | 87.7% | 80.7% | 77.0% | 17.0 | \$35,098 |
| Kiowa County | 8,345 | 96.0% | 80.0% | 79.1% | 8.2 | \$23,548 |
| Latimer County | 9,630 | 42.6% | 58.1% | 35.8% | 13.3 | \$25,189 |
| Le Flore County | 48,907 | 51.8% | 83.1% | 48.5% | 30.8 | \$23,718 |
| Lincoln County | 34,188 | 66.2% | 72.9% | 50.2% | 35.9 | \$30,408 |
| Logan County | 51,933 | 84.9% | 91.8% | 78.5% | 69.8 | \$39,571 |
| Love County | 10,218 | 90.6% | 76.6% | 74.1% | 19.9 | \$28,560 |
| Major County | 7,502 | 89.7% | 48.5% | 45.7% | 7.9 | \$33,480 |
| Marshall County | 15,882 | 81.1% | 70.4% | 64.5% | 42.8 | \$27,997 |
| Mayes County | 39,589 | 73.0% | 80.3% | 64.0% | 60.4 | \$29,607 |
| McClain County | 45,306 | 86.8% | 93.8% | 84.3% | 79.4 | \$39,921 |
| McCurtain County | 30,931 | 79.7% | 39.9% | 38.3% | 16.7 | \$24,635 |
| McIntosh County | 19,451 | 83.3% | 75.1% | 63.0% | 31.5 | \$24,967 |
| Murray County | 13,672 | 90.3% | 80.9% | 77.6% | 32.8 | \$32,488 |
| Muskogee County | 66,354 | 78.3% | 89.8% | 70.5% | 81.9 | \$26,684 |
| Noble County | 10,896 | 97.0% | 76.0% | 74.8% | 14.9 | \$31,946 |
| Nowata County | 9,483 | 68.0% | 61.6% | 51.2% | 16.8 | \$29,851 |
| Okfuskee County | 11,134 | 54.7% | 60.6% | 37.9% | 18.0 | \$23,052 |
| Oklahoma County | 802,559 | 98.8% | 99.8% | 98.6% | 1,132.1 | \$36,987 |
| Okmulgee County | 36,990 | 78.9% | 77.1% | 58.8% | 53.0 | \$27,821 |
| Osage County | 45,839 | 43.7% | 77.6% | 39.3% | 20.4 | \$29,906 |
| Ottawa County | 30,338 | 86.3% | 78.0% | 68.5% | 64.4 | \$24,354 |
| Pawnee County | 15,757 | 58.2% | 77.0% | 48.6% | 27.7 | \$28,327 |
| Payne County | 82,794 | 83.8% | 97.1% | 82.1% | 120.9 | \$26,916 |
| Pittsburg County | 43,613 | 71.5% | 78.9% | 65.4% | 33.4 | \$28,257 |
| Pontotoc County | 38,141 | 76.3% | 75.5% | 64.2% | 52.9 | \$30,774 |
| Pottawatomie County | 73,533 | 87.4% | 90.9% | 82.5% | 93.3 | \$28,106 |
| Pushmataha County | 10,769 | 58.3% | 39.9% | 32.1% | 7.7 | \$23,393 |
| Roger Mills County | 3,320 | 36.4% | 38.1% | 4.7% | 2.9 | \$43,603 |
| Rogers County | 98,836 | 70.2% | 91.6% | 67.7% | 146.3 | \$36,885 |
| Seminole County | 23,351 | 47.1% | 73.4% | 43.8% | 36.9 | \$23,137 |
| Sequoyah County | 39,667 | 79.7% | 67.7% | 57.1% | 58.9 | \$24,708 |
| Stephens County | 43,710 | 74.0% | 78.3% | 69.4% | 50.2 | \$31,501 |
| Texas County | 20,495 | 96.9% | 73.7% | 73.1% | 10.0 | \$23,855 |
| Tillman County | 6,977 | 89.4% | 73.1% | 71.4% | 8.0 | \$23,729 |
| Tulsa County | 677,358 | 97.7% | 99.3% | 97.3% | 1,187.9 | \$38,496 |
| Wagoner County | 86,644 | 91.3% | 92.5% | 85.2% | 154.2 | \$35,675 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|-------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Washington County | 53,242 | 82.9% | 92.4% | 81.3% | 128.1 | \$34,243 |
| Washita County | 10,732 | 94.6% | 70.7% | 67.5% | 10.7 | \$31,421 |
| Woods County | 8,587 | 83.0% | 76.1% | 63.1% | 6.7 | \$29,914 |
| Woodward County | 19,990 | 85.3% | 70.6% | 62.5% | 16.1 | \$31,995 |
| Oregon | 4,240,137 | 91.7% | 90.5% | 85.9% | 44.2 | \$41,805 |
| Baker County | 16,938 | 69.1% | 56.3% | 44.6% | 5.5 | \$32,672 |
| Benton County | 97,630 | 92.8% | 88.2% | 85.1% | 144.6 | \$39,940 |
| Clackamas County | 423,177 | 93.9% | 95.4% | 90.9% | 226.2 | \$49,340 |
| Clatsop County | 41,695 | 81.7% | 68.1% | 57.8% | 50.3 | \$37,166 |
| Columbia County | 53,588 | 77.0% | 78.1% | 68.8% | 81.4 | \$37,986 |
| Coos County | 64,990 | 84.8% | 70.9% | 66.6% | 40.7 | \$33,572 |
| Crook County | 26,375 | 62.4% | 87.3% | 58.2% | 8.9 | \$38,484 |
| Curry County | 23,598 | 89.7% | 57.4% | 56.8% | 14.5 | \$38,214 |
| Deschutes County | 206,549 | 92.2% | 79.5% | 75.9% | 68.4 | \$46,765 |
| Douglas County | 112,297 | 93.8% | 76.2% | 74.0% | 22.3 | \$31,241 |
| Gilliam County | 2,018 | 27.1% | 78.3% | 27.1% | 1.7 | \$34,042 |
| Grant County | 7,218 | 29.1% | 0.0% | 0.0% | 1.6 | \$33,409 |
| Harney County | 7,515 | 64.3% | 72.1% | 56.4% | 0.7 | \$26,910 |
| Hood River County | 24,048 | 72.8% | 93.2% | 69.5% | 46.1 | \$43,333 |
| Jackson County | 221,644 | 94.5% | 88.7% | 85.4% | 79.6 | \$36,538 |
| Jefferson County | 25,330 | 66.3% | 87.4% | 63.2% | 14.2 | \$30,917 |
| Josephine County | 87,730 | 69.2% | 85.5% | 66.1% | 53.5 | \$32,159 |
| Klamath County | 70,212 | 89.0% | 86.5% | 82.0% | 11.8 | \$31,260 |
| Lake County | 8,385 | 58.8% | 67.7% | 52.7% | 1.0 | \$29,400 |
| Lane County | 382,353 | 91.5% | 86.3% | 83.1% | 84.0 | \$36,776 |
| Lincoln County | 50,813 | 88.6% | 75.2% | 71.2% | 51.8 | \$35,295 |
| Linn County | 130,467 | 89.3% | 86.3% | 81.2% | 57.0 | \$32,501 |
| Malheur County | 31,879 | 83.0% | 81.0% | 74.9% | 3.2 | \$22,145 |
| Marion County | 346,703 | 94.9% | 96.6% | 92.6% | 293.5 | \$33,545 |
| Morrow County | 12,300 | 49.2% | 59.1% | 33.0% | 6.1 | \$29,975 |
| Multnomah County | 795,083 | 99.0% | 99.4% | 98.6% | 1,844.1 | \$49,713 |
| Polk County | 89,614 | 88.7% | 93.0% | 86.3% | 120.9 | \$38,920 |
| Sherman County | 1,955 | 60.3% | 64.8% | 40.8% | 2.4 | \$33,206 |
| Tillamook County | 27,574 | 86.6% | 63.0% | 58.4% | 25.0 | \$35,433 |
| Umatilla County | 80,215 | 82.3% | 85.0% | 70.5% | 24.9 | \$30,263 |
| Union County | 26,177 | 79.6% | 76.4% | 68.8% | 12.9 | \$31,640 |
| Wallowa County | 7,659 | 49.7% | 16.3% | 9.8% | 2.4 | \$37,378 |
| Wasco County | 26,561 | 74.9% | 83.1% | 70.5% | 11.2 | \$35,869 |
| Washington County | 600,176 | 96.8% | 98.5% | 96.4% | 828.7 | \$49,553 |
| Wheeler County | 1,445 | 44.4% | 34.2% | 28.5% | 0.8 | \$27,847 |
| Yamhill County | 108,226 | 82.9% | 92.3% | 82.0% | 151.2 | \$38,002 |
| Pennsylvania | 12,972,008 | 95.1% | 91.8% | 89.1% | 289.9 | \$41,234 |
| Adams County | 106,027 | 87.9% | 94.3% | 85.4% | 204.4 | \$37,349 |
| Allegheny County | 1,233,253 | 99.7% | 97.1% | 96.9% | 1,689.5 | \$45,939 |
| Armstrong County | 64,747 | 85.6% | 66.0% | 60.7% | 99.1 | \$33,390 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Beaver County | 165,677 | 96.1% | 92.8% | 90.2% | 381.1 | \$37,649 |
| Bedford County | 47,418 | 73.4% | 48.9% | 43.2% | 46.8 | \$31,269 |
| Berks County | 430,449 | 100.0% | 97.5% | 97.5% | 502.6 | \$37,776 |
| Blair County | 121,032 | 95.4% | 87.3% | 85.7% | 230.4 | \$33,585 |
| Bradford County | 59,866 | 62.5% | 51.7% | 41.6% | 52.2 | \$32,440 |
| Bucks County | 645,054 | 99.2% | 96.6% | 95.9% | 1,067.3 | \$54,930 |
| Butler County | 197,300 | 96.5% | 83.6% | 81.8% | 249.9 | \$45,389 |
| Cambria County | 131,441 | 90.2% | 81.2% | 76.2% | 191.2 | \$31,532 |
| Cameron County | 4,418 | 88.2% | 65.4% | 63.3% | 11.1 | \$27,426 |
| Carbon County | 65,460 | 97.9% | 76.8% | 75.8% | 171.7 | \$34,375 |
| Centre County | 158,425 | 90.5% | 91.6% | 85.4% | 142.9 | \$37,262 |
| Chester County | 545,823 | 98.3% | 93.2% | 91.7% | 727.2 | \$60,599 |
| Clarion County | 37,346 | 70.2% | 52.3% | 43.4% | 62.2 | \$30,444 |
| Clearfield County | 77,904 | 79.0% | 69.2% | 59.7% | 68.0 | \$29,950 |
| Clinton County | 37,931 | 89.8% | 66.4% | 62.9% | 42.7 | \$30,723 |
| Columbia County | 64,926 | 79.5% | 85.3% | 73.3% | 134.4 | \$31,238 |
| Crawford County | 82,670 | 73.6% | 69.2% | 56.4% | 81.7 | \$30,989 |
| Cumberland County | 268,579 | 96.4% | 98.1% | 94.7% | 492.4 | \$43,535 |
| Dauphin County | 288,800 | 98.1% | 98.5% | 96.8% | 550.2 | \$39,709 |
| Delaware County | 575,182 | 99.9% | 98.3% | 98.2% | 3,129.1 | \$46,926 |
| Elk County | 30,477 | 89.2% | 79.5% | 75.0% | 36.9 | \$34,222 |
| Erie County | 267,689 | 92.8% | 90.7% | 85.2% | 335.1 | \$32,858 |
| Fayette County | 125,755 | 86.2% | 74.3% | 66.1% | 159.0 | \$31,498 |
| Forest County | 6,626 | 37.6% | 64.4% | 27.4% | 15.5 | \$18,857 |
| Franklin County | 156,902 | 91.1% | 93.4% | 86.4% | 203.2 | \$37,520 |
| Fulton County | 14,533 | 40.7% | 64.0% | 33.6% | 33.2 | \$33,601 |
| Greene County | 34,663 | 73.3% | 47.4% | 40.7% | 60.2 | \$32,272 |
| Huntingdon County | 43,281 | 80.4% | 58.1% | 54.0% | 49.5 | \$30,392 |
| Indiana County | 82,957 | 73.3% | 68.9% | 56.8% | 100.3 | \$30,494 |
| Jefferson County | 43,794 | 79.7% | 67.6% | 59.6% | 67.1 | \$30,280 |
| Juniata County | 23,339 | 56.3% | 60.7% | 42.3% | 59.6 | \$31,251 |
| Lackawanna County | 215,615 | 98.0% | 96.1% | 94.8% | 469.7 | \$35,296 |
| Lancaster County | 556,629 | 96.4% | 98.2% | 95.1% | 589.7 | \$39,872 |
| Lawrence County | 84,849 | 93.7% | 90.0% | 85.0% | 237.4 | \$32,319 |
| Lebanon County | 144,011 | 96.7% | 99.0% | 95.9% | 398.0 | \$35,604 |
| Lehigh County | 376,317 | 99.1% | 99.2% | 98.4% | 1,089.7 | \$39,856 |
| Luzerne County | 326,369 | 94.6% | 93.8% | 89.9% | 366.8 | \$33,535 |
| Lycoming County | 113,104 | 90.6% | 85.3% | 81.8% | 92.0 | \$32,968 |
| McKean County | 39,866 | 85.0% | 66.2% | 62.8% | 40.7 | \$30,278 |
| Mercer County | 109,220 | 85.3% | 85.5% | 75.6% | 162.4 | \$32,081 |
| Mifflin County | 45,988 | 87.1% | 64.3% | 60.3% | 111.9 | \$28,979 |
| Monroe County | 167,198 | 96.7% | 79.1% | 76.8% | 274.8 | \$36,277 |
| Montgomery County | 864,683 | 99.1% | 98.1% | 97.2% | 1,790.3 | \$57,945 |
| Montour County | 18,091 | 82.2% | 92.6% | 78.4% | 138.9 | \$43,700 |
| Northampton County | 318,526 | 99.4% | 98.5% | 98.0% | 861.4 | \$42,643 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Northumberland County | 90,133 | 90.3% | 86.5% | 80.6% | 196.9 | \$31,240 |
| Perry County | 46,114 | 73.6% | 74.0% | 59.5% | 83.6 | \$37,018 |
| Philadelphia County | 1,567,258 | 99.7% | 99.9% | 99.6% | 11,664.9 | \$35,553 |
| Pike County | 60,558 | 95.1% | 52.8% | 50.7% | 111.1 | \$41,139 |
| Potter County | 16,220 | 93.6% | 32.4% | 31.3% | 15.0 | \$29,629 |
| Schuylkill County | 143,104 | 87.6% | 82.6% | 74.6% | 183.8 | \$32,316 |
| Snyder County | 39,652 | 76.5% | 72.1% | 62.0% | 120.6 | \$31,776 |
| Somerset County | 72,710 | 77.5% | 64.3% | 53.9% | 67.6 | \$31,627 |
| Sullivan County | 5,855 | 46.7% | 20.9% | 12.6% | 13.0 | \$35,618 |
| Susquehanna County | 38,074 | 67.5% | 58.4% | 42.9% | 46.2 | \$37,532 |
| Tioga County | 41,106 | 80.7% | 38.3% | 36.1% | 36.3 | \$31,131 |
| Union County | 42,744 | 84.8% | 73.1% | 65.6% | 135.3 | \$33,566 |
| Venango County | 49,777 | 80.8% | 68.4% | 61.8% | 73.8 | \$31,667 |
| Warren County | 37,808 | 69.8% | 69.3% | 58.5% | 42.8 | \$32,319 |
| Washington County | 210,383 | 92.2% | 88.3% | 83.8% | 245.5 | \$42,859 |
| Wayne County | 51,173 | 84.0% | 54.5% | 47.9% | 70.5 | \$32,207 |
| Westmoreland County | 352,057 | 96.8% | 90.7% | 88.4% | 342.6 | \$40,193 |
| Wyoming County | 26,014 | 74.1% | 58.5% | 47.5% | 65.5 | \$36,533 |
| York County | 461,058 | 95.0% | 98.3% | 93.9% | 509.8 | \$38,926 |
| Puerto Rico | 3,221,789 | 97.0% | 98.0% | 95.5% | 940.9 | \$15,637 |
| Adjuntas Municipio | 17,200 | 97.0% | 92.4% | 89.9% | 257.9 | \$8,705 |
| Aguada Municipio | 36,578 | 97.7% | 89.2% | 87.5% | 1,185.3 | \$11,364 |
| Aguadilla Municipio | 54,090 | 99.9% | 99.6% | 99.5% | 1,480.6 | \$12,887 |
| Agua Buenas Municipio | 23,092 | 92.5% | 98.6% | 91.3% | 767.6 | \$14,065 |
| Aibonito Municipio | 23,742 | 100.0% | 96.2% | 96.2% | 758.3 | \$13,395 |
| Arecibo Municipio | 85,840 | 94.7% | 95.5% | 92.5% | 681.6 | \$12,995 |
| Arroyo Municipio | 16,094 | 99.7% | 97.6% | 97.3% | 1,072.3 | \$12,921 |
| Añasco Municipio | 24,621 | 87.6% | 97.2% | 86.6% | 626.7 | \$12,593 |
| Barceloneta Municipio | 22,627 | 98.2% | 96.6% | 94.9% | 1,210.3 | \$13,368 |
| Barranquitas Municipio | 27,866 | 99.1% | 96.2% | 95.3% | 813.5 | \$11,396 |
| Bayamón Municipio | 181,072 | 99.9% | 99.8% | 99.7% | 4,080.5 | \$16,905 |
| Cabo Rojo Municipio | 47,458 | 97.9% | 98.6% | 96.5% | 674.4 | \$14,453 |
| Caguas Municipio | 123,859 | 99.4% | 99.8% | 99.2% | 2,113.5 | \$19,240 |
| Camuy Municipio | 31,732 | 87.4% | 96.1% | 86.5% | 684.5 | \$13,429 |
| Canóvanas Municipio | 41,323 | 99.9% | 98.9% | 98.8% | 1,257.2 | \$17,181 |
| Carolina Municipio | 153,140 | 99.7% | 99.7% | 99.5% | 3,375.1 | \$19,220 |
| Cataño Municipio | 22,319 | 100.0% | 98.7% | 98.7% | 4,618.7 | \$14,094 |
| Cayey Municipio | 40,933 | 100.0% | 98.7% | 98.7% | 788.2 | \$16,510 |
| Ceiba Municipio | 11,486 | 93.2% | 99.6% | 93.1% | 395.6 | \$14,198 |
| Ciales Municipio | 16,279 | 62.2% | 97.3% | 61.6% | 244.7 | \$9,386 |
| Cidra Municipio | 37,849 | 98.1% | 99.4% | 97.5% | 1,050.7 | \$14,451 |
| Coamo Municipio | 34,327 | 100.0% | 96.5% | 96.5% | 440.0 | \$12,371 |
| Comerío Municipio | 18,028 | 88.3% | 98.3% | 87.4% | 634.8 | \$9,825 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Corozal Municipio | 32,550 | 93.4% | 99.6% | 93.1% | 764.7 | \$11,254 |
| Culebra Municipio | 1,858 | 95.9% | 95.6% | 92.4% | 159.5 | \$17,226 |
| Dorado Municipio | 35,126 | 98.7% | 99.9% | 98.6% | 1,519.6 | \$21,280 |
| Fajardo Municipio | 32,480 | 98.5% | 99.5% | 98.1% | 1,086.2 | \$15,367 |
| Florida Municipio | 11,444 | 88.5% | 97.8% | 86.5% | 752.4 | \$11,174 |
| Guayama Municipio | 36,986 | 98.9% | 98.0% | 96.9% | 568.6 | \$12,626 |
| Guayanilla Municipio | 17,323 | 92.8% | 91.0% | 87.2% | 409.8 | \$10,149 |
| Guaynabo Municipio | 89,274 | 99.8% | 100.0% | 99.8% | 3,236.3 | \$28,637 |
| Gurabo Municipio | 39,987 | 98.9% | 99.8% | 98.6% | 1,434.0 | \$25,112 |
| Guánica Municipio | 14,199 | 100.0% | 93.9% | 93.9% | 383.2 | \$8,318 |
| Hatillo Municipio | 36,802 | 99.1% | 98.7% | 97.9% | 880.9 | \$14,528 |
| Hormigueros Municipio | 15,326 | 98.8% | 100.0% | 98.8% | 1,350.8 | \$14,338 |
| Humacao Municipio | 50,411 | 99.6% | 99.1% | 98.7% | 1,127.3 | \$15,510 |
| Isabela Municipio | 42,240 | 97.8% | 97.2% | 95.4% | 763.7 | \$12,242 |
| Jayuya Municipio | 14,100 | 65.9% | 71.4% | 53.7% | 316.6 | \$8,747 |
| Juana Díaz Municipio | 45,867 | 100.0% | 96.2% | 96.2% | 760.9 | \$11,915 |
| Juncos Municipio | 36,513 | 97.4% | 100.0% | 97.4% | 1,378.4 | \$13,924 |
| Lajas Municipio | 22,750 | 100.0% | 98.9% | 98.9% | 379.4 | \$10,169 |
| Lares Municipio | 26,776 | 88.3% | 94.6% | 86.9% | 435.7 | \$10,348 |
| Las Marías Municipio | 8,451 | 55.3% | 97.3% | 55.2% | 182.3 | \$8,514 |
| Las Piedras Municipio | 34,084 | 97.3% | 98.8% | 96.2% | 1,006.0 | \$13,909 |
| Loíza Municipio | 23,351 | 95.4% | 99.7% | 95.3% | 1,205.3 | \$11,835 |
| Luquillo Municipio | 18,010 | 96.7% | 97.4% | 94.6% | 697.8 | \$13,578 |
| Manatí Municipio | 38,521 | 93.2% | 97.6% | 91.0% | 853.4 | \$13,136 |
| Maricao Municipio | 4,527 | 60.3% | 87.5% | 59.5% | 123.6 | \$9,522 |
| Maunabo Municipio | 10,425 | 99.7% | 99.6% | 99.4% | 492.6 | \$10,593 |
| Mayagüez Municipio | 72,462 | 94.6% | 98.6% | 93.3% | 932.9 | \$13,487 |
| Moca Municipio | 35,632 | 94.5% | 97.2% | 92.6% | 707.8 | \$14,052 |
| Morovis Municipio | 27,325 | 90.0% | 97.3% | 88.2% | 703.0 | \$12,329 |
| Naguabo Municipio | 23,121 | 90.4% | 98.6% | 89.0% | 447.6 | \$10,940 |
| Naranjito Municipio | 27,464 | 97.4% | 99.5% | 97.0% | 1,002.3 | \$11,370 |
| Orocovis Municipio | 20,385 | 86.8% | 94.0% | 82.4% | 320.4 | \$9,952 |
| Patillas Municipio | 15,638 | 99.6% | 81.3% | 81.2% | 335.6 | \$11,832 |
| Peñuelas Municipio | 19,967 | 99.8% | 96.4% | 96.2% | 447.5 | \$11,405 |
| Ponce Municipio | 137,799 | 99.5% | 95.9% | 95.7% | 1,198.9 | \$13,507 |
| Quebradillas Municipio | 22,682 | 94.6% | 98.3% | 93.2% | 1,000.0 | \$11,617 |
| Rincón Municipio | 14,967 | 96.5% | 94.5% | 91.6% | 1,047.5 | \$15,789 |
| Río Grande Municipio | 46,376 | 97.8% | 99.6% | 97.5% | 765.0 | \$14,161 |
| Sabana Grande Municipio | 22,103 | 95.9% | 93.7% | 90.4% | 608.7 | \$11,255 |
| Salinas Municipio | 26,299 | 99.9% | 94.3% | 94.2% | 378.9 | \$11,477 |
| San Germán Municipio | 30,813 | 92.4% | 90.8% | 86.9% | 565.4 | \$11,808 |
| San Juan Municipio | 343,264 | 100.0% | 99.8% | 99.8% | 7,168.0 | \$22,553 |
| San Lorenzo Municipio | 35,750 | 95.9% | 99.9% | 95.8% | 673.2 | \$12,220 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|----------------|-------------------|
| San Sebastián Municipio | 38,356 | 91.0% | 99.1% | 90.6% | 544.7 | \$11,370 |
| Santa Isabel Municipio | 20,247 | 100.0% | 98.8% | 98.8% | 594.9 | \$13,541 |
| Toa Alta Municipio | 64,871 | 99.3% | 99.8% | 99.2% | 2,401.2 | \$16,887 |
| Toa Baja Municipio | 72,940 | 99.9% | 99.9% | 99.8% | 3,138.0 | \$16,260 |
| Trujillo Alto Municipio | 66,027 | 99.6% | 100.0% | 99.6% | 3,180.8 | \$19,492 |
| Utua Municipio | 27,231 | 83.7% | 88.4% | 80.6% | 239.9 | \$10,708 |
| Vega Alta Municipio | 33,891 | 92.5% | 99.3% | 92.0% | 1,222.2 | \$16,582 |
| Vega Baja Municipio | 52,914 | 97.4% | 99.5% | 97.0% | 1,154.1 | \$14,818 |
| Vieques Municipio | 8,241 | 91.1% | 91.6% | 83.7% | 162.3 | \$9,193 |
| Villalba Municipio | 21,275 | 100.0% | 97.5% | 97.5% | 597.0 | \$12,133 |
| Yabucoa Municipio | 29,476 | 97.7% | 98.1% | 96.2% | 533.8 | \$11,720 |
| Yauco Municipio | 33,337 | 87.8% | 96.1% | 87.3% | 492.3 | \$11,934 |
| Rhode Island | 1,093,734 | 99.5% | 91.6% | 91.2% | 1,057.9 | \$43,324 |
| Bristol County | 50,360 | 99.9% | 80.1% | 80.0% | 2,086.9 | \$56,739 |
| Kent County | 171,275 | 99.9% | 86.9% | 86.9% | 1,016.1 | \$46,564 |
| Newport County | 84,481 | 99.3% | 85.1% | 84.7% | 824.8 | \$58,280 |
| Providence County | 657,288 | 99.6% | 96.8% | 96.5% | 1,605.2 | \$38,191 |
| Washington County | 130,330 | 98.5% | 79.9% | 78.8% | 395.8 | \$50,008 |
| South Carolina | 5,282,634 | 90.4% | 87.3% | 81.1% | 175.7 | \$36,072 |
| Abbeville County | 24,356 | 96.3% | 51.4% | 49.5% | 49.6 | \$31,443 |
| Aiken County | 174,150 | 90.5% | 94.9% | 87.4% | 162.7 | \$34,786 |
| Allendale County | 7,579 | 63.3% | 69.3% | 57.3% | 18.6 | \$19,654 |
| Anderson County | 209,581 | 91.8% | 94.2% | 86.9% | 293.6 | \$33,714 |
| Bamberg County | 12,908 | 70.8% | 39.4% | 30.3% | 32.8 | \$21,991 |
| Barnwell County | 20,414 | 61.6% | 47.5% | 32.7% | 37.2 | \$25,640 |
| Beaufort County | 196,371 | 99.0% | 85.5% | 85.1% | 340.9 | \$48,132 |
| Berkeley County | 245,117 | 81.4% | 91.4% | 77.5% | 222.1 | \$37,563 |
| Calhoun County | 14,179 | 89.2% | 58.0% | 53.6% | 37.2 | \$30,898 |
| Charleston County | 419,279 | 96.5% | 95.8% | 93.3% | 456.7 | \$51,480 |
| Cherokee County | 56,121 | 75.9% | 80.5% | 64.8% | 142.8 | \$26,706 |
| Chester County | 31,931 | 56.1% | 52.7% | 36.6% | 55.0 | \$26,349 |
| Chesterfield County | 43,683 | 76.9% | 43.2% | 35.8% | 54.7 | \$26,435 |
| Clarendon County | 30,913 | 78.4% | 48.0% | 39.7% | 50.9 | \$26,290 |
| Colleton County | 38,599 | 99.8% | 58.1% | 57.9% | 36.5 | \$26,253 |
| Darlington County | 62,398 | 81.8% | 64.0% | 57.2% | 111.3 | \$28,821 |
| Dillon County | 27,738 | 78.4% | 58.4% | 48.3% | 68.5 | \$21,736 |
| Dorchester County | 166,133 | 92.2% | 95.9% | 90.3% | 292.2 | \$36,543 |
| Edgefield County | 26,932 | 73.4% | 62.5% | 50.7% | 53.8 | \$31,232 |
| Fairfield County | 20,455 | 61.7% | 50.1% | 35.9% | 29.8 | \$29,269 |
| Florence County | 136,721 | 91.6% | 83.3% | 77.6% | 170.8 | \$30,733 |
| Georgetown County | 64,722 | 94.9% | 74.7% | 71.5% | 79.5 | \$39,403 |
| Greenville County | 547,950 | 93.6% | 97.9% | 92.5% | 697.2 | \$40,427 |
| Greenwood County | 69,267 | 88.7% | 79.0% | 75.0% | 152.0 | \$30,237 |
| Hampton County | 18,113 | 65.2% | 32.9% | 27.5% | 32.3 | \$22,727 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Horry County | 383,101 | 96.1% | 85.8% | 82.6% | 338.0 | \$34,147 |
| Jasper County | 32,039 | 90.8% | 76.3% | 72.4% | 48.9 | \$31,228 |
| Kershaw County | 67,751 | 81.6% | 75.0% | 64.9% | 93.2 | \$30,310 |
| Lancaster County | 104,577 | 94.8% | 75.0% | 72.4% | 190.5 | \$39,172 |
| Laurens County | 67,965 | 86.4% | 76.3% | 67.7% | 95.3 | \$27,221 |
| Lee County | 16,153 | 50.2% | 48.8% | 31.1% | 39.4 | \$21,054 |
| Lexington County | 304,797 | 96.3% | 97.3% | 94.1% | 436.0 | \$37,209 |
| Marion County | 28,450 | 90.5% | 63.2% | 58.1% | 58.1 | \$21,952 |
| Marlboro County | 26,039 | 38.8% | 51.6% | 20.7% | 54.3 | \$20,703 |
| McCormick County | 9,764 | 87.7% | 22.9% | 22.5% | 27.2 | \$32,017 |
| Newberry County | 38,247 | 91.5% | 70.2% | 64.1% | 60.7 | \$32,251 |
| Oconee County | 80,180 | 68.2% | 81.6% | 61.6% | 128.0 | \$35,315 |
| Orangeburg County | 83,094 | 78.6% | 68.0% | 56.3% | 75.1 | \$23,636 |
| Pickens County | 133,462 | 91.9% | 93.0% | 86.9% | 268.6 | \$32,059 |
| Richland County | 421,566 | 95.2% | 98.5% | 93.8% | 556.7 | \$35,720 |
| Saluda County | 18,938 | 74.9% | 58.0% | 45.0% | 41.8 | \$27,912 |
| Spartanburg County | 345,831 | 87.6% | 96.9% | 86.5% | 427.8 | \$32,039 |
| Sumter County | 104,012 | 90.8% | 89.0% | 83.1% | 156.4 | \$28,319 |
| Union County | 26,752 | 70.2% | 77.5% | 63.3% | 52.1 | \$26,111 |
| Williamsburg County | 30,058 | 79.2% | 58.9% | 49.0% | 32.2 | \$22,946 |
| York County | 294,248 | 97.1% | 87.0% | 85.4% | 432.1 | \$41,486 |
| South Dakota | 909,824 | 92.6% | 84.7% | 80.7% | 12.0 | \$36,850 |
| Aurora County | 2,755 | 95.5% | 54.3% | 52.8% | 3.9 | \$40,299 |
| Beadle County | 19,376 | 99.2% | 89.2% | 88.9% | 15.4 | \$32,177 |
| Bennett County | 3,336 | 81.4% | 51.9% | 45.4% | 2.8 | \$22,068 |
| Bon Homme County | 7,062 | 89.5% | 75.8% | 65.7% | 12.5 | \$26,450 |
| Brookings County | 35,484 | 98.6% | 89.4% | 88.4% | 44.8 | \$32,778 |
| Brown County | 37,972 | 90.0% | 73.8% | 71.8% | 22.2 | \$38,035 |
| Brule County | 5,321 | 93.2% | 73.1% | 71.0% | 6.5 | \$34,629 |
| Buffalo County | 1,861 | 92.3% | 71.4% | 66.8% | 3.9 | \$13,731 |
| Butte County | 10,774 | 90.5% | 82.7% | 78.4% | 4.8 | \$34,218 |
| Campbell County | 1,349 | 60.7% | 22.0% | 12.7% | 1.8 | \$40,617 |
| Charles Mix County | 9,213 | 83.6% | 66.5% | 58.8% | 8.4 | \$27,034 |
| Clark County | 3,912 | 96.2% | 67.4% | 65.4% | 4.1 | \$35,573 |
| Clay County | 15,280 | 91.3% | 89.5% | 86.8% | 37.1 | \$30,033 |
| Codington County | 28,721 | 99.3% | 89.7% | 89.5% | 41.8 | \$36,016 |
| Corson County | 3,826 | 87.7% | 49.0% | 44.2% | 1.5 | \$18,757 |
| Custer County | 9,006 | 70.0% | 63.5% | 47.8% | 5.8 | \$43,745 |
| Davison County | 19,973 | 99.6% | 93.0% | 92.8% | 45.8 | \$33,282 |
| Day County | 5,479 | 91.3% | 68.6% | 66.5% | 5.3 | \$34,210 |
| Deuel County | 4,352 | 98.9% | 61.7% | 61.0% | 7.0 | \$35,754 |
| Dewey County | 5,140 | 88.8% | 72.2% | 66.7% | 2.2 | \$20,657 |
| Douglas County | 2,776 | 95.1% | 57.5% | 56.4% | 6.4 | \$37,235 |
| Edmunds County | 4,065 | 75.2% | 34.2% | 32.8% | 3.6 | \$40,159 |
| Fall River County | 7,370 | 78.9% | 77.3% | 69.3% | 4.2 | \$33,745 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Faulk County | 2,126 | 97.4% | 46.0% | 46.0% | 2.2 | \$31,533 |
| Grant County | 7,463 | 98.1% | 71.6% | 70.5% | 11.0 | \$38,787 |
| Gregory County | 3,962 | 97.4% | 50.2% | 49.7% | 3.9 | \$31,505 |
| Haakon County | 1,826 | 96.8% | 77.5% | 76.4% | 1.0 | \$32,270 |
| Hamlin County | 6,352 | 98.7% | 65.8% | 65.1% | 12.5 | \$31,643 |
| Hand County | 3,140 | 99.5% | 56.1% | 56.1% | 2.2 | \$40,952 |
| Hanson County | 3,461 | 96.4% | 55.2% | 52.6% | 8.0 | \$33,489 |
| Harding County | 1,330 | 99.4% | 31.1% | 30.5% | 0.5 | \$44,603 |
| Hughes County | 17,692 | 96.8% | 93.8% | 90.6% | 23.9 | \$37,645 |
| Hutchinson County | 7,368 | 93.2% | 80.9% | 77.0% | 9.1 | \$35,631 |
| Hyde County | 1,184 | 100.0% | 84.8% | 84.8% | 1.4 | \$36,319 |
| Jackson County | 2,821 | 74.2% | 47.9% | 40.9% | 1.5 | \$15,792 |
| Jerauld County | 1,650 | 98.2% | 82.8% | 81.5% | 3.1 | \$47,964 |
| Jones County | 884 | 69.7% | 62.4% | 49.3% | 0.9 | \$30,962 |
| Kingsbury County | 5,294 | 93.3% | 74.0% | 71.1% | 6.4 | \$36,484 |
| Lake County | 10,972 | 94.2% | 91.1% | 86.3% | 19.5 | \$44,809 |
| Lawrence County | 27,214 | 84.5% | 75.2% | 69.5% | 34.0 | \$41,086 |
| Lincoln County | 70,987 | 94.1% | 96.0% | 91.5% | 123.0 | \$46,868 |
| Lyman County | 3,692 | 98.1% | 60.6% | 59.8% | 2.2 | \$25,997 |
| Marshall County | 4,374 | 99.2% | 64.7% | 64.7% | 5.2 | \$44,857 |
| McCook County | 5,778 | 86.4% | 70.9% | 61.5% | 10.1 | \$34,242 |
| McPherson County | 2,395 | 67.1% | 23.6% | 17.7% | 2.1 | \$41,144 |
| Meade County | 30,698 | 79.9% | 69.6% | 57.7% | 8.8 | \$33,857 |
| Mellette County | 1,892 | 60.0% | 29.8% | 17.3% | 1.4 | \$16,826 |
| Miner County | 2,304 | 94.4% | 75.0% | 71.4% | 4.0 | \$32,033 |
| Minnehaha County | 203,971 | 98.7% | 98.2% | 96.9% | 252.8 | \$39,289 |
| Moody County | 6,349 | 99.9% | 77.7% | 77.7% | 12.2 | \$35,419 |
| Oglala Lakota County | 13,519 | 70.0% | 78.1% | 61.9% | 6.5 | \$10,955 |
| Pennington County | 114,461 | 91.1% | 92.8% | 87.9% | 41.2 | \$38,951 |
| Perkins County | 2,804 | 97.2% | 60.4% | 60.2% | 1.0 | \$40,235 |
| Potter County | 2,438 | 100.0% | 55.3% | 55.3% | 2.8 | \$34,335 |
| Roberts County | 10,163 | 97.7% | 56.7% | 54.7% | 9.2 | \$28,613 |
| Sanborn County | 2,415 | 94.2% | 71.2% | 67.9% | 4.2 | \$35,468 |
| Spink County | 6,235 | 91.2% | 12.3% | 11.6% | 4.1 | \$37,138 |
| Stanley County | 2,999 | 85.8% | 89.8% | 79.3% | 2.1 | \$46,652 |
| Sully County | 1,471 | 100.0% | 77.6% | 77.6% | 1.5 | \$45,475 |
| Todd County | 9,220 | 44.2% | 78.9% | 41.3% | 6.6 | \$12,562 |
| Tripp County | 5,565 | 90.6% | 71.6% | 66.3% | 3.5 | \$29,463 |
| Turner County | 8,856 | 92.5% | 74.7% | 70.4% | 14.4 | \$36,103 |
| Union County | 17,063 | 96.5% | 92.8% | 90.0% | 37.0 | \$47,193 |
| Walworth County | 5,265 | 93.6% | 85.1% | 80.6% | 7.4 | \$35,602 |
| Yankton County | 23,373 | 87.8% | 85.5% | 78.0% | 44.8 | \$37,202 |
| Ziebach County | 2,395 | 94.0% | 58.0% | 55.7% | 1.2 | \$23,657 |
| Tennessee | 7,051,339 | 92.2% | 84.6% | 80.8% | 171.0 | \$36,040 |
| Anderson County | 78,913 | 94.9% | 91.6% | 88.2% | 234.0 | \$32,803 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Bedford County | 51,950 | 76.6% | 71.8% | 60.4% | 109.7 | \$28,520 |
| Benton County | 16,002 | 55.8% | 44.7% | 32.2% | 40.6 | \$27,185 |
| Bledsoe County | 14,798 | 72.3% | 41.5% | 39.3% | 36.4 | \$24,241 |
| Blount County | 139,958 | 93.2% | 92.3% | 87.4% | 250.5 | \$36,376 |
| Bradley County | 110,616 | 90.2% | 89.0% | 83.2% | 336.5 | \$31,121 |
| Campbell County | 39,584 | 74.8% | 69.8% | 59.2% | 82.4 | \$26,791 |
| Cannon County | 14,788 | 66.6% | 72.4% | 52.6% | 55.7 | \$30,234 |
| Carroll County | 28,458 | 62.8% | 59.9% | 46.8% | 47.6 | \$26,818 |
| Carter County | 56,410 | 88.8% | 75.2% | 70.0% | 165.3 | \$28,321 |
| Cheatham County | 41,830 | 86.5% | 78.6% | 70.9% | 138.3 | \$35,852 |
| Chester County | 17,609 | 85.6% | 56.7% | 51.6% | 61.6 | \$24,788 |
| Claiborne County | 32,431 | 95.3% | 63.8% | 62.1% | 74.6 | \$25,408 |
| Clay County | 7,620 | 100.0% | 37.8% | 37.8% | 32.2 | \$22,931 |
| Cocke County | 36,879 | 63.5% | 63.6% | 51.0% | 84.6 | \$25,864 |
| Coffee County | 59,728 | 92.1% | 55.8% | 53.0% | 139.2 | \$29,277 |
| Crockett County | 13,888 | 100.0% | 59.0% | 59.0% | 52.3 | \$30,362 |
| Cumberland County | 63,522 | 73.7% | 62.9% | 50.8% | 93.2 | \$30,952 |
| Davidson County | 708,144 | 99.3% | 99.5% | 98.9% | 1,405.9 | \$45,951 |
| DeKalb County | 21,003 | 91.9% | 57.5% | 53.2% | 69.0 | \$27,684 |
| Decatur County | 11,564 | 46.4% | 35.5% | 25.5% | 34.6 | \$27,578 |
| Dickson County | 55,761 | 68.5% | 82.1% | 60.7% | 113.8 | \$33,582 |
| Dyer County | 36,410 | 99.5% | 78.3% | 78.0% | 71.1 | \$37,415 |
| Fayette County | 43,630 | 77.7% | 65.0% | 58.0% | 61.9 | \$40,613 |
| Fentress County | 19,332 | 100.0% | 29.1% | 29.1% | 38.8 | \$24,595 |
| Franklin County | 43,942 | 74.9% | 53.4% | 43.1% | 79.2 | \$31,395 |
| Gibson County | 50,837 | 93.8% | 69.4% | 66.0% | 84.3 | \$27,742 |
| Giles County | 30,554 | 48.5% | 64.8% | 43.3% | 50.0 | \$31,852 |
| Grainger County | 24,277 | 79.5% | 49.4% | 42.7% | 86.5 | \$26,545 |
| Greene County | 71,405 | 88.7% | 63.6% | 59.0% | 114.8 | \$28,237 |
| Grundy County | 13,783 | 90.7% | 42.7% | 40.0% | 38.2 | \$25,075 |
| Hamblen County | 65,168 | 98.4% | 77.0% | 76.3% | 404.3 | \$27,845 |
| Hamilton County | 374,682 | 99.6% | 97.3% | 97.1% | 691.1 | \$41,198 |
| Hancock County | 6,845 | 99.7% | 1.6% | 1.6% | 30.8 | \$24,120 |
| Hardeman County | 25,529 | 76.7% | 53.8% | 46.6% | 38.2 | \$22,098 |
| Hardin County | 27,077 | 60.0% | 51.4% | 36.6% | 46.9 | \$26,068 |
| Hawkins County | 58,043 | 97.2% | 77.9% | 75.9% | 119.2 | \$28,648 |
| Haywood County | 17,550 | 77.1% | 69.7% | 61.4% | 32.9 | \$26,031 |
| Henderson County | 27,929 | 59.1% | 53.5% | 38.1% | 53.7 | \$25,873 |
| Henry County | 32,379 | 83.0% | 53.3% | 45.8% | 57.6 | \$28,098 |
| Hickman County | 25,455 | 86.3% | 29.7% | 26.7% | 41.6 | \$27,764 |
| Houston County | 8,219 | 95.8% | 24.4% | 23.8% | 41.0 | \$27,053 |
| Humphreys County | 19,106 | 100.0% | 45.0% | 45.0% | 36.0 | \$29,561 |
| Jackson County | 11,989 | 99.8% | 22.4% | 22.4% | 38.8 | \$25,534 |
| Jefferson County | 56,727 | 85.6% | 76.7% | 67.0% | 206.2 | \$31,947 |
| Johnson County | 18,086 | 81.8% | 41.9% | 37.6% | 60.6 | \$26,627 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Knox County | 494,574 | 98.5% | 98.7% | 97.3% | 972.9 | \$39,608 |
| Lake County | 6,507 | 100.0% | 23.5% | 23.5% | 39.2 | \$19,695 |
| Lauderdale County | 24,793 | 96.8% | 50.7% | 48.7% | 52.5 | \$24,358 |
| Lawrence County | 45,415 | 75.4% | 64.6% | 53.2% | 73.6 | \$26,865 |
| Lewis County | 12,957 | 97.9% | 51.2% | 50.7% | 45.9 | \$26,873 |
| Lincoln County | 36,004 | 72.4% | 64.6% | 51.4% | 63.1 | \$32,016 |
| Loudon County | 58,181 | 86.8% | 90.8% | 82.5% | 253.8 | \$40,425 |
| Macon County | 26,229 | 100.0% | 18.4% | 18.4% | 85.4 | \$24,979 |
| Madison County | 99,245 | 97.1% | 84.8% | 84.0% | 178.1 | \$31,380 |
| Marion County | 29,094 | 99.3% | 65.7% | 65.4% | 58.4 | \$29,314 |
| Marshall County | 35,878 | 77.4% | 53.4% | 45.2% | 95.6 | \$32,225 |
| Maury County | 108,159 | 87.1% | 87.2% | 80.5% | 176.4 | \$35,733 |
| McMinn County | 54,719 | 66.1% | 55.5% | 45.1% | 127.2 | \$30,334 |
| McNairy County | 25,988 | 47.3% | 45.0% | 27.1% | 46.2 | \$25,004 |
| Meigs County | 13,272 | 58.2% | 47.6% | 31.8% | 68.0 | \$26,843 |
| Monroe County | 47,740 | 63.8% | 38.8% | 30.4% | 75.1 | \$27,356 |
| Montgomery County | 235,201 | 98.2% | 96.6% | 95.1% | 436.2 | \$31,438 |
| Moore County | 6,742 | 47.0% | 34.0% | 17.4% | 52.2 | \$35,178 |
| Morgan County | 21,224 | 99.9% | 42.7% | 42.6% | 40.6 | \$27,320 |
| Obion County | 30,394 | 97.5% | 70.8% | 68.3% | 55.8 | \$28,782 |
| Overton County | 23,044 | 99.9% | 53.6% | 53.5% | 53.2 | \$29,556 |
| Perry County | 8,685 | 99.8% | 35.6% | 35.6% | 20.9 | \$30,870 |
| Pickett County | 5,107 | 99.9% | 34.7% | 34.7% | 31.3 | \$27,259 |
| Polk County | 17,863 | 70.0% | 25.7% | 19.9% | 41.1 | \$30,400 |
| Putnam County | 82,382 | 90.8% | 82.7% | 75.5% | 205.4 | \$29,419 |
| Rhea County | 33,730 | 82.1% | 69.6% | 62.7% | 106.9 | \$26,678 |
| Roane County | 55,082 | 86.0% | 68.6% | 64.6% | 152.7 | \$36,579 |
| Robertson County | 75,470 | 86.3% | 92.3% | 82.4% | 158.4 | \$35,093 |
| Rutherford County | 360,619 | 97.9% | 98.6% | 96.9% | 582.3 | \$35,135 |
| Scott County | 22,035 | 100.0% | 61.2% | 61.2% | 41.4 | \$22,273 |
| Sequatchie County | 16,909 | 87.1% | 75.2% | 68.1% | 63.6 | \$25,954 |
| Sevier County | 98,789 | 85.1% | 87.9% | 78.2% | 166.7 | \$31,603 |
| Shelby County | 916,371 | 98.2% | 98.4% | 97.1% | 1,204.9 | \$36,230 |
| Smith County | 20,489 | 96.5% | 55.8% | 53.2% | 65.2 | \$31,446 |
| Stewart County | 14,035 | 86.2% | 36.5% | 32.7% | 30.5 | \$28,362 |
| Sullivan County | 160,820 | 96.4% | 90.8% | 87.7% | 389.0 | \$33,934 |
| Sumner County | 203,858 | 96.7% | 94.9% | 92.5% | 385.0 | \$40,419 |
| Tipton County | 61,656 | 92.1% | 51.0% | 48.6% | 135.3 | \$31,909 |
| Trousdale County | 12,111 | 96.5% | 32.0% | 31.9% | 105.9 | \$26,522 |
| Unicoi County | 17,674 | 97.2% | 77.6% | 76.8% | 95.0 | \$27,930 |
| Union County | 20,452 | 70.9% | 66.0% | 49.6% | 91.5 | \$28,174 |
| Van Buren County | 6,429 | 78.5% | 38.3% | 33.3% | 23.5 | \$24,099 |
| Warren County | 42,026 | 87.5% | 61.4% | 54.3% | 97.1 | \$27,059 |
| Washington County | 136,172 | 94.2% | 89.4% | 85.0% | 417.1 | \$35,562 |
| Wayne County | 16,308 | 38.8% | 36.0% | 28.9% | 22.2 | \$26,538 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|-------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Weakley County | 33,063 | 82.7% | 61.8% | 57.6% | 57.0 | \$26,820 |
| White County | 28,064 | 91.7% | 67.2% | 62.7% | 74.5 | \$26,213 |
| Williamson County | 260,815 | 95.0% | 97.6% | 93.5% | 447.5 | \$61,451 |
| Wilson County | 158,555 | 93.6% | 94.8% | 89.1% | 277.7 | \$42,978 |
| Texas | 30,029,572 | 92.8% | 95.1% | 89.7% | 114.9 | \$37,514 |
| Anderson County | 58,064 | 42.2% | 33.8% | 26.3% | 54.6 | \$23,548 |
| Andrews County | 18,334 | 95.5% | 71.8% | 71.4% | 12.2 | \$39,749 |
| Angelina County | 87,101 | 65.8% | 73.2% | 54.6% | 109.2 | \$27,460 |
| Aransas County | 24,944 | 99.7% | 97.9% | 97.7% | 99.0 | \$40,890 |
| Archer County | 8,835 | 88.8% | 63.4% | 57.6% | 9.8 | \$37,873 |
| Armstrong County | 1,850 | 99.0% | 27.5% | 27.3% | 2.0 | \$31,823 |
| Atascosa County | 50,864 | 55.0% | 85.3% | 52.8% | 41.7 | \$27,386 |
| Austin County | 31,097 | 94.5% | 82.6% | 79.5% | 48.1 | \$36,399 |
| Bailey County | 6,779 | 99.9% | 81.9% | 81.9% | 8.2 | \$29,674 |
| Bandera County | 22,115 | 89.8% | 65.2% | 59.8% | 28.0 | \$39,162 |
| Bastrop County | 106,188 | 76.8% | 80.5% | 65.8% | 119.6 | \$34,079 |
| Baylor County | 3,466 | 92.6% | 72.2% | 72.1% | 4.0 | \$31,392 |
| Bee County | 30,394 | 96.7% | 71.2% | 69.5% | 34.5 | \$22,347 |
| Bell County | 388,386 | 96.9% | 95.4% | 93.0% | 368.5 | \$31,822 |
| Bexar County | 2,059,530 | 94.5% | 99.9% | 94.5% | 1,660.5 | \$33,963 |
| Blanco County | 12,418 | 91.0% | 77.6% | 73.2% | 17.5 | \$46,356 |
| Borden County | 585 | 54.9% | 37.6% | 33.0% | 0.7 | \$39,276 |
| Bosque County | 18,697 | 61.8% | 59.3% | 37.5% | 19.0 | \$32,990 |
| Bowie County | 92,035 | 84.0% | 81.8% | 74.1% | 104.0 | \$30,103 |
| Brazoria County | 388,181 | 88.1% | 98.3% | 87.4% | 284.7 | \$39,891 |
| Brazos County | 242,014 | 96.3% | 98.2% | 95.2% | 412.9 | \$32,499 |
| Brewster County | 9,343 | 78.5% | 84.1% | 72.2% | 1.5 | \$35,516 |
| Briscoe County | 1,431 | 96.4% | 81.8% | 81.7% | 1.6 | \$29,721 |
| Brooks County | 6,906 | 93.4% | 87.6% | 85.8% | 7.3 | \$20,308 |
| Brown County | 38,373 | 99.0% | 83.8% | 83.6% | 40.6 | \$30,202 |
| Burleson County | 18,657 | 55.4% | 69.1% | 40.4% | 28.3 | \$38,918 |
| Burnet County | 52,502 | 87.2% | 81.2% | 74.7% | 52.8 | \$40,628 |
| Caldwell County | 47,848 | 83.4% | 73.8% | 64.7% | 87.9 | \$28,742 |
| Calhoun County | 19,706 | 87.7% | 93.1% | 83.7% | 38.9 | \$33,754 |
| Callahan County | 14,210 | 95.0% | 67.9% | 66.5% | 15.8 | \$31,856 |
| Cameron County | 425,208 | 97.4% | 99.4% | 97.0% | 476.8 | \$21,440 |
| Camp County | 12,716 | 94.1% | 45.9% | 45.7% | 64.9 | \$28,004 |
| Carson County | 5,784 | 83.1% | 76.7% | 67.6% | 6.3 | \$40,192 |
| Cass County | 28,539 | 41.2% | 60.0% | 36.9% | 30.5 | \$28,608 |
| Castro County | 7,298 | 82.8% | 80.2% | 71.3% | 8.2 | \$25,425 |
| Chambers County | 51,288 | 85.6% | 95.9% | 83.0% | 85.9 | \$42,628 |
| Cherokee County | 51,645 | 42.2% | 55.0% | 32.6% | 49.0 | \$26,790 |
| Childress County | 6,809 | 84.0% | 69.8% | 68.7% | 9.8 | \$27,466 |
| Clay County | 10,486 | 94.4% | 61.2% | 60.2% | 9.6 | \$35,847 |
| Cochran County | 2,526 | 83.4% | 16.4% | 9.0% | 3.3 | \$23,748 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Coke County | 3,333 | 80.9% | 71.3% | 67.8% | 3.7 | \$28,397 |
| Coleman County | 7,850 | 90.6% | 73.3% | 72.8% | 6.2 | \$31,249 |
| Collin County | 1,158,696 | 96.1% | 99.7% | 95.8% | 1,377.3 | \$52,654 |
| Collingsworth County | 2,568 | 85.7% | 78.0% | 75.6% | 2.8 | \$33,436 |
| Colorado County | 20,754 | 70.5% | 80.1% | 65.3% | 21.6 | \$35,002 |
| Comal County | 184,642 | 94.0% | 96.6% | 90.8% | 330.0 | \$47,280 |
| Comanche County | 13,878 | 75.1% | 74.0% | 62.8% | 14.8 | \$31,171 |
| Concho County | 3,340 | 95.2% | 58.2% | 57.7% | 3.4 | \$24,207 |
| Cooke County | 43,050 | 89.3% | 73.5% | 69.5% | 49.2 | \$36,275 |
| Coryell County | 85,057 | 88.7% | 91.8% | 85.1% | 80.8 | \$26,699 |
| Cottle County | 1,307 | 96.5% | 83.0% | 82.5% | 1.5 | \$26,081 |
| Crane County | 4,546 | 18.9% | 98.7% | 18.9% | 5.8 | \$31,973 |
| Crockett County | 2,943 | 1.0% | 89.1% | 0.9% | 1.0 | \$35,942 |
| Crosby County | 4,998 | 96.5% | 88.4% | 86.4% | 5.6 | \$30,888 |
| Culberson County | 2,155 | 68.2% | 94.9% | 67.9% | 0.6 | \$29,295 |
| Dallam County | 7,241 | 96.2% | 67.8% | 66.4% | 4.8 | \$28,936 |
| Dallas County | 2,600,840 | 96.5% | 100.0% | 96.5% | 2,979.0 | \$39,172 |
| Dawson County | 12,130 | 99.1% | 92.4% | 91.9% | 13.5 | \$22,002 |
| DeWitt County | 19,772 | 51.1% | 84.9% | 49.9% | 21.8 | \$29,359 |
| Deaf Smith County | 18,377 | 98.4% | 82.4% | 81.7% | 12.3 | \$23,310 |
| Delta County | 5,406 | 93.6% | 78.9% | 76.3% | 21.0 | \$34,345 |
| Denton County | 977,281 | 95.8% | 99.8% | 95.5% | 1,112.4 | \$50,470 |
| Dickens County | 1,726 | 94.0% | 81.8% | 78.4% | 1.9 | \$28,798 |
| Dimmit County | 8,387 | 78.2% | 81.6% | 67.5% | 6.3 | \$19,505 |
| Donley County | 3,339 | 17.5% | 84.2% | 15.5% | 3.6 | \$25,682 |
| Duval County | 9,888 | 93.6% | 90.8% | 88.2% | 5.5 | \$21,606 |
| Eastland County | 17,944 | 89.6% | 78.4% | 73.9% | 19.4 | \$31,197 |
| Ector County | 160,869 | 98.1% | 99.3% | 97.6% | 179.2 | \$34,267 |
| Edwards County | 1,422 | 7.2% | 78.3% | 4.2% | 0.7 | \$25,218 |
| El Paso County | 868,763 | 99.4% | 99.9% | 99.3% | 857.4 | \$26,011 |
| Ellis County | 212,182 | 96.4% | 97.9% | 94.9% | 226.8 | \$38,628 |
| Erath County | 43,895 | 84.3% | 74.6% | 68.6% | 40.5 | \$32,181 |
| Falls County | 17,049 | 45.3% | 63.8% | 16.2% | 22.3 | \$29,183 |
| Fannin County | 37,125 | 77.9% | 67.0% | 56.5% | 41.7 | \$33,481 |
| Fayette County | 24,913 | 59.9% | 80.8% | 53.1% | 26.2 | \$37,849 |
| Fisher County | 3,622 | 81.6% | 64.9% | 60.8% | 4.0 | \$32,722 |
| Floyd County | 5,235 | 78.6% | 73.5% | 63.9% | 5.3 | \$28,755 |
| Foard County | 1,057 | 92.3% | 75.6% | 75.6% | 1.5 | \$27,262 |
| Fort Bend County | 889,146 | 97.1% | 99.9% | 97.0% | 1,031.8 | \$45,172 |
| Franklin County | 10,618 | 88.1% | 67.3% | 60.5% | 37.3 | \$39,246 |
| Freestone County | 19,950 | 87.1% | 43.8% | 41.5% | 22.7 | \$28,201 |
| Frio County | 17,815 | 76.0% | 71.2% | 59.1% | 15.7 | \$22,779 |
| Gaines County | 22,181 | 98.8% | 76.4% | 76.3% | 14.8 | \$28,701 |
| Galveston County | 357,117 | 96.6% | 99.7% | 96.3% | 941.6 | \$42,603 |
| Garza County | 6,262 | 86.6% | 89.9% | 81.8% | 7.0 | \$22,188 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Gillespie County | 27,477 | 96.4% | 70.9% | 70.5% | 26.0 | \$42,067 |
| Glasscock County | 1,164 | 81.9% | 33.6% | 30.7% | 1.3 | \$50,449 |
| Goliad County | 7,131 | 63.8% | 69.9% | 50.9% | 8.4 | \$36,114 |
| Gonzales County | 19,832 | 53.6% | 62.9% | 30.7% | 18.6 | \$32,807 |
| Gray County | 21,015 | 98.9% | 94.2% | 93.8% | 22.7 | \$30,303 |
| Grayson County | 143,131 | 95.9% | 90.1% | 87.6% | 153.4 | \$34,643 |
| Gregg County | 125,443 | 93.7% | 92.0% | 88.3% | 458.9 | \$32,236 |
| Grimes County | 30,754 | 76.6% | 75.8% | 60.6% | 39.1 | \$28,792 |
| Guadalupe County | 182,760 | 93.0% | 98.0% | 91.6% | 257.0 | \$37,184 |
| Hale County | 31,827 | 92.6% | 85.7% | 84.6% | 31.7 | \$23,696 |
| Hall County | 2,810 | 87.2% | 80.9% | 72.8% | 3.2 | \$26,847 |
| Hamilton County | 8,298 | 79.5% | 70.8% | 67.2% | 9.9 | \$36,764 |
| Hansford County | 5,151 | 84.0% | 58.1% | 55.2% | 5.6 | \$27,585 |
| Hardeman County | 3,516 | 97.6% | 90.3% | 89.8% | 5.1 | \$29,783 |
| Hardin County | 57,811 | 81.4% | 84.2% | 72.9% | 64.9 | \$33,700 |
| Harris County | 4,780,913 | 96.4% | 100.0% | 96.4% | 2,800.8 | \$38,184 |
| Harrison County | 69,955 | 71.2% | 67.8% | 57.3% | 77.7 | \$30,613 |
| Hartley County | 5,208 | 84.6% | 77.3% | 71.9% | 3.6 | \$27,850 |
| Haskell County | 5,403 | 88.8% | 70.7% | 68.4% | 6.0 | \$37,600 |
| Hays County | 269,225 | 96.7% | 98.4% | 95.5% | 397.8 | \$38,909 |
| Hemphill County | 3,217 | 83.0% | 39.0% | 31.9% | 3.5 | \$40,940 |
| Henderson County | 84,511 | 60.5% | 53.9% | 39.9% | 96.7 | \$32,513 |
| Hidalgo County | 888,367 | 95.1% | 99.9% | 95.0% | 565.5 | \$20,844 |
| Hill County | 37,329 | 78.9% | 54.6% | 48.3% | 38.9 | \$30,730 |
| Hockley County | 21,161 | 96.4% | 91.1% | 89.8% | 23.3 | \$28,809 |
| Hood County | 66,373 | 90.4% | 92.7% | 85.6% | 157.8 | \$41,729 |
| Hopkins County | 37,804 | 95.5% | 73.7% | 72.3% | 49.3 | \$32,100 |
| Houston County | 21,950 | 43.3% | 60.0% | 40.1% | 17.8 | \$25,346 |
| Howard County | 33,672 | 96.7% | 94.8% | 92.6% | 37.4 | \$32,431 |
| Hudspeth County | 3,432 | 7.2% | 82.7% | 7.2% | 0.8 | \$16,368 |
| Hunt County | 108,282 | 95.0% | 77.4% | 75.0% | 128.8 | \$31,362 |
| Hutchinson County | 20,215 | 93.1% | 91.0% | 87.1% | 22.8 | \$30,038 |
| Irion County | 1,530 | 82.4% | 74.5% | 67.7% | 1.5 | \$29,664 |
| Jack County | 8,922 | 82.5% | 25.2% | 19.3% | 9.8 | \$28,626 |
| Jackson County | 15,142 | 87.7% | 75.9% | 70.1% | 18.3 | \$29,684 |
| Jasper County | 32,484 | 35.9% | 73.9% | 31.2% | 34.6 | \$31,251 |
| Jeff Davis County | 1,903 | 29.8% | 52.0% | 21.0% | 0.8 | \$38,603 |
| Jefferson County | 250,830 | 92.3% | 98.4% | 90.9% | 286.1 | \$30,770 |
| Jim Hogg County | 4,763 | 24.9% | 97.8% | 24.8% | 4.2 | \$18,366 |
| Jim Wells County | 38,826 | 97.8% | 86.8% | 85.4% | 44.9 | \$25,030 |
| Johnson County | 195,506 | 97.2% | 97.2% | 95.0% | 269.7 | \$32,728 |
| Jones County | 19,935 | 91.1% | 60.0% | 58.0% | 21.5 | \$21,173 |
| Karnes County | 14,836 | 52.1% | 82.2% | 47.8% | 19.8 | \$25,910 |
| Kaufman County | 172,366 | 97.5% | 90.2% | 87.8% | 220.8 | \$33,250 |
| Kendall County | 48,973 | 94.1% | 82.6% | 79.3% | 73.9 | \$56,063 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Kenedy County | 358 | 22.9% | 42.2% | 10.9% | 0.2 | \$21,822 |
| Kent County | 740 | 92.7% | 75.4% | 73.6% | 0.8 | \$29,575 |
| Kerr County | 53,741 | 91.2% | 73.9% | 69.2% | 48.7 | \$38,003 |
| Kimble County | 4,422 | 63.3% | 74.4% | 57.8% | 3.5 | \$39,045 |
| King County | 233 | 84.5% | 54.5% | 53.6% | 0.3 | \$26,408 |
| Kinney County | 3,128 | 0.0% | 95.4% | 0.0% | 2.3 | \$29,833 |
| Kleberg County | 30,362 | 98.2% | 97.5% | 96.2% | 34.5 | \$25,876 |
| Knox County | 3,273 | 95.3% | 0.3% | 0.1% | 3.8 | \$24,892 |
| La Salle County | 6,604 | 67.5% | 65.6% | 51.6% | 4.4 | \$15,492 |
| Lamar County | 50,484 | 81.4% | 76.0% | 67.9% | 55.6 | \$29,888 |
| Lamb County | 12,724 | 94.7% | 86.6% | 84.8% | 12.5 | \$26,687 |
| Lampasas County | 22,785 | 93.2% | 74.3% | 70.6% | 32.0 | \$33,787 |
| Lavaca County | 20,589 | 58.2% | 79.8% | 53.9% | 21.2 | \$34,591 |
| Lee County | 17,954 | 72.1% | 69.1% | 57.5% | 28.5 | \$31,001 |
| Leon County | 16,209 | 35.4% | 47.6% | 24.4% | 15.1 | \$34,519 |
| Liberty County | 101,992 | 54.0% | 86.0% | 48.8% | 88.0 | \$25,667 |
| Limestone County | 22,253 | 90.4% | 39.0% | 36.9% | 24.6 | \$26,479 |
| Lipscomb County | 2,854 | 62.3% | 1.8% | 0.5% | 3.1 | \$33,236 |
| Live Oak County | 11,428 | 74.5% | 62.3% | 56.7% | 11.0 | \$27,951 |
| Llano County | 22,540 | 87.9% | 78.1% | 71.2% | 24.1 | \$48,116 |
| Loving County | 51 | 35.3% | 64.7% | 35.3% | 0.1 | \$44,821 |
| Lubbock County | 317,561 | 97.5% | 97.7% | 95.5% | 354.6 | \$33,700 |
| Lynn County | 5,724 | 94.9% | 80.0% | 76.1% | 6.4 | \$31,000 |
| Madison County | 13,661 | 74.3% | 65.6% | 60.6% | 29.3 | \$24,340 |
| Marion County | 9,560 | 29.1% | 35.4% | 25.5% | 25.1 | \$27,263 |
| Martin County | 5,217 | 93.8% | 83.3% | 80.0% | 5.7 | \$36,881 |
| Mason County | 3,982 | 82.4% | 61.3% | 57.5% | 4.3 | \$36,235 |
| Matagorda County | 36,125 | 85.4% | 89.5% | 78.5% | 33.1 | \$29,001 |
| Maverick County | 57,843 | 94.4% | 95.8% | 90.7% | 45.2 | \$21,405 |
| McCulloch County | 7,497 | 97.3% | 83.5% | 82.9% | 7.0 | \$29,514 |
| McLennan County | 266,836 | 94.0% | 85.6% | 81.9% | 257.4 | \$31,036 |
| McMullen County | 576 | 74.8% | 50.5% | 43.9% | 0.5 | \$27,029 |
| Medina County | 53,723 | 48.6% | 80.2% | 43.7% | 40.5 | \$31,516 |
| Menard County | 1,968 | 91.4% | 74.2% | 73.2% | 2.2 | \$31,983 |
| Midland County | 171,999 | 91.8% | 97.6% | 89.7% | 191.0 | \$46,914 |
| Milam County | 25,628 | 90.8% | 65.8% | 62.6% | 25.2 | \$31,984 |
| Mills County | 4,500 | 91.3% | 68.0% | 61.9% | 6.0 | \$37,010 |
| Mitchell County | 8,943 | 75.8% | 81.1% | 70.2% | 9.8 | \$24,591 |
| Montague County | 21,063 | 88.7% | 71.8% | 67.8% | 22.6 | \$31,125 |
| Montgomery County | 678,490 | 84.8% | 99.7% | 84.6% | 651.0 | \$48,161 |
| Moore County | 20,996 | 98.4% | 95.1% | 94.2% | 23.3 | \$26,321 |
| Morris County | 12,083 | 53.0% | 31.2% | 16.1% | 48.0 | \$26,199 |
| Motley County | 1,032 | 91.5% | 84.9% | 83.9% | 1.0 | \$29,788 |
| Nacogdoches County | 64,862 | 59.4% | 72.6% | 53.7% | 68.5 | \$27,584 |
| Navarro County | 54,636 | 95.3% | 61.8% | 60.9% | 54.1 | \$26,910 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Newton County | 12,052 | 11.8% | 47.8% | 9.5% | 12.9 | \$23,995 |
| Nolan County | 14,473 | 83.4% | 82.5% | 77.5% | 15.9 | \$30,572 |
| Nueces County | 351,674 | 98.3% | 99.2% | 97.6% | 419.1 | \$32,284 |
| Ochiltree County | 9,606 | 87.2% | 28.9% | 27.0% | 10.5 | \$30,836 |
| Oldham County | 1,752 | 88.2% | 69.3% | 64.4% | 1.2 | \$27,710 |
| Orange County | 84,934 | 86.7% | 93.8% | 84.1% | 254.5 | \$35,301 |
| Palo Pinto County | 29,239 | 80.1% | 77.5% | 65.5% | 30.7 | \$31,890 |
| Panola County | 22,677 | 43.7% | 44.8% | 33.1% | 27.9 | \$32,024 |
| Parker County | 165,834 | 96.3% | 91.6% | 88.8% | 183.5 | \$43,434 |
| Parmer County | 9,620 | 86.6% | 86.0% | 73.2% | 10.9 | \$28,342 |
| Pecos County | 14,735 | 79.6% | 82.8% | 72.2% | 3.1 | \$28,217 |
| Polk County | 53,255 | 56.7% | 64.8% | 40.3% | 50.4 | \$27,922 |
| Potter County | 115,645 | 93.4% | 94.6% | 89.7% | 127.3 | \$26,406 |
| Presidio County | 5,939 | 70.5% | 71.6% | 60.2% | 1.5 | \$22,256 |
| Rains County | 12,823 | 99.6% | 44.1% | 44.1% | 55.9 | \$36,069 |
| Randall County | 146,140 | 94.7% | 94.2% | 89.8% | 160.1 | \$40,047 |
| Reagan County | 3,135 | 94.5% | 96.3% | 93.4% | 2.7 | \$28,765 |
| Real County | 2,840 | 54.0% | 47.1% | 37.0% | 4.1 | \$22,725 |
| Red River County | 11,542 | 49.6% | 46.1% | 35.2% | 11.1 | \$25,057 |
| Reeves County | 12,905 | 86.7% | 89.5% | 82.6% | 4.9 | \$26,180 |
| Refugio County | 6,632 | 87.2% | 87.5% | 77.5% | 8.6 | \$27,103 |
| Roberts County | 803 | 37.7% | 8.7% | 1.5% | 0.9 | \$32,250 |
| Robertson County | 17,153 | 86.6% | 51.8% | 48.0% | 20.1 | \$30,568 |
| Rockwall County | 123,208 | 99.5% | 99.7% | 99.2% | 968.6 | \$53,000 |
| Runnels County | 9,859 | 93.9% | 69.4% | 68.3% | 9.4 | \$29,784 |
| Rusk County | 53,333 | 57.0% | 55.4% | 40.9% | 57.7 | \$30,365 |
| Sabine County | 10,048 | 21.3% | 25.6% | 4.3% | 20.4 | \$33,953 |
| San Augustine County | 7,857 | 22.1% | 46.3% | 18.1% | 14.8 | \$24,673 |
| San Jacinto County | 28,348 | 37.0% | 56.9% | 21.8% | 49.8 | \$28,124 |
| San Patricio County | 69,954 | 99.6% | 95.1% | 94.8% | 100.9 | \$30,692 |
| San Saba County | 5,824 | 79.5% | 74.5% | 63.1% | 5.1 | \$26,377 |
| Schleicher County | 2,357 | 90.4% | 85.4% | 83.6% | 1.8 | \$28,084 |
| Scurry County | 16,686 | 85.4% | 77.7% | 73.9% | 18.4 | \$28,549 |
| Shackelford County | 3,186 | 89.7% | 84.1% | 83.6% | 3.5 | \$32,245 |
| Shelby County | 24,008 | 25.3% | 46.9% | 17.0% | 30.2 | \$26,642 |
| Sherman County | 2,799 | 94.5% | 86.6% | 84.1% | 3.0 | \$43,340 |
| Smith County | 241,922 | 65.2% | 84.5% | 60.4% | 262.5 | \$33,903 |
| Somervell County | 9,757 | 54.4% | 68.3% | 43.2% | 52.4 | \$39,037 |
| Starr County | 65,728 | 94.4% | 94.9% | 90.2% | 53.7 | \$16,934 |
| Stephens County | 9,390 | 94.2% | 78.1% | 77.6% | 10.5 | \$28,231 |
| Sterling County | 1,417 | 87.1% | 2.7% | 1.0% | 1.5 | \$31,039 |
| Stonewall County | 1,182 | 86.8% | 83.7% | 79.1% | 1.3 | \$26,733 |
| Sutton County | 3,217 | 86.2% | 86.9% | 83.8% | 2.2 | \$22,836 |
| Swisher County | 6,881 | 99.0% | 82.3% | 82.1% | 7.7 | \$21,371 |
| Tarrant County | 2,154,595 | 96.7% | 100.0% | 96.7% | 2,490.0 | \$39,407 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Taylor County | 145,163 | 99.1% | 88.6% | 88.1% | 158.6 | \$31,492 |
| Terrell County | 693 | 88.9% | 0.0% | 0.0% | 0.3 | \$36,144 |
| Terry County | 11,567 | 98.5% | 92.4% | 91.5% | 13.0 | \$25,206 |
| Throckmorton County | 1,550 | 81.4% | 48.2% | 47.9% | 1.7 | \$30,381 |
| Titus County | 31,208 | 82.6% | 76.0% | 70.3% | 76.9 | \$25,058 |
| Tom Green County | 118,892 | 98.9% | 93.3% | 92.7% | 78.1 | \$33,861 |
| Travis County | 1,326,436 | 95.6% | 98.0% | 93.9% | 1,334.4 | \$54,870 |
| Trinity County | 13,996 | 18.5% | 52.8% | 13.0% | 20.2 | \$30,911 |
| Tyler County | 20,030 | 33.0% | 64.9% | 20.7% | 21.7 | \$29,594 |
| Upshur County | 42,488 | 62.5% | 51.2% | 34.0% | 72.9 | \$30,236 |
| Upton County | 3,152 | 4.6% | 24.9% | 0.0% | 2.5 | \$27,385 |
| Uvalde County | 24,940 | 84.2% | 82.6% | 74.3% | 16.1 | \$26,141 |
| Val Verde County | 47,606 | 90.6% | 92.0% | 86.5% | 15.1 | \$25,181 |
| Van Zandt County | 62,859 | 90.3% | 52.5% | 51.0% | 74.6 | \$33,092 |
| Victoria County | 91,065 | 91.9% | 93.5% | 87.8% | 103.2 | \$31,747 |
| Walker County | 78,870 | 60.0% | 85.2% | 52.3% | 100.6 | \$23,220 |
| Waller County | 61,894 | 85.6% | 96.5% | 83.0% | 120.6 | \$32,446 |
| Ward County | 10,964 | 96.4% | 97.2% | 94.1% | 13.1 | \$30,854 |
| Washington County | 36,159 | 98.0% | 82.5% | 81.7% | 59.8 | \$39,147 |
| Webb County | 267,780 | 95.3% | 98.4% | 93.8% | 79.7 | \$23,446 |
| Wharton County | 41,824 | 81.2% | 88.4% | 77.3% | 38.5 | \$29,061 |
| Wheeler County | 4,807 | 79.6% | 42.9% | 36.3% | 5.3 | \$30,454 |
| Wichita County | 129,978 | 91.0% | 96.9% | 88.5% | 207.1 | \$30,834 |
| Wilbarger County | 12,491 | 91.3% | 20.8% | 19.1% | 12.9 | \$24,291 |
| Willacy County | 20,143 | 80.7% | 95.0% | 76.2% | 34.1 | \$20,229 |
| Williamson County | 671,418 | 97.1% | 96.5% | 94.1% | 601.7 | \$47,574 |
| Wilson County | 52,735 | 65.9% | 79.7% | 55.4% | 65.6 | \$40,952 |
| Winkler County | 7,306 | 87.2% | 87.4% | 87.1% | 8.7 | \$32,325 |
| Wise County | 74,895 | 99.8% | 82.0% | 81.9% | 82.8 | \$36,614 |
| Wood County | 46,857 | 84.7% | 51.8% | 47.9% | 72.6 | \$34,541 |
| Yoakum County | 7,451 | 89.3% | 92.1% | 85.5% | 9.3 | \$34,168 |
| Young County | 17,962 | 95.4% | 74.9% | 74.8% | 19.6 | \$35,039 |
| Zapata County | 13,849 | 92.5% | 76.3% | 71.5% | 13.9 | \$19,139 |
| Zavala County | 9,377 | 78.9% | 94.7% | 78.5% | 7.2 | \$20,409 |
| U.S. Virgin Isl. | 105,413 | 99.4% | 89.9% | 89.5% | 784.5 | NA |
| St. Croix Island | 51,166 | 99.8% | 86.7% | 86.5% | 613.8 | NA |
| St. John Island | 5,051 | 98.9% | 64.3% | 64.0% | 256.5 | NA |
| St. Thomas Island | 49,196 | 99.1% | 95.8% | 95.1% | 1,570.9 | NA |
| Utah | 3,380,800 | 97.1% | 98.5% | 96.2% | 41.0 | \$37,023 |
| Beaver County | 7,327 | 94.2% | 95.4% | 91.0% | 2.8 | \$28,176 |
| Box Elder County | 61,498 | 90.5% | 96.0% | 87.1% | 10.7 | \$30,762 |
| Cache County | 140,173 | 98.6% | 99.6% | 98.4% | 120.3 | \$29,298 |
| Carbon County | 20,571 | 99.0% | 92.2% | 91.6% | 13.9 | \$26,450 |
| Daggett County | 1,014 | 42.6% | 93.4% | 42.6% | 1.5 | \$27,261 |
| Davis County | 369,948 | 99.5% | 100.0% | 99.5% | 1,237.0 | \$39,218 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Duchesne County | 20,161 | 57.1% | 77.9% | 52.4% | 6.2 | \$28,650 |
| Emery County | 10,099 | 98.5% | 93.9% | 93.1% | 2.3 | \$27,771 |
| Garfield County | 5,281 | 72.3% | 83.3% | 65.7% | 1.0 | \$29,240 |
| Grand County | 9,769 | 98.3% | 88.8% | 88.2% | 2.7 | \$37,510 |
| Iron County | 62,429 | 98.2% | 98.0% | 97.0% | 18.9 | \$26,650 |
| Juab County | 12,567 | 88.4% | 99.0% | 87.6% | 3.7 | \$31,545 |
| Kane County | 8,227 | 70.2% | 83.1% | 64.0% | 2.1 | \$36,941 |
| Millard County | 13,330 | 78.4% | 82.5% | 70.5% | 2.0 | \$27,757 |
| Morgan County | 12,832 | 94.3% | 90.0% | 86.6% | 21.1 | \$40,485 |
| Piute County | 1,487 | 58.8% | 90.8% | 58.8% | 2.0 | \$19,919 |
| Rich County | 2,628 | 64.5% | 62.0% | 43.6% | 2.6 | \$26,796 |
| Salt Lake County | 1,186,257 | 98.7% | 100.0% | 98.7% | 1,598.6 | \$40,969 |
| San Juan County | 14,359 | 49.6% | 42.5% | 33.1% | 1.8 | \$25,591 |
| Sanpete County | 29,724 | 91.8% | 88.4% | 82.1% | 18.7 | \$25,257 |
| Sevier County | 22,069 | 95.7% | 62.0% | 59.5% | 11.6 | \$28,859 |
| Summit County | 43,036 | 89.1% | 97.7% | 88.4% | 23.0 | \$67,602 |
| Tooele County | 79,934 | 98.8% | 99.8% | 98.7% | 11.5 | \$34,733 |
| Uintah County | 37,141 | 78.9% | 91.1% | 76.6% | 8.3 | \$27,977 |
| Utah County | 702,434 | 97.5% | 99.9% | 97.5% | 350.5 | \$33,251 |
| Wasatch County | 36,619 | 92.3% | 97.0% | 90.8% | 31.1 | \$51,178 |
| Washington County | 197,680 | 99.0% | 97.6% | 96.9% | 81.4 | \$36,047 |
| Wayne County | 2,645 | 68.4% | 88.8% | 66.0% | 1.1 | \$32,605 |
| Weber County | 269,561 | 99.3% | 99.9% | 99.3% | 467.8 | \$34,778 |
| Vermont | 647,064 | 82.3% | 53.0% | 48.0% | 70.2 | \$41,680 |
| Addison County | 37,578 | 66.1% | 49.7% | 43.0% | 49.1 | \$42,271 |
| Bennington County | 37,392 | 88.6% | 41.9% | 39.2% | 55.4 | \$39,717 |
| Caledonia County | 30,579 | 63.1% | 56.0% | 43.8% | 47.1 | \$36,604 |
| Chittenden County | 169,301 | 95.0% | 68.2% | 65.9% | 315.1 | \$47,458 |
| Essex County | 5,994 | 40.0% | 40.4% | 26.0% | 9.0 | \$31,891 |
| Franklin County | 50,731 | 76.8% | 41.4% | 37.2% | 80.4 | \$35,531 |
| Grand Isle County | 7,489 | 59.7% | 13.2% | 10.6% | 91.6 | \$48,551 |
| Lamoille County | 26,090 | 65.1% | 45.0% | 37.4% | 56.4 | \$42,778 |
| Orange County | 29,846 | 76.0% | 26.2% | 19.5% | 43.4 | \$38,709 |
| Orleans County | 27,666 | 63.9% | 30.8% | 23.5% | 39.8 | \$34,365 |
| Rutland County | 60,366 | 91.9% | 64.8% | 62.8% | 64.9 | \$36,845 |
| Washington County | 60,048 | 71.0% | 68.2% | 53.5% | 87.5 | \$43,002 |
| Windham County | 45,842 | 81.0% | 32.3% | 29.9% | 58.4 | \$40,284 |
| Windsor County | 58,142 | 96.0% | 49.1% | 48.0% | 60.0 | \$43,180 |
| Virginia | 8,683,619 | 92.3% | 86.0% | 82.1% | 219.9 | \$47,210 |
| Accomack County | 33,191 | 80.6% | 47.8% | 41.2% | 73.9 | \$31,570 |
| Albemarle County | 114,534 | 96.8% | 68.4% | 67.7% | 159.0 | \$55,347 |
| Alexandria city | 155,525 | 99.8% | 100.0% | 99.8% | 10,413.2 | \$75,884 |
| Alleghany County | 14,835 | 79.8% | 57.4% | 53.7% | 33.2 | \$30,143 |
| Amelia County | 13,455 | 71.6% | 28.4% | 23.2% | 37.9 | \$34,122 |
| Amherst County | 31,589 | 98.6% | 37.3% | 37.3% | 66.6 | \$34,137 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Appomattox County | 16,748 | 98.9% | 31.1% | 31.0% | 50.1 | \$31,654 |
| Arlington County | 234,000 | 100.0% | 99.8% | 99.7% | 9,000.9 | \$85,221 |
| Augusta County | 78,064 | 71.4% | 73.5% | 60.0% | 80.7 | \$35,582 |
| Bath County | 4,049 | 45.0% | 12.4% | 6.3% | 7.7 | \$33,856 |
| Bedford County | 80,848 | 98.8% | 49.2% | 49.1% | 106.4 | \$40,552 |
| Bland County | 6,148 | 49.1% | 34.0% | 21.6% | 17.2 | \$27,904 |
| Botetourt County | 34,135 | 81.2% | 70.8% | 59.1% | 63.1 | \$40,289 |
| Bristol city | 16,975 | 100.0% | 97.4% | 97.4% | 1,318.8 | \$30,419 |
| Brunswick County | 15,921 | 38.5% | 32.6% | 8.4% | 28.1 | \$26,491 |
| Buchanan County | 19,352 | 91.0% | 1.8% | 1.8% | 38.5 | \$24,126 |
| Buckingham County | 16,982 | 70.2% | 22.7% | 17.0% | 29.3 | \$27,139 |
| Buena Vista city | 6,591 | 98.4% | 98.6% | 97.5% | 1,023.7 | \$32,925 |
| Campbell County | 55,141 | 99.4% | 65.9% | 65.8% | 109.6 | \$31,877 |
| Caroline County | 31,957 | 53.4% | 41.5% | 22.1% | 60.6 | \$38,432 |
| Carroll County | 29,147 | 45.6% | 33.3% | 17.6% | 61.4 | \$27,972 |
| Charles City County | 6,605 | 66.9% | 50.3% | 33.9% | 36.1 | \$38,351 |
| Charlotte County | 11,475 | 83.6% | 34.9% | 30.0% | 24.1 | \$27,159 |
| Charlottesville city | 45,373 | 99.2% | 97.8% | 97.0% | 4,428.8 | \$45,625 |
| Chesapeake city | 252,488 | 97.9% | 99.4% | 97.5% | 746.0 | \$42,753 |
| Chesterfield County | 378,408 | 98.3% | 98.1% | 96.6% | 893.5 | \$45,041 |
| Clarke County | 15,266 | 57.3% | 69.2% | 43.0% | 86.8 | \$50,751 |
| Colonial Heights city | 18,294 | 99.8% | 100.0% | 99.8% | 2,432.9 | \$37,039 |
| Covington city | 5,679 | 98.1% | 98.8% | 97.0% | 1,038.5 | \$24,657 |
| Craig County | 4,847 | 24.2% | 40.5% | 21.7% | 14.8 | \$32,020 |
| Culpeper County | 54,381 | 85.5% | 66.0% | 60.0% | 143.4 | \$39,062 |
| Cumberland County | 9,746 | 89.1% | 47.7% | 45.4% | 32.8 | \$38,099 |
| Danville city | 42,229 | 98.7% | 96.9% | 95.7% | 986.7 | \$26,453 |
| Dickenson County | 13,725 | 71.7% | 22.0% | 20.8% | 41.5 | \$25,003 |
| Dinwiddie County | 28,161 | 50.4% | 58.3% | 43.6% | 55.9 | \$35,506 |
| Emporia city | 5,481 | 98.8% | 90.1% | 89.2% | 793.9 | \$24,915 |
| Essex County | 10,630 | 57.9% | 53.9% | 39.4% | 41.3 | \$29,021 |
| Fairfax County | 1,138,331 | 99.6% | 95.7% | 95.3% | 2,911.2 | \$67,598 |
| Fairfax city | 24,835 | 100.0% | 99.0% | 98.9% | 3,979.7 | \$59,688 |
| Falls Church city | 14,586 | 100.0% | 100.0% | 100.0% | 7,127.5 | \$83,001 |
| Fauquier County | 74,664 | 70.0% | 63.9% | 53.5% | 115.2 | \$54,878 |
| Floyd County | 15,619 | 63.9% | 39.3% | 28.1% | 41.0 | \$31,788 |
| Fluvanna County | 28,159 | 99.3% | 53.5% | 53.3% | 98.1 | \$48,426 |
| Franklin County | 55,074 | 94.2% | 52.1% | 51.3% | 79.7 | \$37,329 |
| Franklin city | 8,247 | 93.1% | 99.9% | 93.1% | 996.3 | \$29,683 |
| Frederick County | 95,051 | 80.3% | 70.0% | 59.8% | 230.1 | \$43,375 |
| Fredericksburg city | 28,757 | 99.1% | 99.7% | 98.9% | 2,751.8 | \$43,063 |
| Galax city | 6,730 | 96.5% | 93.6% | 90.4% | 817.1 | \$29,802 |
| Giles County | 16,453 | 73.5% | 71.8% | 58.1% | 46.1 | \$31,917 |
| Gloucester County | 39,493 | 84.3% | 86.0% | 76.2% | 181.3 | \$39,450 |
| Goochland County | 26,109 | 66.4% | 62.5% | 44.6% | 92.6 | \$63,645 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Grayson County | 15,343 | 45.2% | 34.3% | 20.6% | 34.7 | \$26,270 |
| Greene County | 21,107 | 84.0% | 49.5% | 42.0% | 135.3 | \$39,180 |
| Greensville County | 11,226 | 33.7% | 45.4% | 11.3% | 38.0 | \$22,437 |
| Halifax County | 33,644 | 91.6% | 50.1% | 48.1% | 41.1 | \$26,440 |
| Hampton city | 138,037 | 98.5% | 99.9% | 98.4% | 2,682.4 | \$35,002 |
| Hanover County | 112,938 | 78.8% | 93.2% | 76.1% | 241.5 | \$49,110 |
| Harrisonburg city | 51,158 | 94.1% | 97.2% | 91.7% | 2,950.4 | \$25,881 |
| Henrico County | 333,962 | 99.0% | 98.9% | 98.1% | 1,429.2 | \$47,865 |
| Henry County | 49,906 | 89.7% | 60.3% | 56.7% | 130.5 | \$26,097 |
| Highland County | 2,301 | 71.3% | 24.8% | 22.7% | 5.5 | \$32,704 |
| Hopewell city | 22,962 | 99.7% | 100.0% | 99.7% | 2,217.6 | \$25,664 |
| Isle of Wight County | 40,151 | 77.4% | 83.3% | 68.9% | 127.2 | \$45,230 |
| James City County | 81,199 | 97.9% | 97.4% | 95.5% | 570.6 | \$50,984 |
| King George County | 27,856 | 69.2% | 69.4% | 53.1% | 155.1 | \$44,551 |
| King William County | 18,492 | 54.8% | 52.7% | 31.8% | 67.5 | \$36,145 |
| King and Queen County | 6,718 | 45.6% | 46.2% | 24.5% | 21.3 | \$38,904 |
| Lancaster County | 10,750 | 74.4% | 19.1% | 14.7% | 80.6 | \$46,405 |
| Lee County | 21,982 | 96.8% | 48.4% | 47.6% | 50.5 | \$23,257 |
| Lexington city | 7,457 | 99.5% | 100.0% | 99.5% | 2,983.7 | \$29,117 |
| Loudoun County | 432,085 | 90.7% | 94.9% | 86.9% | 837.8 | \$67,251 |
| Louisa County | 40,116 | 45.3% | 41.4% | 25.3% | 81.0 | \$40,803 |
| Lunenburg County | 12,031 | 60.9% | 26.2% | 22.3% | 27.9 | \$26,486 |
| Lynchburg city | 79,287 | 94.3% | 81.8% | 77.4% | 1,618.9 | \$28,478 |
| Madison County | 14,000 | 55.5% | 50.7% | 34.8% | 43.7 | \$35,772 |
| Manassas Park city | 16,703 | 99.9% | 100.0% | 99.9% | 5,505.6 | \$41,595 |
| Manassas city | 42,642 | 99.8% | 100.0% | 99.7% | 4,332.2 | \$42,958 |
| Martinsville city | 13,725 | 99.1% | 86.2% | 85.7% | 1,252.8 | \$27,052 |
| Mathews County | 8,490 | 80.0% | 68.3% | 55.2% | 98.8 | \$48,173 |
| Mecklenburg County | 30,508 | 55.8% | 43.6% | 32.9% | 48.8 | \$31,010 |
| Middlesex County | 10,943 | 65.2% | 41.5% | 24.3% | 84.0 | \$39,111 |
| Montgomery County | 98,915 | 92.2% | 82.0% | 79.1% | 255.7 | \$32,776 |
| Nelson County | 14,652 | 96.3% | 33.4% | 33.1% | 31.1 | \$42,837 |
| New Kent County | 24,986 | 69.6% | 84.6% | 64.5% | 119.0 | \$49,666 |
| Newport News city | 184,306 | 99.7% | 99.8% | 99.6% | 2,671.5 | \$36,135 |
| Norfolk city | 232,995 | 92.2% | 99.8% | 92.0% | 4,373.4 | \$35,761 |
| Northampton County | 11,900 | 80.2% | 56.6% | 49.2% | 56.2 | \$37,321 |
| Northumberland County | 12,302 | 70.4% | 27.2% | 18.9% | 64.3 | \$45,156 |
| Norton city | 3,609 | 100.0% | 94.8% | 94.8% | 482.7 | \$27,666 |
| Nottoway County | 15,559 | 78.8% | 67.3% | 57.0% | 49.5 | \$27,223 |
| Orange County | 37,991 | 91.1% | 68.8% | 64.6% | 111.4 | \$41,650 |
| Page County | 23,750 | 61.7% | 67.7% | 50.3% | 76.6 | \$30,146 |
| Patrick County | 17,643 | 25.9% | 38.1% | 15.0% | 36.5 | \$32,883 |
| Petersburg city | 33,394 | 96.4% | 99.4% | 95.8% | 1,469.8 | \$28,146 |
| Pittsylvania County | 59,952 | 96.9% | 60.8% | 59.9% | 61.9 | \$28,428 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Poquoson city | 12,582 | 99.8% | 99.8% | 99.6% | 819.3 | \$47,329 |
| Portsmouth city | 97,029 | 98.4% | 100.0% | 98.4% | 2,913.7 | \$31,457 |
| Powhatan County | 31,489 | 90.5% | 70.0% | 63.7% | 121.0 | \$47,268 |
| Prince Edward County | 21,927 | 99.4% | 52.0% | 51.8% | 62.7 | \$25,205 |
| Prince George County | 43,134 | 92.7% | 82.8% | 76.9% | 162.6 | \$31,801 |
| Prince William County | 486,943 | 97.8% | 95.1% | 93.1% | 1,452.4 | \$48,958 |
| Pulaski County | 33,706 | 79.4% | 71.1% | 62.0% | 105.4 | \$34,870 |
| Radford city | 16,738 | 98.1% | 90.0% | 88.7% | 1,729.8 | \$24,835 |
| Rappahannock County | 7,502 | 43.8% | 45.9% | 33.9% | 28.2 | \$54,654 |
| Richmond County | 9,080 | 61.9% | 34.2% | 26.9% | 47.4 | \$27,620 |
| Richmond city | 229,395 | 99.6% | 100.0% | 99.6% | 3,828.0 | \$42,132 |
| Roanoke County | 96,914 | 98.3% | 79.5% | 79.2% | 386.8 | \$43,125 |
| Roanoke city | 97,847 | 99.6% | 94.6% | 94.3% | 2,301.1 | \$33,206 |
| Rockbridge County | 22,593 | 77.3% | 52.8% | 45.3% | 37.9 | \$37,087 |
| Rockingham County | 85,397 | 72.3% | 80.1% | 61.1% | 100.5 | \$37,180 |
| Russell County | 25,448 | 91.5% | 62.0% | 58.3% | 53.7 | \$25,939 |
| Salem city | 25,523 | 99.7% | 95.6% | 95.3% | 1,758.4 | \$37,991 |
| Scott County | 21,476 | 80.8% | 54.9% | 48.6% | 40.1 | \$26,681 |
| Shenandoah County | 44,968 | 77.9% | 72.4% | 63.1% | 88.5 | \$34,170 |
| Smyth County | 29,449 | 94.9% | 50.2% | 48.6% | 65.2 | \$26,660 |
| Southampton County | 17,932 | 41.9% | 63.8% | 31.7% | 29.9 | \$32,218 |
| Spotsylvania County | 146,688 | 91.8% | 77.1% | 74.4% | 365.4 | \$44,881 |
| Stafford County | 163,380 | 96.6% | 88.9% | 86.3% | 606.9 | \$48,971 |
| Staunton city | 25,904 | 98.1% | 94.7% | 92.7% | 1,300.4 | \$34,581 |
| Suffolk city | 98,537 | 88.6% | 96.5% | 86.9% | 246.9 | \$44,004 |
| Surry County | 6,527 | 92.7% | 65.7% | 61.8% | 23.4 | \$36,497 |
| Sussex County | 10,680 | 64.7% | 48.7% | 38.5% | 21.8 | \$28,788 |
| Tazewell County | 39,821 | 92.0% | 60.9% | 59.7% | 76.8 | \$27,327 |
| Virginia Beach city | 455,618 | 99.0% | 99.6% | 98.6% | 1,861.8 | \$45,320 |
| Warren County | 41,440 | 83.7% | 53.1% | 45.7% | 193.1 | \$37,706 |
| Washington County | 53,958 | 90.3% | 63.9% | 61.4% | 96.1 | \$33,900 |
| Waynesboro city | 22,808 | 98.4% | 99.4% | 97.8% | 1,523.6 | \$30,380 |
| Westmoreland County | 18,712 | 73.0% | 52.8% | 38.6% | 81.6 | \$35,850 |
| Williamsburg city | 15,909 | 98.7% | 99.2% | 98.0% | 1,779.9 | \$35,264 |
| Winchester city | 27,936 | 99.6% | 98.5% | 98.2% | 3,038.9 | \$36,012 |
| Wise County | 35,421 | 95.2% | 54.4% | 53.5% | 87.8 | \$23,702 |
| Wythe County | 28,111 | 60.2% | 58.0% | 42.6% | 60.9 | \$31,810 |
| York County | 71,341 | 98.6% | 98.7% | 97.4% | 681.3 | \$47,722 |
| Washington | 7,785,786 | 91.5% | 91.7% | 86.5% | 117.2 | \$48,685 |
| Adams County | 20,961 | 55.4% | 82.0% | 50.7% | 10.9 | \$24,609 |
| Asotin County | 22,508 | 95.0% | 91.8% | 90.9% | 35.4 | \$36,800 |
| Benton County | 212,791 | 97.6% | 93.5% | 91.6% | 125.2 | \$39,668 |
| Chelan County | 79,926 | 91.5% | 87.5% | 83.9% | 27.4 | \$39,746 |
| Clallam County | 77,805 | 66.1% | 74.2% | 55.8% | 44.7 | \$38,181 |
| Clark County | 516,779 | 90.8% | 94.1% | 89.8% | 822.2 | \$43,872 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Columbia County | 4,026 | 66.2% | 74.7% | 65.8% | 4.6 | \$40,774 |
| Cowlitz County | 111,956 | 83.6% | 76.2% | 71.4% | 98.1 | \$35,526 |
| Douglas County | 44,192 | 92.9% | 93.2% | 88.6% | 24.3 | \$39,867 |
| Ferry County | 7,448 | 24.3% | 40.3% | 17.6% | 3.4 | \$31,355 |
| Franklin County | 98,678 | 88.4% | 73.8% | 64.0% | 79.5 | \$31,346 |
| Garfield County | 2,363 | 64.4% | 63.9% | 57.9% | 3.3 | \$31,187 |
| Grant County | 101,311 | 85.1% | 85.3% | 74.5% | 37.8 | \$29,655 |
| Grays Harbor County | 77,038 | 87.5% | 78.9% | 72.2% | 40.5 | \$31,703 |
| Island County | 86,625 | 85.2% | 59.7% | 51.7% | 415.5 | \$44,217 |
| Jefferson County | 33,589 | 72.4% | 55.2% | 43.7% | 18.6 | \$44,289 |
| King County | 2,266,789 | 98.4% | 98.5% | 97.2% | 1,071.7 | \$66,811 |
| Kitsap County | 277,673 | 93.5% | 87.1% | 82.6% | 702.8 | \$47,713 |
| Kittitas County | 45,189 | 97.2% | 94.3% | 92.8% | 19.7 | \$39,399 |
| Klickitat County | 23,271 | 41.6% | 69.4% | 39.3% | 12.4 | \$38,760 |
| Lewis County | 85,370 | 54.1% | 79.7% | 48.3% | 35.5 | \$32,800 |
| Lincoln County | 11,601 | 7.0% | 65.8% | 6.2% | 5.0 | \$36,741 |
| Mason County | 68,166 | 83.0% | 44.0% | 38.4% | 71.0 | \$37,088 |
| Okanogan County | 43,127 | 32.9% | 66.7% | 26.8% | 8.2 | \$29,777 |
| Pacific County | 24,113 | 79.9% | 68.1% | 57.0% | 25.8 | \$36,899 |
| Pend Oreille County | 14,179 | 53.5% | 61.1% | 31.9% | 10.1 | \$33,981 |
| Pierce County | 927,380 | 94.8% | 95.6% | 92.0% | 556.0 | \$43,575 |
| San Juan County | 18,662 | 69.8% | 47.4% | 39.3% | 107.3 | \$59,650 |
| Skagit County | 131,179 | 87.5% | 83.7% | 76.0% | 75.8 | \$41,191 |
| Skamania County | 12,460 | 33.7% | 66.3% | 30.9% | 7.5 | \$42,162 |
| Snohomish County | 840,079 | 93.9% | 96.4% | 91.9% | 402.6 | \$49,215 |
| Spokane County | 549,690 | 88.3% | 97.7% | 88.0% | 311.6 | \$38,052 |
| Stevens County | 48,229 | 34.7% | 61.6% | 31.1% | 19.5 | \$32,904 |
| Thurston County | 298,758 | 91.0% | 86.1% | 81.8% | 413.5 | \$42,306 |
| Wahkiakum County | 4,688 | 68.1% | 56.5% | 46.8% | 17.8 | \$31,643 |
| Walla Walla County | 61,890 | 88.6% | 80.4% | 73.4% | 48.7 | \$34,476 |
| Whatcom County | 230,677 | 88.9% | 83.7% | 77.4% | 109.4 | \$40,916 |
| Whitman County | 47,619 | 80.5% | 79.3% | 70.1% | 22.1 | \$30,287 |
| Yakima County | 257,001 | 94.9% | 94.8% | 90.9% | 59.8 | \$27,448 |
| West Virginia | 1,775,156 | 70.5% | 66.4% | 54.8% | 73.8 | \$31,462 |
| Barbour County | 15,414 | 7.8% | 44.2% | 4.4% | 45.2 | \$24,947 |
| Berkeley County | 129,490 | 88.5% | 87.6% | 80.7% | 403.2 | \$35,909 |
| Boone County | 20,968 | 68.5% | 32.7% | 22.2% | 41.8 | \$26,242 |
| Braxton County | 12,185 | 36.5% | 43.4% | 30.3% | 23.9 | \$21,948 |
| Brooke County | 21,733 | 89.2% | 67.0% | 63.5% | 243.7 | \$30,400 |
| Cabell County | 92,730 | 89.0% | 88.6% | 82.9% | 330.0 | \$30,068 |
| Calhoun County | 6,068 | 3.1% | 13.1% | 0.9% | 21.7 | \$22,982 |
| Clay County | 7,814 | 12.3% | 14.4% | 1.3% | 22.9 | \$23,264 |
| Doddridge County | 7,698 | 44.1% | 33.0% | 26.1% | 24.1 | \$29,652 |
| Fayette County | 39,487 | 55.6% | 53.7% | 34.1% | 59.7 | \$24,818 |
| Gilmer County | 7,325 | 29.9% | 49.1% | 23.9% | 21.6 | \$20,653 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Grant County | 10,968 | 39.4% | 43.1% | 26.5% | 23.0 | \$28,274 |
| Greenbrier County | 32,435 | 41.3% | 53.8% | 26.5% | 31.8 | \$29,992 |
| Hampshire County | 23,468 | 24.1% | 44.4% | 17.1% | 36.6 | \$28,713 |
| Hancock County | 28,172 | 90.2% | 86.2% | 82.1% | 341.0 | \$34,257 |
| Hardy County | 14,192 | 82.7% | 51.4% | 45.9% | 24.4 | \$30,667 |
| Harrison County | 64,915 | 76.3% | 75.8% | 66.6% | 156.0 | \$32,658 |
| Jackson County | 27,716 | 53.1% | 68.2% | 46.7% | 59.7 | \$34,014 |
| Jefferson County | 58,979 | 90.7% | 69.4% | 64.0% | 281.8 | \$42,359 |
| Kanawha County | 175,515 | 75.9% | 81.4% | 66.3% | 194.7 | \$34,976 |
| Lewis County | 16,767 | 61.7% | 52.8% | 45.0% | 43.3 | \$31,444 |
| Lincoln County | 19,901 | 48.4% | 23.7% | 15.2% | 45.5 | \$26,713 |
| Logan County | 31,316 | 50.2% | 24.0% | 13.4% | 69.0 | \$26,111 |
| Marion County | 55,952 | 80.6% | 79.5% | 70.5% | 181.2 | \$31,740 |
| Marshall County | 29,752 | 76.2% | 48.0% | 42.3% | 97.4 | \$33,673 |
| Mason County | 25,000 | 44.5% | 54.0% | 32.9% | 58.0 | \$31,085 |
| McDowell County | 17,850 | 82.3% | 16.7% | 10.9% | 33.5 | \$15,353 |
| Mercer County | 58,700 | 74.2% | 71.5% | 58.0% | 140.1 | \$27,245 |
| Mineral County | 26,855 | 76.6% | 74.4% | 62.5% | 81.9 | \$33,580 |
| Mingo County | 22,573 | 60.9% | 2.5% | 2.1% | 53.3 | \$21,342 |
| Monongalia County | 106,869 | 91.8% | 86.5% | 82.8% | 296.8 | \$38,757 |
| Monroe County | 12,296 | 46.9% | 20.1% | 12.8% | 26.0 | \$26,120 |
| Morgan County | 17,430 | 46.6% | 57.1% | 34.3% | 76.1 | \$33,029 |
| Nicholas County | 24,335 | 44.2% | 52.1% | 27.2% | 37.6 | \$27,744 |
| Ohio County | 41,447 | 93.4% | 88.0% | 85.0% | 391.6 | \$36,191 |
| Pendleton County | 6,011 | 62.9% | 28.6% | 21.7% | 8.6 | \$27,513 |
| Pleasants County | 7,586 | 54.7% | 46.6% | 33.7% | 58.3 | \$39,138 |
| Pocahontas County | 7,819 | 17.8% | 14.7% | 0.7% | 8.3 | \$23,736 |
| Preston County | 34,172 | 66.3% | 58.7% | 45.5% | 52.7 | \$27,848 |
| Putnam County | 57,015 | 76.9% | 74.0% | 64.1% | 164.9 | \$38,589 |
| Raleigh County | 72,882 | 74.8% | 71.7% | 57.5% | 120.4 | \$27,724 |
| Randolph County | 27,600 | 37.4% | 54.6% | 26.1% | 26.5 | \$26,289 |
| Ritchie County | 8,207 | 82.6% | 40.2% | 37.8% | 18.2 | \$27,997 |
| Roane County | 13,834 | 26.3% | 42.6% | 22.8% | 28.6 | \$24,849 |
| Summers County | 11,762 | 27.3% | 62.9% | 23.5% | 32.6 | \$24,507 |
| Taylor County | 16,342 | 71.7% | 73.1% | 59.6% | 94.6 | \$30,095 |
| Tucker County | 6,568 | 63.7% | 58.9% | 52.6% | 15.7 | \$32,590 |
| Tyler County | 8,183 | 24.7% | 49.2% | 20.7% | 31.9 | \$29,891 |
| Upshur County | 23,712 | 43.3% | 37.2% | 23.5% | 66.9 | \$28,855 |
| Wayne County | 37,998 | 62.5% | 61.6% | 50.2% | 75.1 | \$29,774 |
| Webster County | 8,167 | 56.0% | 51.5% | 43.9% | 14.8 | \$23,494 |
| Wetzel County | 14,025 | 48.5% | 43.2% | 33.7% | 39.2 | \$27,174 |
| Wirt County | 5,091 | 25.6% | 44.1% | 13.5% | 21.9 | \$26,966 |
| Wood County | 83,340 | 84.5% | 83.9% | 75.6% | 227.4 | \$31,932 |
| Wyoming County | 20,527 | 85.1% | 23.2% | 21.7% | 41.1 | \$22,818 |
| Wisconsin | 5,892,539 | 89.1% | 83.0% | 78.4% | 108.8 | \$40,130 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Adams County | 21,226 | 69.8% | 29.8% | 19.8% | 32.9 | \$32,223 |
| Ashland County | 16,039 | 69.3% | 42.7% | 35.8% | 15.3 | \$31,563 |
| Barron County | 46,843 | 78.7% | 65.8% | 57.2% | 54.3 | \$34,146 |
| Bayfield County | 16,608 | 85.2% | 27.7% | 23.7% | 11.2 | \$39,449 |
| Brown County | 270,036 | 99.0% | 97.0% | 96.2% | 509.4 | \$39,091 |
| Buffalo County | 13,391 | 79.8% | 9.5% | 8.3% | 19.8 | \$34,866 |
| Burnett County | 17,036 | 69.6% | 37.2% | 32.5% | 20.7 | \$36,322 |
| Calumet County | 52,718 | 99.7% | 88.0% | 87.7% | 165.6 | \$42,110 |
| Chippewa County | 66,807 | 81.6% | 76.9% | 65.5% | 66.3 | \$36,180 |
| Clark County | 34,691 | 37.0% | 48.6% | 28.6% | 28.7 | \$29,589 |
| Columbia County | 58,193 | 83.5% | 70.6% | 62.7% | 76.0 | \$40,144 |
| Crawford County | 16,007 | 60.8% | 47.5% | 43.7% | 28.1 | \$32,129 |
| Dane County | 568,203 | 94.5% | 96.5% | 92.2% | 474.9 | \$49,280 |
| Dodge County | 88,282 | 99.4% | 78.8% | 78.5% | 100.8 | \$35,949 |
| Door County | 30,526 | 64.2% | 64.7% | 45.9% | 63.3 | \$45,367 |
| Douglas County | 44,144 | 69.8% | 77.7% | 65.4% | 33.8 | \$35,646 |
| Dunn County | 45,651 | 78.4% | 62.8% | 53.6% | 53.7 | \$34,615 |
| Eau Claire County | 106,837 | 88.9% | 90.2% | 83.4% | 167.5 | \$38,529 |
| Florence County | 4,688 | 38.9% | 29.6% | 21.7% | 9.6 | \$36,746 |
| Fond du Lac County | 103,836 | 98.9% | 97.4% | 96.4% | 144.3 | \$36,824 |
| Forest County | 9,381 | 50.0% | 15.1% | 10.1% | 9.2 | \$30,310 |
| Grant County | 51,276 | 64.8% | 42.4% | 30.7% | 44.7 | \$32,097 |
| Green County | 36,816 | 58.8% | 73.6% | 55.6% | 63.0 | \$40,954 |
| Green Lake County | 19,220 | 68.7% | 66.3% | 49.5% | 55.0 | \$35,222 |
| Iowa County | 23,865 | 56.5% | 41.9% | 28.8% | 31.3 | \$39,330 |
| Iron County | 6,224 | 40.5% | 36.2% | 19.8% | 8.2 | \$34,669 |
| Jackson County | 20,836 | 41.4% | 46.2% | 30.4% | 21.1 | \$32,659 |
| Jefferson County | 85,784 | 98.3% | 88.0% | 87.0% | 154.2 | \$39,035 |
| Juneau County | 26,866 | 57.1% | 52.6% | 37.5% | 35.0 | \$31,211 |
| Kenosha County | 167,817 | 94.4% | 94.4% | 89.7% | 617.3 | \$38,720 |
| Kewaunee County | 20,623 | 91.5% | 95.7% | 88.0% | 60.2 | \$38,012 |
| La Crosse County | 120,294 | 91.5% | 80.8% | 76.7% | 266.3 | \$39,498 |
| Lafayette County | 16,877 | 43.6% | 44.3% | 22.6% | 26.6 | \$33,484 |
| Langlade County | 19,559 | 84.3% | 48.9% | 45.3% | 22.5 | \$32,989 |
| Lincoln County | 28,376 | 53.2% | 39.9% | 30.0% | 32.3 | \$35,558 |
| Manitowoc County | 81,172 | 97.3% | 89.5% | 88.2% | 137.7 | \$35,854 |
| Marathon County | 137,958 | 75.1% | 55.8% | 48.5% | 89.3 | \$38,886 |
| Marinette County | 41,988 | 60.6% | 41.3% | 34.1% | 30.0 | \$33,952 |
| Marquette County | 15,779 | 66.0% | 41.0% | 31.2% | 34.6 | \$33,291 |
| Menominee County | 4,197 | 90.8% | 24.4% | 23.0% | 11.7 | \$24,004 |
| Milwaukee County | 918,661 | 99.6% | 99.5% | 99.2% | 3,804.3 | \$35,039 |
| Monroe County | 46,109 | 60.5% | 61.9% | 46.4% | 51.2 | \$33,256 |
| Oconto County | 39,633 | 85.4% | 49.0% | 46.7% | 39.7 | \$37,124 |
| Oneida County | 38,212 | 63.6% | 21.4% | 18.4% | 34.3 | \$40,086 |
| Outagamie County | 192,127 | 97.8% | 91.3% | 89.8% | 301.3 | \$42,923 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Ozaukee County | 93,009 | 98.3% | 95.5% | 94.0% | 399.1 | \$55,948 |
| Pepin County | 7,410 | 81.4% | 40.2% | 33.1% | 31.9 | \$38,730 |
| Pierce County | 42,532 | 87.9% | 74.3% | 69.5% | 74.1 | \$39,439 |
| Polk County | 45,709 | 72.9% | 51.6% | 40.0% | 50.0 | \$37,674 |
| Portage County | 70,718 | 92.3% | 71.1% | 67.7% | 88.3 | \$37,990 |
| Price County | 14,179 | 57.8% | 25.6% | 20.4% | 11.3 | \$33,468 |
| Racine County | 195,846 | 93.5% | 92.4% | 86.8% | 588.8 | \$38,288 |
| Richland County | 17,090 | 73.9% | 33.8% | 28.5% | 29.2 | \$33,382 |
| Rock County | 164,060 | 91.0% | 92.1% | 85.7% | 228.4 | \$35,594 |
| Rusk County | 14,186 | 53.5% | 12.9% | 9.1% | 15.5 | \$31,329 |
| Sauk County | 65,777 | 78.1% | 55.4% | 48.2% | 79.1 | \$37,431 |
| Sawyer County | 18,559 | 46.5% | 34.1% | 21.7% | 14.8 | \$36,167 |
| Shawano County | 40,886 | 89.2% | 73.3% | 70.4% | 45.8 | \$34,825 |
| Sheboygan County | 117,841 | 97.4% | 89.2% | 87.8% | 230.4 | \$37,454 |
| St. Croix County | 96,017 | 74.4% | 93.4% | 70.7% | 133.0 | \$45,810 |
| Taylor County | 19,975 | 32.2% | 26.6% | 22.9% | 20.5 | \$32,874 |
| Trempealeau County | 30,899 | 78.1% | 27.1% | 22.5% | 42.2 | \$34,694 |
| Vernon County | 31,060 | 93.4% | 41.7% | 39.2% | 39.2 | \$32,297 |
| Vilas County | 23,763 | 40.9% | 14.1% | 4.4% | 27.7 | \$40,136 |
| Walworth County | 105,380 | 87.4% | 79.3% | 70.5% | 189.7 | \$40,386 |
| Washburn County | 16,911 | 37.3% | 42.8% | 26.2% | 21.2 | \$34,396 |
| Washington County | 137,688 | 99.3% | 94.0% | 93.5% | 319.7 | \$45,821 |
| Waukesha County | 410,434 | 98.7% | 95.6% | 94.4% | 746.6 | \$55,573 |
| Waupaca County | 51,488 | 69.2% | 70.8% | 56.3% | 68.9 | \$39,147 |
| Waushara County | 24,999 | 43.7% | 56.4% | 27.8% | 39.9 | \$37,927 |
| Winnebago County | 170,718 | 96.4% | 95.3% | 93.5% | 392.7 | \$37,983 |
| Wood County | 73,993 | 82.2% | 64.4% | 58.3% | 93.3 | \$36,712 |
| Wyoming | 581,381 | 87.7% | 70.3% | 66.2% | 6.0 | \$39,547 |
| Albany County | 38,031 | 97.5% | 45.1% | 44.8% | 8.9 | \$34,969 |
| Big Horn County | 11,855 | 47.8% | 60.4% | 38.7% | 3.8 | \$29,746 |
| Campbell County | 47,058 | 91.7% | 81.5% | 79.1% | 9.8 | \$39,781 |
| Carbon County | 14,542 | 84.1% | 68.0% | 58.7% | 1.8 | \$33,905 |
| Converse County | 13,786 | 90.3% | 66.1% | 63.3% | 3.2 | \$37,976 |
| Crook County | 7,448 | 49.0% | 50.4% | 33.9% | 2.6 | \$33,386 |
| Fremont County | 39,472 | 88.4% | 55.3% | 53.6% | 4.3 | \$30,414 |
| Goshen County | 12,562 | 95.2% | 65.2% | 64.5% | 5.6 | \$32,693 |
| Hot Springs County | 4,588 | 75.0% | 82.4% | 72.2% | 2.3 | \$33,128 |
| Johnson County | 8,730 | 81.1% | 32.8% | 25.6% | 2.1 | \$37,691 |
| Laramie County | 100,723 | 95.3% | 93.1% | 90.3% | 37.5 | \$41,104 |
| Lincoln County | 20,660 | 72.0% | 51.8% | 39.7% | 5.1 | \$38,245 |
| Natrona County | 79,601 | 98.1% | 96.3% | 95.4% | 14.9 | \$40,346 |
| Niobrara County | 2,380 | 86.9% | 72.5% | 70.3% | 0.9 | \$29,442 |
| Park County | 30,518 | 63.0% | 65.6% | 52.4% | 4.4 | \$37,544 |
| Platte County | 8,645 | 92.7% | 74.1% | 72.2% | 4.2 | \$37,756 |
| Sheridan County | 32,096 | 94.3% | 64.5% | 62.9% | 12.7 | \$39,656 |

| State, Territory, County or County Equivalent | Pop. Evaluated | % of Pop. With Fixed 100/20 Mbps | % of Pop. With Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Density | Per Capita Income |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|--------------|-------------------|
| Sublette County | 8,763 | 74.9% | 51.9% | 51.1% | 1.8 | \$54,704 |
| Sweetwater County | 41,345 | 93.4% | 41.6% | 38.6% | 4.0 | \$40,268 |
| Teton County | 23,287 | 89.2% | 80.3% | 76.7% | 5.8 | \$76,296 |
| Uinta County | 20,712 | 56.6% | 27.3% | 19.4% | 9.9 | \$32,955 |
| Washakie County | 7,719 | 81.4% | 73.6% | 67.3% | 3.4 | \$32,979 |
| Weston County | 6,860 | 82.7% | 71.5% | 67.7% | 2.9 | \$37,067 |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022.

APPX. B-13

Service Availability (Millions) of Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps Services By State and County Segmented by Urban and Rural Areas, Including U.S. Territories (December 31, 2022)

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|----------------|----------------------------------|---------------------------------------|-------------------------------|
| | Pop. Evaluated | % of Pop. with Fixed 100/20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Alabama | 2,919,221 | 96.0% | 97.8% | 93.9% | 2,155,075 | 64.9% | 67.7% | 49.2% |
| Autauga County | 35,416 | 97.3% | 99.8% | 97.2% | 24,343 | 91.3% | 77.9% | 71.6% |
| Baldwin County | 152,954 | 85.8% | 96.1% | 82.1% | 93,481 | 49.5% | 83.6% | 44.7% |
| Barbour County | 8,412 | 92.7% | 82.4% | 77.6% | 16,294 | 45.0% | 44.2% | 24.5% |
| Bibb County | | | | | 22,005 | 14.8% | 49.8% | 11.3% |
| Blount County | 5,648 | 27.7% | 97.5% | 27.6% | 53,864 | 35.4% | 66.0% | 27.1% |
| Bullock County | | | | | 10,202 | 85.0% | 5.1% | 3.4% |
| Butler County | 5,699 | 96.8% | 93.6% | 90.5% | 12,951 | 47.8% | 39.1% | 21.6% |
| Calhoun County | 72,872 | 99.9% | 99.9% | 99.9% | 42,916 | 78.8% | 86.9% | 72.7% |
| Chambers County | 16,688 | 97.2% | 95.3% | 92.7% | 17,400 | 66.3% | 58.7% | 49.9% |
| Cherokee County | | | | | 25,302 | 31.7% | 49.3% | 26.1% |
| Chilton County | 6,719 | 17.8% | 96.6% | 17.8% | 39,165 | 53.4% | 38.8% | 16.5% |
| Choctaw County | | | | | 12,439 | 21.5% | 32.0% | 7.6% |
| Clarke County | | | | | 22,515 | 40.9% | 55.2% | 34.3% |
| Clay County | | | | | 14,198 | 30.1% | 39.0% | 20.8% |
| Cleburne County | | | | | 15,346 | 13.7% | 33.0% | 4.7% |
| Coffee County | 29,037 | 95.4% | 64.8% | 61.0% | 25,768 | 66.2% | 39.2% | 27.9% |
| Colbert County | 34,665 | 98.8% | 98.9% | 97.8% | 23,368 | 49.2% | 58.9% | 31.6% |
| Conecuh County | | | | | 11,206 | 33.9% | 44.5% | 25.6% |
| Coosa County | | | | | 10,166 | 73.8% | 41.0% | 35.9% |
| Covington County | 11,776 | 99.6% | 94.1% | 93.7% | 25,826 | 85.7% | 46.9% | 44.4% |
| Crenshaw County | | | | | 13,025 | 53.7% | 51.7% | 31.9% |
| Cullman County | 21,983 | 94.7% | 92.4% | 87.3% | 68,682 | 68.8% | 59.0% | 42.8% |
| Dale County | 20,810 | 71.6% | 74.9% | 55.5% | 28,734 | 62.1% | 55.2% | 39.7% |
| Dallas County | 20,115 | 90.9% | 74.8% | 69.9% | 16,652 | 49.7% | 23.9% | 12.4% |
| DeKalb County | 7,813 | 98.3% | 99.7% | 98.0% | 64,185 | 83.3% | 59.5% | 50.8% |
| Elmore County | 25,144 | 95.7% | 99.7% | 95.5% | 64,419 | 82.9% | 81.5% | 67.7% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|----------------|----------------------------------|---------------------------------------|-------------------------------|
| | Pop. Evaluated | % of Pop. with Fixed 100/20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Escambia County | 12,886 | 99.8% | 96.2% | 96.2% | 23,780 | 34.1% | 48.3% | 20.1% |
| Etowah County | 59,102 | 99.1% | 99.4% | 98.6% | 43,986 | 74.3% | 69.0% | 56.1% |
| Fayette County | | | | | 16,118 | 50.1% | 45.9% | 27.8% |
| Franklin County | 9,697 | 87.7% | 95.2% | 83.0% | 22,235 | 44.9% | 60.4% | 36.3% |
| Geneva County | 152 | 100.0% | 100.0% | 100.0% | 26,631 | 58.6% | 53.3% | 39.8% |
| Greene County | | | | | 7,422 | 21.1% | 57.5% | 21.1% |
| Hale County | | | | | 14,595 | 47.0% | 54.7% | 36.7% |
| Henry County | | | | | 17,655 | 47.4% | 55.0% | 40.7% |
| Houston County | 70,573 | 99.1% | 96.2% | 95.5% | 37,506 | 62.0% | 64.4% | 46.8% |
| Jackson County | 13,013 | 98.2% | 59.4% | 59.0% | 39,878 | 89.1% | 44.3% | 39.6% |
| Jefferson County | 585,180 | 96.7% | 99.2% | 96.0% | 80,229 | 79.4% | 89.7% | 72.9% |
| Lamar County | | | | | 13,705 | 96.5% | 44.4% | 42.7% |
| Lauderdale County | 45,274 | 99.2% | 98.9% | 98.2% | 50,604 | 65.6% | 80.5% | 56.6% |
| Lawrence County | 2 | 100.0% | 100.0% | 100.0% | 33,212 | 92.3% | 63.4% | 58.4% |
| Lee County | 129,792 | 97.7% | 96.3% | 94.1% | 50,981 | 85.5% | 69.9% | 62.0% |
| Limestone County | 54,344 | 96.3% | 99.7% | 96.1% | 56,556 | 77.6% | 95.3% | 76.3% |
| Lowndes County | | | | | 9,777 | 26.7% | 19.5% | 8.6% |
| Macon County | 8,237 | 96.1% | 80.3% | 76.5% | 10,279 | 38.7% | 29.5% | 15.3% |
| Madison County | 333,497 | 99.3% | 99.8% | 99.1% | 70,068 | 93.3% | 92.1% | 86.7% |
| Marengo County | 5,907 | 97.9% | 100.0% | 97.9% | 12,838 | 57.3% | 49.1% | 31.6% |
| Marion County | | | | | 29,156 | 99.6% | 65.3% | 65.2% |
| Marshall County | 46,056 | 98.7% | 99.0% | 97.7% | 53,367 | 87.8% | 84.9% | 76.4% |
| Mobile County | 318,856 | 98.6% | 98.6% | 97.3% | 92,555 | 60.4% | 82.7% | 52.4% |
| Monroe County | 4,105 | 96.7% | 83.2% | 80.1% | 15,299 | 41.3% | 33.6% | 17.7% |
| Montgomery County | 198,802 | 94.2% | 99.9% | 94.1% | 27,559 | 76.0% | 75.1% | 58.1% |
| Morgan County | 76,203 | 95.4% | 96.9% | 92.5% | 48,008 | 69.2% | 65.5% | 49.6% |
| Perry County | | | | | 8,035 | 21.4% | 35.8% | 20.2% |
| Pickens County | | | | | 18,697 | 48.7% | 59.4% | 40.7% |
| Pike County | 14,248 | 61.0% | 96.2% | 58.6% | 18,766 | 53.2% | 50.1% | 28.9% |
| Randolph County | | | | | 22,479 | 33.9% | 47.1% | 25.2% |
| Russell County | 34,555 | 91.0% | 100.0% | 91.0% | 24,000 | 77.5% | 87.2% | 73.4% |
| Shelby County | 174,036 | 96.7% | 99.6% | 96.3% | 56,079 | 60.5% | 91.6% | 57.0% |
| St. Clair County | 31,014 | 98.1% | 98.8% | 97.1% | 62,918 | 79.5% | 90.7% | 74.5% |
| Sumter County | | | | | 11,853 | 43.2% | 62.2% | 39.1% |
| Talladega County | 32,456 | 94.4% | 99.2% | 93.7% | 48,248 | 69.4% | 91.5% | 64.7% |
| Tallapoosa County | 8,616 | 93.7% | 83.5% | 78.8% | 32,361 | 79.9% | 41.8% | 36.7% |
| Tuscaloosa County | 163,766 | 97.6% | 99.9% | 97.5% | 73,014 | 70.9% | 85.8% | 65.4% |
| Walker County | 13,101 | 92.9% | 99.8% | 92.8% | 51,238 | 56.8% | 88.1% | 53.4% |
| Washington County | | | | | 15,122 | 19.6% | 28.1% | 11.3% |
| Wilcox County | | | | | 10,059 | 34.7% | 18.5% | 9.1% |
| Winston County | | | | | 23,755 | 45.8% | 51.2% | 30.5% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Alaska | 466,216 | 97.1% | 81.2% | 79.9% | 267,383 | 46.5% | 31.7% | 22.4% |
| Aleutians East Borough | | | | | 3,398 | 0.0% | 0.0% | 0.0% |
| Aleutians West Census Area | | | | | 5,122 | 3.5% | 0.0% | 0.0% |
| Anchorage Municipality | 270,072 | 99.0% | 86.5% | 85.7% | 17,073 | 64.4% | 48.8% | 43.8% |
| Bethel Census Area | 5,318 | 0.0% | 0.0% | 0.0% | 12,939 | 0.0% | 0.0% | 0.0% |
| Bristol Bay Borough | | | | | 865 | 0.0% | 0.0% | 0.0% |
| Chugach Census Area | | | | | 6,874 | 49.1% | 42.0% | 38.3% |
| Copper River Census Area | | | | | 2,589 | 69.3% | 0.0% | 0.0% |
| Denali Borough | | | | | 1,585 | 2.6% | 13.9% | 0.1% |
| Dillingham Census Area | | | | | 4,723 | 0.0% | 0.0% | 0.0% |
| Fairbanks North Star Borough | 69,275 | 97.2% | 78.0% | 76.3% | 26,081 | 66.9% | 46.6% | 32.6% |
| Haines Borough | | | | | 2,056 | 39.0% | 0.2% | 0.0% |
| Hoonah-Angoon Census Area | | | | | 2,287 | 39.0% | 18.1% | 17.6% |
| Juneau City and Borough | 24,275 | 99.7% | 78.3% | 78.0% | 7,410 | 92.9% | 69.5% | 68.5% |
| Kenai Peninsula Borough | 13,548 | 98.3% | 65.9% | 65.6% | 47,142 | 74.6% | 46.8% | 39.0% |
| Ketchikan Gateway Borough | 11,766 | 99.6% | 60.4% | 60.4% | 1,975 | 91.3% | 36.4% | 33.1% |
| Kodiak Island Borough | 9,539 | 99.7% | 70.4% | 70.2% | 3,181 | 31.3% | 42.8% | 26.1% |
| Kusilvak Census Area | | | | | 8,278 | 0.0% | 0.0% | 0.0% |
| Lake and Peninsula Borough | | | | | 1,381 | 0.0% | 0.0% | 0.0% |
| Matanuska-Susitna Borough | 54,824 | 94.0% | 89.7% | 84.7% | 58,501 | 42.1% | 48.7% | 26.0% |
| Nome Census Area | | | | | 9,835 | 40.0% | 0.0% | 0.0% |
| North Slope Borough | | | | | 10,805 | 52.7% | 0.0% | 0.0% |
| Northwest Arctic Borough | | | | | 7,423 | 39.5% | 0.0% | 0.0% |
| Petersburg Borough | | | | | 3,360 | 93.0% | 0.0% | 0.0% |
| Prince of Wales-Hyder Census Area | | | | | 5,666 | 3.9% | 0.1% | 0.0% |
| Sitka City and Borough | 7,599 | 99.2% | 0.0% | 0.0% | 783 | 75.2% | 0.0% | 0.0% |
| Skagway Municipality | | | | | 1,081 | 55.6% | 84.6% | 54.5% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|------------------|----------------------------------|---------------------------------------|-------------------------------|------------------|----------------------------------|---------------------------------------|-------------------------------|
| | Pop. Evaluated | % of Pop. with Fixed 100/20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Southeast Fairbanks Census Area | | | | | 7,021 | 5.4% | 21.6% | 4.3% |
| Wrangell City and Borough | | | | | 2,070 | 85.7% | 0.0% | 0.0% |
| Yakutat City and Borough | | | | | 700 | 0.0% | 0.0% | 0.0% |
| Yukon-Koyukuk Census Area | | | | | 5,179 | 0.0% | 8.8% | 0.0% |
| American Samoa | 34,472 | 27.2% | 0.0% | 0.0% | 10,971 | 5.8% | 0.0% | 0.0% |
| Eastern District | 8,551 | 44.5% | 0.0% | 0.0% | 6,483 | 7.8% | 0.0% | 0.0% |
| Manu'a District | | | | | 777 | 0.0% | 0.0% | 0.0% |
| Western District | 25,921 | 21.5% | 0.0% | 0.0% | 3,711 | 3.6% | 0.0% | 0.0% |
| Arizona | 5,566,249 | 7.5% | 9.4% | 7.0% | 92,948 | 5.0% | 72.2% | 47.9% |
| Apache County | | | | | 65,432 | 2.4% | 17.5% | 0.9% |
| Cochise County | 76,712 | 47.0% | 99.7% | 46.8% | 48,951 | 34.0% | 70.8% | 22.6% |
| Coconino County | 95,562 | 86.6% | 99.8% | 86.5% | 48,498 | 37.2% | 62.9% | 33.0% |
| Gila County | 29,922 | 74.7% | 99.9% | 74.7% | 24,000 | 28.8% | 79.9% | 26.2% |
| Graham County | 18,571 | 99.9% | 47.0% | 46.9% | 20,208 | 71.1% | 61.5% | 48.5% |
| Greenlee County | | | | | 9,302 | 68.5% | 85.0% | 57.8% |
| La Paz County | 9,357 | 0.8% | 80.3% | 0.8% | 7,149 | 1.2% | 61.1% | 1.2% |
| Maricopa County | 4,447,844 | 99.1% | 99.8% | 99.0% | 103,680 | 82.0% | 94.3% | 77.7% |
| Mohave County | 167,967 | 93.6% | 100.0% | 93.6% | 52,849 | 32.6% | 81.0% | 32.6% |
| Navajo County | 42,170 | 89.6% | 76.9% | 76.8% | 66,480 | 26.0% | 29.1% | 17.4% |
| Pima County | 959,343 | 99.9% | 99.7% | 99.7% | 98,254 | 91.7% | 90.2% | 84.9% |
| Pinal County | 356,684 | 97.7% | 99.3% | 97.1% | 107,470 | 71.5% | 87.8% | 65.4% |
| Santa Cruz County | 19,193 | 99.0% | 99.2% | 98.3% | 29,566 | 92.9% | 65.0% | 62.3% |
| Yavapai County | 166,339 | 83.3% | 97.1% | 80.9% | 79,852 | 45.5% | 75.3% | 34.5% |
| Yuma County | 176,585 | 97.1% | 99.9% | 97.0% | 31,257 | 70.2% | 96.5% | 69.7% |
| Arkansas | 1,686,298 | 96.0% | 97.8% | 94.0% | 1,359,339 | 62.4% | 61.9% | 42.0% |
| Arkansas County | 7,791 | 89.7% | 100.0% | 89.7% | 8,721 | 2.0% | 57.7% | 2.0% |
| Ashley County | 7,101 | 95.6% | 26.5% | 22.7% | 11,253 | 42.4% | 39.3% | 25.0% |
| Baxter County | 18,030 | 97.7% | 99.0% | 96.8% | 24,405 | 98.0% | 51.1% | 50.1% |
| Benton County | 227,049 | 99.7% | 99.3% | 99.0% | 75,814 | 55.1% | 83.0% | 52.6% |
| Boone County | 14,081 | 99.6% | 95.0% | 94.6% | 24,203 | 41.7% | 63.0% | 28.0% |
| Bradley County | 5,129 | 99.1% | 63.9% | 63.8% | 5,006 | 56.4% | 31.7% | 22.4% |
| Calhoun County | | | | | 4,695 | 84.5% | 18.2% | 14.3% |
| Carroll County | 5,142 | 99.0% | 96.2% | 95.3% | 23,600 | 45.6% | 69.1% | 40.3% |
| Chicot County | | | | | 9,873 | 70.7% | 67.3% | 56.7% |
| Clark County | 9,725 | 92.0% | 98.1% | 90.2% | 11,525 | 89.4% | 40.2% | 36.2% |
| Clay County | | | | | 14,265 | 86.9% | 37.0% | 34.8% |
| Cleburne County | 6,979 | 89.2% | 98.1% | 87.5% | 18,305 | 31.8% | 51.0% | 20.0% |
| Cleveland County | | | | | 7,467 | 0.4% | 30.9% | 0.1% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Columbia County | 10,214 | 89.2% | 77.7% | 70.8% | 12,002 | 42.4% | 48.7% | 20.4% |
| Conway County | 6,491 | 87.4% | 94.3% | 82.8% | 14,555 | 52.2% | 64.4% | 34.6% |
| Craighead County | 74,487 | 92.0% | 94.5% | 86.8% | 38,530 | 95.1% | 66.6% | 62.8% |
| Crawford County | 31,132 | 99.9% | 99.9% | 99.9% | 29,943 | 95.7% | 72.9% | 69.9% |
| Crittenden County | 38,302 | 99.3% | 97.9% | 97.3% | 8,759 | 57.7% | 71.4% | 46.2% |
| Cross County | 7,595 | 100.0% | 95.8% | 95.8% | 9,006 | 51.7% | 30.3% | 18.5% |
| Dallas County | | | | | 6,191 | 60.7% | 66.3% | 50.7% |
| Desha County | 4,082 | 99.8% | 100.0% | 99.8% | 6,689 | 82.1% | 60.0% | 55.2% |
| Drew County | 7,569 | 99.7% | 71.6% | 71.4% | 9,342 | 44.6% | 22.7% | 10.9% |
| Faulkner County | 67,612 | 98.8% | 99.9% | 98.8% | 60,053 | 58.9% | 88.3% | 54.3% |
| Franklin County | | | | | 17,271 | 57.5% | 61.9% | 35.0% |
| Fulton County | | | | | 12,382 | 98.1% | 45.2% | 44.6% |
| Garland County | 66,736 | 99.1% | 93.6% | 93.1% | 33,353 | 60.0% | 70.8% | 48.7% |
| Grant County | 4,825 | 87.8% | 95.4% | 83.6% | 13,335 | 61.3% | 30.5% | 17.6% |
| Greene County | 24,184 | 100.0% | 96.5% | 96.5% | 22,264 | 99.7% | 52.7% | 52.6% |
| Hempstead County | 8,743 | 99.9% | 99.9% | 99.8% | 10,710 | 49.3% | 36.0% | 26.7% |
| Hot Spring County | 8,866 | 94.1% | 92.4% | 87.1% | 24,337 | 53.6% | 32.4% | 20.3% |
| Howard County | | | | | 12,557 | 71.2% | 58.9% | 47.1% |
| Independence County | 10,890 | 91.8% | 98.0% | 89.9% | 27,055 | 40.9% | 62.7% | 33.0% |
| Izard County | | | | | 14,048 | 87.5% | 32.8% | 31.3% |
| Jackson County | 6,149 | 93.4% | 100.0% | 93.4% | 10,475 | 42.6% | 47.4% | 29.5% |
| Jefferson County | 44,166 | 84.8% | 99.8% | 84.7% | 20,080 | 13.1% | 76.6% | 12.0% |
| Johnson County | 7,840 | 99.4% | 100.0% | 99.4% | 18,161 | 84.0% | 61.0% | 53.1% |
| Lafayette County | | | | | 6,101 | 40.6% | 33.3% | 20.7% |
| Lawrence County | 6,639 | 89.0% | 94.9% | 84.2% | 9,566 | 93.6% | 39.3% | 36.5% |
| Lee County | | | | | 8,364 | 43.2% | 50.7% | 39.8% |
| Lincoln County | | | | | 12,916 | 36.7% | 27.4% | 16.0% |
| Little River County | | | | | 11,821 | 57.2% | 53.0% | 37.3% |
| Logan County | | | | | 21,253 | 27.7% | 62.8% | 21.6% |
| Lonoke County | 35,760 | 55.3% | 100.0% | 55.3% | 39,465 | 65.1% | 94.7% | 61.8% |
| Madison County | | | | | 17,486 | 83.1% | 42.1% | 37.4% |
| Marion County | | | | | 17,254 | 46.1% | 56.3% | 30.8% |
| Miller County | 25,313 | 99.8% | 98.1% | 98.0% | 17,239 | 95.3% | 55.6% | 53.0% |
| Mississippi County | 21,139 | 92.2% | 97.8% | 90.1% | 17,757 | 85.7% | 44.9% | 37.2% |
| Monroe County | | | | | 6,564 | 0.2% | 33.6% | 0.2% |
| Montgomery County | | | | | 8,556 | 33.0% | 41.7% | 21.9% |
| Nevada County | | | | | 8,181 | 65.2% | 35.9% | 28.0% |
| Newton County | | | | | 7,078 | 2.5% | 40.4% | 0.4% |
| Ouachita County | 9,618 | 99.1% | 99.7% | 98.9% | 12,431 | 66.8% | 57.7% | 45.7% |
| Perry County | | | | | 10,063 | 91.0% | 60.9% | 57.2% |
| Phillips County | 8,056 | 92.3% | 97.6% | 90.4% | 7,248 | 47.7% | 59.8% | 35.4% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Pike County | | | | | 10,179 | 97.0% | 42.4% | 41.6% |
| Poinsett County | 7,657 | 100.0% | 98.4% | 98.4% | 14,838 | 77.6% | 46.1% | 28.7% |
| Polk County | 5,614 | 99.9% | 58.0% | 57.9% | 13,723 | 32.5% | 31.9% | 11.8% |
| Pope County | 27,276 | 94.8% | 99.7% | 94.5% | 36,789 | 57.1% | 75.4% | 44.5% |
| Prairie County | | | | | 8,069 | 71.3% | 76.7% | 58.0% |
| Pulaski County | 353,301 | 98.9% | 99.8% | 98.7% | 45,844 | 63.8% | 93.5% | 61.8% |
| Randolph County | 7,360 | 94.4% | 88.0% | 82.7% | 11,477 | 84.0% | 28.7% | 26.5% |
| Saline County | 80,237 | 98.5% | 99.5% | 98.1% | 47,120 | 81.6% | 89.7% | 74.4% |
| Scott County | | | | | 9,805 | 29.0% | 60.4% | 26.7% |
| Searcy County | | | | | 7,918 | 23.7% | 54.4% | 21.0% |
| Sebastian County | 103,362 | 99.9% | 99.8% | 99.8% | 25,697 | 90.1% | 77.3% | 69.4% |
| Sevier County | 5,828 | 98.8% | 92.9% | 92.4% | 9,858 | 62.6% | 32.4% | 23.8% |
| Sharp County | | | | | 17,810 | 82.9% | 32.0% | 26.3% |
| St. Francis County | 8,041 | 96.9% | 82.0% | 80.4% | 14,410 | 25.0% | 41.1% | 18.9% |
| Stone County | | | | | 12,575 | 12.7% | 39.2% | 3.3% |
| Union County | 18,255 | 89.7% | 91.1% | 81.9% | 19,497 | 42.3% | 42.8% | 20.5% |
| Van Buren County | | | | | 16,102 | 58.2% | 48.3% | 28.0% |
| Washington County | 194,804 | 99.9% | 99.5% | 99.5% | 61,250 | 99.6% | 77.0% | 76.8% |
| White County | 33,915 | 54.8% | 99.3% | 54.8% | 43,840 | 36.2% | 71.1% | 28.1% |
| Woodruff County | | | | | 6,049 | 53.1% | 85.2% | 52.3% |
| Yell County | 3,213 | 86.0% | 95.9% | 83.0% | 16,916 | 58.6% | 55.8% | 34.3% |
| California | 6,734,588 | 98.1% | 99.1% | 97.3% | 2,294,754 | 65.9% | 79.4% | 55.4% |
| Alameda County | 1,621,032 | 99.8% | 99.4% | 99.2% | 7,965 | 66.7% | 82.0% | 59.8% |
| Alpine County | | | | | 1,190 | 10.1% | 41.0% | 10.0% |
| Amador County | 12,652 | 97.6% | 96.9% | 94.8% | 28,760 | 29.6% | 47.2% | 19.2% |
| Butte County | 163,475 | 99.5% | 98.6% | 98.2% | 43,828 | 76.7% | 73.3% | 63.8% |
| Calaveras County | 8,308 | 99.1% | 43.8% | 43.6% | 38,255 | 75.8% | 54.5% | 45.6% |
| Colusa County | 12,522 | 99.3% | 92.5% | 91.9% | 9,392 | 92.4% | 84.5% | 79.9% |
| Contra Costa County | 1,145,356 | 99.6% | 99.1% | 98.7% | 11,610 | 59.3% | 84.7% | 54.9% |
| Del Norte County | 15,642 | 92.9% | 94.8% | 88.3% | 11,440 | 65.9% | 70.8% | 49.2% |
| El Dorado County | 120,859 | 97.1% | 99.3% | 96.5% | 71,787 | 66.4% | 80.8% | 56.0% |
| Fresno County | 901,646 | 99.5% | 99.9% | 99.5% | 113,544 | 56.1% | 92.9% | 54.0% |
| Glenn County | 16,412 | 99.7% | 99.8% | 99.6% | 11,927 | 92.7% | 88.8% | 85.9% |
| Humboldt County | 92,403 | 99.9% | 95.4% | 95.4% | 42,607 | 83.4% | 61.9% | 52.1% |
| Imperial County | 145,905 | 95.2% | 99.6% | 94.9% | 32,808 | 51.7% | 74.0% | 40.6% |
| Inyo County | 10,854 | 25.4% | 97.6% | 23.8% | 7,864 | 20.0% | 57.4% | 16.9% |
| Kern County | 797,010 | 98.1% | 99.3% | 97.5% | 119,098 | 59.5% | 83.8% | 51.5% |
| Kings County | 134,503 | 89.9% | 98.3% | 89.9% | 18,478 | 47.1% | 99.6% | 47.1% |
| Lake County | 40,648 | 98.7% | 73.9% | 73.0% | 27,543 | 69.8% | 66.4% | 51.6% |
| Lassen County | 8,655 | 100.0% | 100.0% | 100.0% | 21,249 | 70.5% | 86.4% | 67.5% |
| Los Angeles County | 9,632,013 | 97.0% | 99.4% | 96.5% | 89,125 | 73.9% | 81.3% | 61.3% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Madera County | 96,671 | 98.6% | 99.7% | 98.4% | 63,585 | 46.1% | 87.8% | 40.0% |
| Marin County | 240,778 | 98.9% | 86.8% | 86.0% | 15,240 | 76.8% | 62.4% | 51.9% |
| Mariposa County | | | | | 17,020 | 2.0% | 50.2% | 1.8% |
| Mendocino County | 45,720 | 99.2% | 84.6% | 84.5% | 44,063 | 63.9% | 39.1% | 27.1% |
| Merced County | 240,725 | 98.9% | 99.8% | 98.8% | 49,289 | 86.4% | 96.8% | 84.4% |
| Modoc County | | | | | 8,511 | 41.2% | 54.9% | 31.3% |
| Mono County | 7,147 | 93.0% | 99.7% | 92.8% | 5,831 | 38.7% | 61.2% | 24.9% |
| Monterey County | 367,045 | 99.8% | 95.6% | 95.5% | 65,813 | 93.2% | 84.4% | 81.6% |
| Napa County | 114,243 | 98.8% | 99.4% | 98.3% | 20,057 | 82.7% | 76.7% | 63.7% |
| Nevada County | 53,034 | 91.9% | 94.5% | 87.9% | 49,259 | 63.9% | 56.4% | 39.5% |
| Orange County | 3,142,650 | 97.8% | 99.7% | 97.5% | 8,534 | 91.6% | 59.8% | 55.5% |
| Placer County | 355,611 | 97.6% | 99.1% | 96.9% | 62,161 | 62.8% | 82.8% | 53.0% |
| Plumas County | | | | | 19,351 | 53.6% | 77.0% | 49.3% |
| Riverside County | 2,338,131 | 97.2% | 99.6% | 96.9% | 135,771 | 60.5% | 88.1% | 55.1% |
| Sacramento County | 1,545,550 | 99.3% | 99.9% | 99.3% | 38,619 | 63.4% | 94.4% | 60.0% |
| San Benito County | 52,175 | 100.0% | 88.9% | 88.9% | 15,404 | 94.0% | 84.0% | 82.3% |
| San Bernardino County | 2,072,759 | 95.8% | 99.5% | 95.4% | 120,897 | 55.1% | 92.4% | 51.8% |
| San Diego County | 3,137,183 | 99.5% | 98.8% | 98.4% | 139,025 | 74.0% | 82.5% | 65.9% |
| San Francisco County | 808,436 | 99.5% | 99.9% | 99.4% | 1 | 0.0% | 100.0% | 0.0% |
| San Joaquin County | 731,129 | 99.6% | 100.0% | 99.6% | 62,100 | 82.2% | 94.5% | 77.9% |
| San Luis Obispo County | 225,244 | 99.4% | 96.5% | 96.0% | 56,769 | 82.5% | 80.8% | 70.7% |
| San Mateo County | 716,943 | 99.5% | 99.1% | 98.7% | 12,238 | 73.7% | 60.0% | 51.9% |
| Santa Barbara County | 418,183 | 98.3% | 97.6% | 96.1% | 25,654 | 38.8% | 62.0% | 31.9% |
| Santa Clara County | 1,845,662 | 99.8% | 99.7% | 99.6% | 25,283 | 93.8% | 85.3% | 82.9% |
| Santa Cruz County | 229,323 | 99.4% | 87.8% | 87.4% | 35,047 | 90.4% | 46.4% | 44.1% |
| Shasta County | 118,618 | 93.7% | 94.5% | 88.7% | 62,312 | 41.2% | 61.0% | 32.6% |
| Sierra County | 42 | 0.0% | 100.0% | 0.0% | 3,175 | 30.2% | 34.1% | 16.3% |
| Siskiyou County | 12,824 | 95.3% | 98.2% | 93.6% | 30,836 | 62.8% | 72.0% | 48.9% |
| Solano County | 427,929 | 99.4% | 99.1% | 98.6% | 20,818 | 88.6% | 94.1% | 84.1% |
| Sonoma County | 415,511 | 98.8% | 98.6% | 97.5% | 67,139 | 71.3% | 75.7% | 56.2% |
| Stanislaus County | 506,149 | 99.9% | 100.0% | 99.9% | 45,126 | 91.6% | 97.0% | 90.3% |
| Sutter County | 83,648 | 99.9% | 99.3% | 99.3% | 14,855 | 98.2% | 87.5% | 86.0% |
| Tehama County | 27,693 | 99.4% | 96.1% | 95.6% | 37,552 | 69.9% | 67.0% | 47.9% |
| Trinity County | | | | | 15,781 | 6.0% | 39.5% | 0.3% |
| Tulare County | 382,341 | 98.9% | 100.0% | 98.9% | 95,203 | 53.7% | 93.3% | 51.3% |
| Tuolumne County | 29,115 | 95.9% | 81.8% | 79.2% | 25,416 | 44.2% | 68.6% | 34.6% |
| Ventura County | 804,660 | 97.4% | 98.7% | 96.2% | 27,945 | 61.5% | 80.0% | 49.0% |
| Yolo County | 202,970 | 99.5% | 100.0% | 99.5% | 19,145 | 66.8% | 93.6% | 64.3% |
| Yuba County | 58,851 | 99.8% | 100.0% | 99.8% | 25,459 | 81.8% | 82.0% | 75.2% |
| Colorado | 5,015,417 | 99.3% | 98.5% | 97.9% | 824,509 | 63.1% | 62.8% | 45.2% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Adams County | 504,822 | 99.3% | 99.7% | 99.0% | 22,753 | 67.1% | 77.3% | 52.4% |
| Alamosa County | 10,944 | 98.0% | 98.0% | 96.0% | 5,648 | 61.3% | 30.4% | 22.6% |
| Arapahoe County | 641,656 | 99.6% | 99.5% | 99.2% | 14,152 | 79.4% | 82.4% | 67.3% |
| Archuleta County | 5,871 | 99.8% | 97.4% | 97.3% | 8,132 | 67.2% | 41.6% | 35.4% |
| Baca County | | | | | 3,432 | 29.6% | 51.8% | 26.9% |
| Bent County | | | | | 5,399 | 66.2% | 6.1% | 0.0% |
| Boulder County | 295,105 | 99.9% | 97.7% | 97.6% | 32,363 | 65.2% | 69.2% | 56.8% |
| Broomfield County | 75,582 | 99.5% | 99.8% | 99.4% | 539 | 57.6% | 100.0% | 57.6% |
| Chaffee County | 11,035 | 95.8% | 94.0% | 90.3% | 9,188 | 28.3% | 58.9% | 23.3% |
| Cheyenne County | | | | | 1,732 | 18.1% | 33.3% | 13.1% |
| Clear Creek County | | | | | 9,355 | 49.3% | 61.4% | 38.3% |
| Conejos County | | | | | 7,579 | 69.2% | 43.6% | 32.3% |
| Costilla County | | | | | 3,603 | 64.1% | 39.6% | 36.2% |
| Crowley County | | | | | 5,614 | 4.1% | 27.0% | 3.1% |
| Custer County | | | | | 5,335 | 0.5% | 39.1% | 0.2% |
| Delta County | 8,242 | 99.8% | 100.0% | 99.8% | 23,360 | 78.6% | 77.1% | 64.7% |
| Denver County | 713,055 | 99.8% | 99.1% | 99.0% | 197 | 73.0% | 100.0% | 73.0% |
| Dolores County | | | | | 2,455 | 4.6% | 51.0% | 0.0% |
| Douglas County | 340,255 | 99.6% | 97.6% | 97.3% | 35,733 | 85.8% | 73.9% | 65.7% |
| Eagle County | 45,639 | 98.2% | 97.8% | 96.6% | 9,646 | 69.0% | 64.7% | 55.3% |
| El Paso County | 670,270 | 99.2% | 99.4% | 98.7% | 70,297 | 69.0% | 79.9% | 60.4% |
| Elbert County | | | | | 27,799 | 71.2% | 30.0% | 23.3% |
| Fremont County | 25,006 | 92.3% | 96.9% | 89.4% | 24,615 | 39.6% | 75.1% | 35.6% |
| Garfield County | 42,168 | 97.6% | 99.6% | 97.3% | 20,103 | 53.3% | 60.9% | 35.0% |
| Gilpin County | | | | | 5,891 | 47.2% | 79.5% | 45.2% |
| Grand County | 5,205 | 95.0% | 63.5% | 63.4% | 10,564 | 67.8% | 58.2% | 46.0% |
| Gunnison County | 7,038 | 100.0% | 100.0% | 100.0% | 10,229 | 78.5% | 31.2% | 29.3% |
| Hinsdale County | | | | | 775 | 0.2% | 0.0% | 0.0% |
| Huerfano County | | | | | 7,082 | 53.6% | 54.7% | 43.9% |
| Jackson County | | | | | 1,302 | 82.1% | 65.0% | 63.2% |
| Jefferson County | 533,642 | 99.3% | 99.0% | 98.4% | 42,501 | 51.7% | 70.3% | 44.4% |
| Kiowa County | | | | | 1,424 | 57.2% | 0.6% | 0.0% |
| Kit Carson County | | | | | 6,961 | 73.5% | 60.0% | 54.2% |
| La Plata County | 19,573 | 91.7% | 96.0% | 87.8% | 37,034 | 76.1% | 61.6% | 52.6% |
| Lake County | 4,472 | 94.7% | 99.9% | 94.7% | 2,855 | 58.7% | 74.7% | 45.9% |
| Larimer County | 328,007 | 99.9% | 98.7% | 98.7% | 38,771 | 67.0% | 58.6% | 45.9% |
| Las Animas County | 8,303 | 99.2% | 95.0% | 94.3% | 6,024 | 15.7% | 55.7% | 15.5% |
| Lincoln County | | | | | 5,510 | 36.5% | 43.7% | 31.4% |
| Logan County | 12,112 | 100.0% | 0.0% | 0.0% | 8,711 | 79.3% | 1.3% | 0.9% |
| Mesa County | 138,280 | 96.5% | 99.4% | 96.0% | 20,356 | 36.8% | 80.9% | 34.9% |
| Mineral County | | | | | 931 | 51.1% | 1.6% | 0.5% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Moffat County | 9,552 | 100.0% | 78.4% | 78.4% | 3,625 | 65.9% | 19.1% | 12.3% |
| Montezuma County | 8,665 | 99.4% | 94.7% | 94.1% | 17,803 | 57.9% | 60.0% | 41.2% |
| Montrose County | 25,147 | 99.9% | 99.9% | 99.9% | 18,664 | 58.7% | 78.5% | 51.9% |
| Morgan County | 19,145 | 100.0% | 98.5% | 98.5% | 10,094 | 86.2% | 52.6% | 50.1% |
| Otero County | 7,571 | 97.1% | 92.4% | 89.8% | 10,732 | 68.2% | 67.6% | 50.7% |
| Ouray County | | | | | 5,100 | 51.9% | 32.4% | 21.3% |
| Park County | | | | | 17,939 | 39.6% | 40.0% | 20.1% |
| Phillips County | | | | | 4,449 | 90.0% | 5.3% | 4.8% |
| Pitkin County | 11,310 | 98.7% | 99.7% | 98.4% | 5,566 | 60.5% | 59.9% | 49.4% |
| Prowers County | 7,408 | 96.0% | 100.0% | 96.0% | 4,446 | 24.1% | 59.2% | 23.4% |
| Pueblo County | 148,235 | 98.7% | 97.4% | 96.2% | 21,309 | 66.0% | 72.2% | 47.5% |
| Rio Blanco County | | | | | 6,569 | 66.2% | 37.6% | 32.8% |
| Rio Grande County | | | | | 11,325 | 65.6% | 64.5% | 51.0% |
| Routt County | 14,546 | 99.9% | 99.8% | 99.8% | 10,461 | 77.7% | 37.5% | 35.9% |
| Saguache County | | | | | 6,623 | 57.7% | 20.7% | 7.9% |
| San Juan County | | | | | 803 | 82.0% | 87.5% | 81.5% |
| San Miguel County | 4,496 | 70.7% | 95.2% | 66.8% | 3,507 | 36.9% | 43.9% | 29.5% |
| Sedgwick County | | | | | 2,295 | 76.6% | 65.0% | 62.1% |
| Summit County | 25,696 | 97.9% | 99.4% | 97.4% | 4,869 | 68.3% | 87.5% | 62.5% |
| Teller County | 9,912 | 99.9% | 99.9% | 99.8% | 14,945 | 27.8% | 45.8% | 23.8% |
| Washington County | | | | | 4,812 | 78.0% | 12.0% | 11.8% |
| Weld County | 277,452 | 99.0% | 97.5% | 96.6% | 72,724 | 75.5% | 87.0% | 66.9% |
| Yuma County | | | | | 9,899 | 90.3% | 55.6% | 55.5% |
| Connecticut | 3,119,066 | 98.4% | 93.4% | 91.9% | 507,139 | 96.2% | 63.5% | 61.4% |
| Capitol Planning Region | 854,933 | 99.5% | 97.9% | 97.5% | 119,584 | 98.6% | 80.3% | 79.1% |
| Greater Bridgeport Planning Region | 319,513 | 95.7% | 96.1% | 91.8% | 9,471 | 96.0% | 64.6% | 61.9% |
| Lower Connecticut River Valley Planning Region | 122,458 | 99.6% | 93.9% | 93.6% | 56,145 | 97.9% | 72.5% | 71.2% |
| Naugatuck Valley Planning Region | 415,161 | 99.4% | 93.2% | 92.8% | 42,018 | 98.2% | 68.6% | 67.6% |
| Northeastern Connecticut Planning Region | 35,503 | 95.9% | 80.3% | 77.0% | 60,620 | 90.1% | 50.6% | 45.2% |
| Northwest Hills Planning Region | 45,539 | 94.4% | 95.2% | 90.0% | 69,208 | 93.1% | 47.2% | 44.4% |
| South Central Connecticut Planning Region | 550,627 | 99.5% | 94.5% | 94.1% | 21,655 | 98.8% | 69.4% | 68.5% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Southeastern Connecticut Planning Region | 208,880 | 98.4% | 91.8% | 90.3% | 75,064 | 96.6% | 57.3% | 55.4% |
| Western Connecticut Planning Region | 566,452 | 96.6% | 85.2% | 82.2% | 53,374 | 97.1% | 54.5% | 52.8% |
| Delaware | 837,346 | 99.2% | 97.8% | 97.1% | 181,050 | 82.8% | 79.6% | 67.3% |
| Kent County | 136,064 | 97.4% | 99.3% | 96.8% | 50,882 | 80.8% | 83.6% | 68.3% |
| New Castle County | 539,860 | 99.6% | 98.5% | 98.2% | 35,634 | 88.4% | 83.8% | 74.8% |
| Sussex County | 161,422 | 99.4% | 94.4% | 93.8% | 94,534 | 81.7% | 75.9% | 64.0% |
| District of Columbia | 671,803 | 99.7% | 99.9% | 99.7% | | | | |
| District of Columbia | 671,803 | 99.7% | 99.9% | 99.7% | | | | |
| Florida | 0,334,773 | 97.6% | 97.5% | 95.3% | 1,910,053 | 59.8% | 71.4% | 46.8% |
| Alachua County | 213,788 | 98.6% | 93.4% | 92.0% | 70,242 | 55.4% | 83.4% | 50.0% |
| Baker County | 10,818 | 98.7% | 84.4% | 83.8% | 16,985 | 58.5% | 39.3% | 25.8% |
| Bay County | 159,249 | 99.7% | 96.5% | 96.3% | 25,885 | 67.3% | 70.0% | 44.4% |
| Bradford County | 7,956 | 91.5% | 99.8% | 91.5% | 19,357 | 18.6% | 89.3% | 16.7% |
| Brevard County | 605,650 | 96.5% | 99.7% | 96.2% | 25,043 | 89.7% | 92.1% | 83.0% |
| Broward County | 1,946,859 | 97.8% | 99.0% | 96.9% | 167 | 76.0% | 97.6% | 74.8% |
| Calhoun County | | | | | 13,464 | 30.5% | 40.6% | 24.9% |
| Charlotte County | 189,361 | 94.6% | 91.3% | 86.1% | 13,300 | 54.8% | 75.2% | 40.9% |
| Citrus County | 121,600 | 97.1% | 87.3% | 84.7% | 40,929 | 65.9% | 74.9% | 49.9% |
| Clay County | 193,746 | 97.1% | 97.2% | 94.4% | 32,843 | 54.1% | 72.0% | 41.4% |
| Collier County | 352,027 | 98.9% | 97.6% | 96.6% | 45,967 | 92.7% | 54.9% | 49.9% |
| Columbia County | 26,132 | 97.0% | 88.3% | 85.6% | 45,776 | 40.4% | 49.8% | 21.2% |
| DeSoto County | 17,924 | 41.1% | 98.5% | 40.3% | 17,388 | 32.2% | 76.1% | 23.9% |
| Dixie County | | | | | 17,124 | 1.6% | 44.3% | 0.9% |
| Duval County | 989,688 | 98.7% | 98.2% | 97.0% | 26,848 | 97.1% | 73.4% | 71.3% |
| Escambia County | 299,579 | 99.7% | 98.6% | 98.3% | 25,299 | 71.6% | 67.7% | 49.8% |
| Flagler County | 117,000 | 97.9% | 90.7% | 88.7% | 9,705 | 77.1% | 68.1% | 52.1% |
| Franklin County | | | | | 12,498 | 86.7% | 67.2% | 62.6% |
| Gadsden County | 7,986 | 98.9% | 93.2% | 92.2% | 35,417 | 65.9% | 53.3% | 42.0% |
| Gilchrist County | | | | | 18,992 | 14.3% | 68.5% | 11.9% |
| Glades County | 2,301 | 84.2% | 96.0% | 80.2% | 10,153 | 33.8% | 72.1% | 30.5% |
| Gulf County | | | | | 15,314 | 70.7% | 59.5% | 52.9% |
| Hamilton County | | | | | 13,217 | 30.4% | 51.5% | 16.5% |
| Hardee County | 10,046 | 98.9% | 100.0% | 98.9% | 15,599 | 45.5% | 81.6% | 43.4% |
| Hendry County | 26,227 | 95.8% | 98.3% | 94.2% | 15,112 | 32.7% | 66.3% | 24.9% |
| Hernando County | 165,413 | 97.3% | 99.4% | 96.7% | 41,483 | 88.9% | 81.2% | 72.1% |
| Highlands County | 84,508 | 93.3% | 88.1% | 83.0% | 21,110 | 52.3% | 68.0% | 39.4% |
| Hillsborough County | 1,456,868 | 96.3% | 99.3% | 95.7% | 56,433 | 82.4% | 90.4% | 75.4% |
| Holmes County | | | | | 19,651 | 20.1% | 48.5% | 19.9% |
| Indian River County | 155,765 | 99.5% | 91.6% | 91.2% | 11,587 | 71.1% | 94.6% | 68.6% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Jackson County | 5,846 | 99.4% | 100.0% | 99.4% | 42,365 | 37.7% | 48.7% | 24.7% |
| Jefferson County | | | | | 15,042 | 4.1% | 53.8% | 3.9% |
| Lafayette County | | | | | 7,786 | 27.7% | 72.8% | 23.9% |
| Lake County | 336,788 | 96.3% | 97.3% | 93.7% | 73,351 | 52.3% | 83.9% | 49.1% |
| Lee County | 790,210 | 95.8% | 97.5% | 93.9% | 32,243 | 57.8% | 86.2% | 51.7% |
| Leon County | 257,531 | 99.1% | 97.3% | 96.5% | 39,838 | 73.2% | 79.8% | 66.3% |
| Levy County | | | | | 45,260 | 15.2% | 63.6% | 11.1% |
| Liberty County | | | | | 7,603 | 28.7% | 33.4% | 21.8% |
| Madison County | | | | | 18,198 | 40.2% | 58.6% | 33.7% |
| Manatee County | 408,658 | 97.3% | 98.1% | 95.4% | 20,467 | 88.3% | 73.9% | 65.2% |
| Marion County | 280,613 | 95.3% | 96.6% | 92.2% | 115,802 | 53.7% | 71.8% | 39.4% |
| Martin County | 150,041 | 99.4% | 95.1% | 94.5% | 11,965 | 69.9% | 81.7% | 58.3% |
| Miami-Dade County | 2,650,240 | 99.1% | 98.2% | 97.5% | 23,597 | 56.7% | 76.2% | 47.3% |
| Monroe County | 70,605 | 99.7% | 83.2% | 83.1% | 11,106 | 94.8% | 73.1% | 70.1% |
| Nassau County | 55,340 | 99.5% | 88.1% | 87.8% | 42,559 | 76.5% | 62.4% | 50.6% |
| Okaloosa County | 193,366 | 98.0% | 90.2% | 88.4% | 23,116 | 50.2% | 43.1% | 19.9% |
| Okeechobee County | 26,561 | 98.1% | 93.2% | 91.5% | 13,851 | 26.6% | 58.9% | 24.9% |
| Orange County | 1,419,271 | 96.8% | 99.8% | 96.7% | 33,455 | 82.6% | 92.3% | 76.7% |
| Osceola County | 394,680 | 97.6% | 98.9% | 96.5% | 27,865 | 78.5% | 85.6% | 66.9% |
| Palm Beach County | 1,505,687 | 99.2% | 97.8% | 97.0% | 12,790 | 76.1% | 92.8% | 72.2% |
| Pasco County | 563,872 | 95.9% | 94.8% | 90.8% | 44,922 | 74.9% | 81.9% | 62.7% |
| Pinellas County | 959,921 | 96.8% | 96.7% | 93.6% | 1,818 | 96.7% | 92.4% | 89.6% |
| Polk County | 700,763 | 97.2% | 96.5% | 93.8% | 86,641 | 66.0% | 83.1% | 58.1% |
| Putnam County | 20,014 | 92.6% | 90.5% | 83.6% | 54,717 | 58.0% | 69.2% | 46.5% |
| Santa Rosa County | 158,410 | 98.3% | 94.4% | 92.8% | 39,858 | 55.0% | 70.9% | 46.1% |
| Sarasota County | 451,033 | 99.1% | 97.1% | 96.2% | 11,253 | 83.0% | 62.9% | 50.7% |
| Seminole County | 462,654 | 97.2% | 99.2% | 96.5% | 16,118 | 74.6% | 85.0% | 63.5% |
| St. Johns County | 260,302 | 99.6% | 95.8% | 95.4% | 46,539 | 82.4% | 88.0% | 77.9% |
| St. Lucie County | 345,512 | 98.9% | 97.8% | 96.8% | 13,192 | 63.3% | 94.9% | 62.1% |
| Sumter County | 114,497 | 94.9% | 99.7% | 94.6% | 30,473 | 48.9% | 85.2% | 40.3% |
| Suwannee County | 7,007 | 91.7% | 83.1% | 76.9% | 38,404 | 27.3% | 45.4% | 14.5% |
| Taylor County | 6,235 | 98.8% | 94.3% | 93.1% | 15,048 | 48.5% | 53.4% | 30.7% |
| Union County | | | | | 15,460 | 42.3% | 72.1% | 29.1% |
| Volusia County | 529,584 | 96.4% | 98.5% | 95.1% | 49,608 | 72.9% | 89.1% | 69.6% |
| Wakulla County | 10,467 | 95.2% | 91.4% | 86.8% | 24,711 | 60.0% | 63.6% | 46.3% |
| Walton County | 38,574 | 99.6% | 75.7% | 75.4% | 44,730 | 87.3% | 51.7% | 46.7% |
| Washington County | | | | | 25,414 | 64.4% | 50.6% | 36.5% |
| Georgia | 8,032,887 | 98.3% | 96.7% | 95.2% | 2,879,989 | 71.0% | 61.0% | 47.3% |
| Appling County | 5,443 | 99.3% | 76.5% | 75.9% | 12,985 | 67.3% | 40.3% | 31.8% |
| Atkinson County | | | | | 8,183 | 97.7% | 60.6% | 59.4% |
| Bacon County | | | | | 11,191 | 86.6% | 41.9% | 40.5% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Baker County | | | | | 2,788 | 3.5% | 27.5% | 3.5% |
| Baldwin County | 21,390 | 94.9% | 87.3% | 85.1% | 22,245 | 84.2% | 51.4% | 46.3% |
| Banks County | 901 | 90.8% | 61.3% | 57.9% | 18,427 | 34.7% | 41.9% | 17.2% |
| Barrow County | 59,663 | 98.2% | 91.4% | 89.9% | 29,636 | 86.9% | 86.7% | 75.4% |
| Bartow County | 67,979 | 98.7% | 96.1% | 95.0% | 44,837 | 74.9% | 67.4% | 56.1% |
| Ben Hill County | 11,099 | 99.9% | 73.1% | 73.1% | 5,970 | 44.1% | 36.5% | 18.2% |
| Berrien County | 4,903 | 99.4% | 96.7% | 96.2% | 13,311 | 42.4% | 43.9% | 24.0% |
| Bibb County | 133,788 | 99.9% | 99.6% | 99.6% | 22,409 | 95.3% | 93.9% | 89.7% |
| Bleckley County | 5,935 | 100.0% | 68.6% | 68.6% | 6,322 | 57.0% | 56.0% | 33.7% |
| Brantley County | 120 | 88.3% | 10.8% | 10.8% | 18,063 | 99.4% | 42.1% | 41.8% |
| Brooks County | | | | | 16,253 | 59.0% | 55.6% | 41.2% |
| Bryan County | 25,256 | 95.0% | 75.3% | 71.7% | 22,969 | 94.4% | 41.3% | 39.9% |
| Bulloch County | 41,964 | 100.0% | 91.5% | 91.5% | 41,095 | 99.9% | 37.4% | 37.4% |
| Burke County | 6,108 | 99.0% | 94.5% | 93.6% | 18,280 | 47.8% | 46.9% | 24.0% |
| Butts County | 5,934 | 95.8% | 99.5% | 95.4% | 20,715 | 78.4% | 82.5% | 63.4% |
| Calhoun County | | | | | 5,469 | 16.7% | 70.6% | 14.2% |
| Camden County | 41,098 | 99.8% | 80.4% | 80.3% | 15,915 | 69.6% | 41.2% | 31.3% |
| Candler County | | | | | 11,000 | 99.7% | 52.4% | 52.4% |
| Carroll County | 54,564 | 93.4% | 90.3% | 83.9% | 70,028 | 73.4% | 61.5% | 48.0% |
| Catoosa County | 52,361 | 98.5% | 99.7% | 98.2% | 16,465 | 85.3% | 65.4% | 57.7% |
| Charlton County | | | | | 12,781 | 68.9% | 45.3% | 39.1% |
| Chatham County | 291,908 | 97.3% | 93.0% | 90.5% | 9,199 | 91.1% | 63.6% | 57.3% |
| Chattahoochee County | 2,298 | 0.0% | 0.0% | 0.0% | 6,521 | 0.0% | 94.1% | 0.0% |
| Chattooga County | 10,090 | 96.3% | 96.0% | 92.4% | 14,846 | 59.5% | 37.4% | 29.7% |
| Cherokee County | 229,485 | 99.1% | 98.5% | 97.6% | 51,793 | 86.0% | 81.4% | 73.2% |
| Clarke County | 121,600 | 94.9% | 95.8% | 90.8% | 8,275 | 75.8% | 75.6% | 58.7% |
| Clay County | | | | | 2,845 | 26.2% | 28.8% | 5.6% |
| Clayton County | 294,969 | 99.3% | 99.2% | 98.6% | 1,595 | 87.9% | 93.4% | 82.2% |
| Clinch County | | | | | 6,662 | 30.9% | 66.1% | 26.3% |
| Cobb County | 771,912 | 99.0% | 98.9% | 98.0% | 40 | 62.5% | 100.0% | 62.5% |
| Coffee County | 14,197 | 97.1% | 93.6% | 91.3% | 28,975 | 69.1% | 57.8% | 45.4% |
| Colquitt County | 19,062 | 98.0% | 64.5% | 62.9% | 26,700 | 48.3% | 45.6% | 24.3% |
| Columbia County | 138,185 | 99.5% | 99.3% | 98.9% | 24,234 | 90.0% | 91.8% | 83.3% |
| Cook County | 7,065 | 99.2% | 47.9% | 47.6% | 10,339 | 47.7% | 49.1% | 31.8% |
| Coweta County | 82,832 | 98.2% | 96.3% | 94.6% | 70,050 | 84.9% | 72.9% | 63.3% |
| Crawford County | | | | | 12,140 | 88.7% | 56.4% | 51.5% |
| Crisp County | 10,679 | 98.2% | 94.1% | 92.4% | 9,029 | 48.8% | 52.3% | 31.9% |
| Dade County | 504 | 100.0% | 100.0% | 100.0% | 15,577 | 95.4% | 81.2% | 77.3% |
| Dawson County | 9,179 | 96.9% | 93.3% | 90.8% | 20,959 | 63.0% | 59.9% | 47.4% |
| DeKalb County | 761,590 | 99.1% | 98.4% | 97.6% | 1,230 | 94.8% | 95.5% | 90.8% |
| Decatur County | 13,535 | 98.4% | 69.6% | 68.3% | 15,447 | 22.4% | 39.3% | 11.4% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Dodge County | 6,267 | 99.2% | 95.6% | 94.9% | 13,535 | 46.9% | 59.9% | 34.8% |
| Dooly County | | | | | 10,572 | 90.7% | 73.4% | 70.8% |
| Dougherty County | 70,562 | 98.3% | 90.4% | 88.8% | 12,404 | 84.3% | 47.9% | 42.7% |
| Douglas County | 124,308 | 99.1% | 97.3% | 96.6% | 23,008 | 82.7% | 96.1% | 80.6% |
| Early County | | | | | 10,574 | 13.8% | 56.9% | 10.5% |
| Echols County | | | | | 3,686 | 0.1% | 44.5% | 0.1% |
| Effingham County | 17,225 | 99.3% | 67.4% | 67.1% | 51,816 | 86.9% | 32.1% | 30.5% |
| Elbert County | 5,595 | 100.0% | 94.8% | 94.8% | 14,219 | 91.8% | 49.8% | 47.1% |
| Emanuel County | 7,241 | 99.9% | 83.9% | 83.9% | 15,688 | 98.5% | 42.9% | 42.5% |
| Evans County | | | | | 10,695 | 83.8% | 63.4% | 59.0% |
| Fannin County | | | | | 25,737 | 65.4% | 35.3% | 28.6% |
| Fayette County | 100,215 | 99.3% | 98.1% | 97.5% | 21,815 | 84.1% | 96.2% | 80.9% |
| Floyd County | 60,631 | 98.6% | 99.0% | 97.7% | 38,812 | 70.8% | 69.7% | 57.4% |
| Forsyth County | 246,721 | 98.2% | 98.5% | 96.7% | 20,516 | 92.0% | 93.0% | 85.7% |
| Franklin County | | | | | 24,128 | 62.2% | 51.7% | 34.1% |
| Fulton County | 1,067,477 | 98.2% | 99.1% | 97.4% | 7,157 | 61.1% | 88.8% | 58.5% |
| Gilmer County | 6,891 | 88.6% | 66.7% | 63.9% | 25,516 | 78.8% | 33.3% | 30.3% |
| Glascoc County | | | | | 2,939 | 10.3% | 33.9% | 6.6% |
| Glynn County | 69,055 | 99.4% | 86.5% | 86.0% | 16,024 | 92.7% | 52.3% | 49.5% |
| Gordon County | 23,549 | 97.8% | 87.7% | 85.7% | 35,405 | 60.7% | 48.6% | 34.1% |
| Grady County | 10,237 | 98.6% | 76.3% | 75.3% | 15,771 | 32.2% | 42.0% | 19.9% |
| Greene County | | | | | 20,139 | 69.0% | 48.6% | 37.1% |
| Gwinnett County | 970,513 | 98.4% | 99.0% | 97.5% | 4,840 | 87.9% | 82.5% | 72.8% |
| Habersham County | 18,782 | 95.1% | 67.0% | 64.6% | 28,693 | 89.0% | 67.3% | 62.7% |
| Hall County | 156,327 | 97.2% | 97.7% | 95.0% | 56,365 | 81.8% | 79.9% | 67.1% |
| Hancock County | | | | | 8,387 | 13.4% | 32.9% | 9.7% |
| Haralson County | 7,649 | 95.7% | 37.3% | 35.5% | 23,688 | 57.7% | 48.7% | 30.6% |
| Harris County | 1,033 | 99.5% | 80.2% | 80.2% | 35,243 | 76.1% | 51.0% | 38.4% |
| Hart County | 6,185 | 100.0% | 84.5% | 84.5% | 20,724 | 86.2% | 42.8% | 37.4% |
| Heard County | | | | | 11,725 | 54.8% | 16.8% | 12.0% |
| Henry County | 201,266 | 98.1% | 98.9% | 97.1% | 47,098 | 91.6% | 95.9% | 87.7% |
| Houston County | 154,179 | 99.7% | 99.6% | 99.4% | 15,452 | 78.6% | 87.0% | 70.4% |
| Irwin County | | | | | 9,126 | 75.9% | 24.3% | 19.2% |
| Jackson County | 31,057 | 93.8% | 92.0% | 86.5% | 52,879 | 62.7% | 84.4% | 54.8% |
| Jasper County | | | | | 15,951 | 31.6% | 52.3% | 20.1% |
| Jeff Davis County | 5,039 | 99.5% | 93.2% | 92.8% | 9,850 | 81.3% | 47.1% | 36.4% |
| Jefferson County | | | | | 15,314 | 67.5% | 72.0% | 52.2% |
| Jenkins County | | | | | 8,689 | 52.2% | 51.1% | 41.4% |
| Johnson County | | | | | 9,242 | 62.1% | 46.7% | 29.6% |
| Jones County | 4,740 | 99.8% | 89.8% | 89.7% | 23,732 | 88.9% | 82.4% | 73.1% |
| Lamar County | 6,933 | 95.0% | 91.9% | 87.6% | 12,534 | 70.8% | 31.2% | 23.9% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Lanier County | | | | | 10,171 | 67.8% | 20.7% | 14.7% |
| Laurens County | 20,628 | 92.9% | 92.2% | 85.6% | 29,032 | 70.3% | 44.7% | 32.9% |
| Lee County | 12,756 | 94.1% | 76.8% | 71.8% | 20,886 | 71.2% | 70.9% | 57.7% |
| Liberty County | 49,931 | 99.2% | 89.0% | 88.3% | 18,099 | 74.5% | 55.4% | 42.3% |
| Lincoln County | | | | | 7,841 | 99.8% | 55.8% | 55.8% |
| Long County | 3,680 | 97.7% | 51.1% | 49.7% | 14,668 | 69.8% | 49.6% | 38.7% |
| Lowndes County | 77,178 | 97.3% | 97.9% | 95.4% | 42,561 | 42.6% | 78.4% | 35.3% |
| Lumpkin County | 4,872 | 94.0% | 93.8% | 88.2% | 29,924 | 59.4% | 58.7% | 40.1% |
| Macon County | | | | | 11,765 | 50.7% | 65.6% | 34.9% |
| Madison County | 2,930 | 96.5% | 87.4% | 85.1% | 28,543 | 51.3% | 56.1% | 35.4% |
| Marion County | | | | | 7,449 | 47.6% | 10.1% | 7.1% |
| McDuffie County | 8,646 | 98.2% | 100.0% | 98.2% | 13,067 | 52.3% | 76.4% | 50.0% |
| McIntosh County | | | | | 11,180 | 100.0% | 46.7% | 46.7% |
| Meriwether County | | | | | 20,845 | 41.6% | 40.1% | 23.6% |
| Miller County | | | | | 5,807 | 40.0% | 42.4% | 33.5% |
| Mitchell County | 5,106 | 93.2% | 65.6% | 60.3% | 16,010 | 36.9% | 38.4% | 23.2% |
| Monroe County | 5,276 | 100.0% | 89.2% | 89.2% | 24,151 | 96.7% | 43.1% | 41.7% |
| Montgomery County | 103 | 100.0% | 0.0% | 0.0% | 8,552 | 44.5% | 63.5% | 36.1% |
| Morgan County | 4,792 | 91.1% | 61.6% | 55.9% | 16,239 | 47.4% | 42.8% | 21.7% |
| Murray County | 12,914 | 96.3% | 96.5% | 92.9% | 27,558 | 82.3% | 56.4% | 47.4% |
| Muscogee County | 189,766 | 98.6% | 99.3% | 98.0% | 12,850 | 58.8% | 93.0% | 54.1% |
| Newton County | 77,291 | 97.6% | 99.6% | 97.3% | 40,330 | 82.1% | 86.8% | 70.4% |
| Oconee County | 19,551 | 95.2% | 92.5% | 87.8% | 24,037 | 68.3% | 58.2% | 43.9% |
| Oglethorpe County | | | | | 15,469 | 43.4% | 37.0% | 21.6% |
| Paulding County | 141,450 | 97.8% | 97.4% | 95.3% | 36,971 | 80.0% | 89.1% | 73.3% |
| Peach County | 17,028 | 99.4% | 100.0% | 99.4% | 11,534 | 60.0% | 93.6% | 57.0% |
| Pickens County | 6,527 | 99.9% | 60.4% | 60.4% | 28,299 | 74.4% | 49.6% | 41.7% |
| Pierce County | 250 | 100.0% | 95.6% | 95.6% | 19,918 | 74.7% | 51.8% | 43.1% |
| Pike County | 60 | 96.6% | 100.0% | 96.6% | 19,930 | 42.8% | 44.9% | 18.5% |
| Polk County | 20,861 | 93.9% | 93.1% | 87.1% | 22,848 | 72.8% | 53.5% | 43.8% |
| Pulaski County | | | | | 9,984 | 85.3% | 79.2% | 74.1% |
| Putnam County | | | | | 22,984 | 77.3% | 52.2% | 43.8% |
| Quitman County | 598 | 94.1% | 34.9% | 33.6% | 1,651 | 18.4% | 34.3% | 4.1% |
| Rabun County | | | | | 17,206 | 62.6% | 50.0% | 35.4% |
| Randolph County | | | | | 6,116 | 71.4% | 41.6% | 36.9% |
| Richmond County | 189,025 | 99.4% | 99.8% | 99.3% | 17,615 | 94.5% | 83.3% | 79.0% |
| Rockdale County | 81,883 | 99.1% | 98.6% | 97.7% | 13,101 | 93.8% | 96.0% | 90.0% |
| Schley County | | | | | 4,496 | 47.3% | 51.3% | 36.9% |
| Screven County | | | | | 13,977 | 86.4% | 46.4% | 40.3% |
| Seminole County | | | | | 9,127 | 49.1% | 43.4% | 29.5% |
| Spalding County | 40,055 | 98.6% | 98.9% | 97.6% | 28,864 | 77.3% | 81.0% | 61.7% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Stephens County | 11,541 | 94.1% | 89.5% | 84.8% | 15,226 | 72.0% | 59.3% | 43.5% |
| Stewart County | | | | | 4,648 | 9.9% | 81.5% | 9.9% |
| Sumter County | 16,865 | 94.8% | 93.2% | 88.1% | 12,012 | 40.3% | 51.0% | 24.9% |
| Talbot County | | | | | 5,747 | 53.3% | 41.2% | 29.7% |
| Taliaferro County | | | | | 1,600 | 98.6% | 28.7% | 28.7% |
| Tattnall County | | | | | 24,064 | 71.4% | 47.7% | 38.5% |
| Taylor County | | | | | 7,737 | 77.5% | 39.8% | 34.7% |
| Telfair County | | | | | 12,354 | 50.9% | 75.6% | 46.7% |
| Terrell County | | | | | 8,754 | 63.5% | 68.1% | 56.1% |
| Thomas County | 24,929 | 96.6% | 85.6% | 82.7% | 20,632 | 49.0% | 55.6% | 33.1% |
| Tift County | 24,522 | 97.3% | 75.5% | 73.5% | 16,890 | 63.9% | 56.1% | 40.1% |
| Toombs County | 13,635 | 99.5% | 79.1% | 79.0% | 13,202 | 31.4% | 43.5% | 19.8% |
| Towns County | | | | | 12,972 | 86.9% | 62.2% | 57.5% |
| Treutlen County | | | | | 6,365 | 67.3% | 67.9% | 37.5% |
| Troup County | 38,005 | 94.5% | 84.5% | 80.0% | 32,186 | 77.1% | 67.5% | 52.6% |
| Turner County | 4,603 | 98.7% | 76.2% | 75.1% | 4,239 | 31.7% | 48.1% | 24.0% |
| Twiggs County | | | | | 7,680 | 39.5% | 91.4% | 34.7% |
| Union County | | | | | 26,388 | 67.3% | 42.4% | 32.2% |
| Upson County | 14,724 | 98.5% | 87.3% | 86.1% | 13,362 | 74.4% | 26.5% | 22.9% |
| Walker County | 33,646 | 99.4% | 99.5% | 99.0% | 35,269 | 81.5% | 78.2% | 68.0% |
| Walton County | 42,948 | 84.8% | 98.0% | 83.3% | 60,117 | 82.0% | 92.6% | 77.5% |
| Ware County | 24,192 | 93.2% | 94.3% | 87.7% | 11,422 | 54.5% | 59.5% | 33.9% |
| Warren County | | | | | 5,155 | 0.7% | 6.6% | 0.6% |
| Washington County | 6,959 | 95.3% | 84.2% | 80.6% | 12,779 | 71.8% | 36.4% | 32.5% |
| Wayne County | 12,990 | 95.8% | 86.1% | 84.5% | 17,906 | 54.3% | 57.0% | 38.3% |
| Webster County | | | | | 2,328 | 24.8% | 59.4% | 22.1% |
| Wheeler County | | | | | 7,314 | 31.8% | 50.7% | 26.0% |
| White County | | | | | 28,806 | 90.7% | 67.3% | 62.2% |
| Whitfield County | 66,976 | 99.6% | 96.1% | 95.8% | 36,156 | 85.1% | 62.4% | 55.5% |
| Wilcox County | | | | | 8,761 | 43.6% | 66.6% | 38.1% |
| Wilkes County | | | | | 9,599 | 99.7% | 52.0% | 52.0% |
| Wilkinson County | | | | | 8,681 | 62.0% | 58.4% | 41.2% |
| Worth County | 5,922 | 99.2% | 94.0% | 93.5% | 14,502 | 61.8% | 45.2% | 31.6% |
| Guam | 148,844 | 93.3% | 50.2% | 47.4% | 20,242 | 30.8% | 7.1% | 5.3% |
| Guam | 148,844 | 93.3% | 50.2% | 47.4% | 20,242 | 30.8% | 7.1% | 5.3% |
| Hawaii | 1,229,914 | 97.1% | 97.4% | 94.6% | 210,282 | 84.6% | 70.4% | 61.9% |
| Hawaii County | 83,843 | 97.7% | 89.8% | 87.7% | 122,472 | 82.5% | 64.8% | 55.6% |
| Honolulu County | 974,503 | 96.9% | 98.6% | 95.6% | 21,135 | 82.6% | 83.9% | 70.5% |
| Kalawao County | | | | | 82 | 76.8% | 0.0% | 0.0% |
| Kauai County | 42,419 | 97.8% | 92.1% | 90.0% | 31,391 | 94.3% | 82.4% | 78.2% |
| Maui County | 129,149 | 98.0% | 95.3% | 93.4% | 35,202 | 84.1% | 71.5% | 64.5% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Idaho | 1,335,245 | 99.8% | 96.9% | 96.8% | 603,788 | 63.3% | 65.5% | 48.1% |
| Ada County | 491,666 | 99.9% | 99.9% | 99.9% | 27,241 | 87.3% | 94.3% | 82.3% |
| Adams County | | | | | 4,817 | 21.7% | 63.2% | 17.6% |
| Bannock County | 74,514 | 100.0% | 100.0% | 100.0% | 15,003 | 73.3% | 88.5% | 70.0% |
| Bear Lake County | | | | | 6,722 | 67.3% | 80.6% | 61.1% |
| Benewah County | | | | | 10,370 | 9.5% | 49.8% | 7.8% |
| Bingham County | 19,988 | 99.9% | 97.5% | 97.5% | 29,935 | 86.4% | 63.9% | 55.8% |
| Blaine County | 18,743 | 99.9% | 97.5% | 97.4% | 6,123 | 63.9% | 61.9% | 52.4% |
| Boise County | | | | | 8,333 | 18.9% | 42.8% | 16.5% |
| Bonner County | 13,658 | 96.0% | 91.2% | 88.9% | 37,756 | 18.8% | 45.0% | 14.0% |
| Bonneville County | 109,372 | 99.9% | 99.2% | 99.1% | 20,124 | 90.6% | 86.5% | 80.4% |
| Boundary County | | | | | 13,345 | 26.6% | 75.7% | 26.1% |
| Butte County | | | | | 2,684 | 45.7% | 63.2% | 31.1% |
| Camas County | | | | | 1,153 | 5.7% | 19.9% | 0.0% |
| Canyon County | 203,366 | 99.9% | 99.9% | 99.8% | 47,699 | 73.0% | 89.4% | 67.6% |
| Caribou County | | | | | 7,190 | 15.2% | 55.3% | 10.7% |
| Cassia County | 12,704 | 100.0% | 75.9% | 75.9% | 12,951 | 95.7% | 62.8% | 61.9% |
| Clark County | | | | | 806 | 59.5% | 64.5% | 57.6% |
| Clearwater County | | | | | 9,015 | 49.7% | 43.3% | 28.8% |
| Custer County | | | | | 4,506 | 59.4% | 65.3% | 50.6% |
| Elmore County | 18,176 | 100.0% | 100.0% | 100.0% | 11,227 | 74.4% | 87.1% | 69.4% |
| Franklin County | | | | | 15,189 | 88.8% | 71.8% | 68.3% |
| Fremont County | | | | | 13,978 | 70.6% | 92.0% | 66.5% |
| Gem County | 10,518 | 100.0% | 92.6% | 92.6% | 9,900 | 84.7% | 83.2% | 72.9% |
| Gooding County | | | | | 15,715 | 99.2% | 79.1% | 78.8% |
| Idaho County | | | | | 17,593 | 9.6% | 45.1% | 7.4% |
| Jefferson County | 10,988 | 100.0% | 84.7% | 84.7% | 22,440 | 90.8% | 75.6% | 71.8% |
| Jerome County | 12,592 | 100.0% | 99.7% | 99.7% | 12,719 | 97.2% | 28.7% | 26.9% |
| Kootenai County | 138,451 | 99.5% | 87.5% | 87.1% | 45,127 | 31.5% | 43.1% | 19.9% |
| Latah County | 26,252 | 98.2% | 74.7% | 73.0% | 14,726 | 42.8% | 58.0% | 31.7% |
| Lemhi County | | | | | 8,240 | 44.5% | 67.2% | 41.4% |
| Lewis County | | | | | 3,763 | 0.0% | 62.5% | 0.0% |
| Lincoln County | | | | | 5,329 | 64.3% | 52.4% | 44.1% |
| Madison County | 41,006 | 100.0% | 100.0% | 100.0% | 13,970 | 91.3% | 95.7% | 87.6% |
| Minidoka County | 12,222 | 100.0% | 85.8% | 85.8% | 9,972 | 99.2% | 57.2% | 57.2% |
| Nez Perce County | 34,696 | 99.7% | 99.9% | 99.7% | 8,308 | 44.8% | 47.7% | 27.7% |
| Oneida County | | | | | 4,712 | 94.5% | 51.6% | 47.7% |
| Owyhee County | | | | | 12,613 | 53.5% | 62.1% | 41.6% |
| Payette County | 15,607 | 100.0% | 96.9% | 96.9% | 11,349 | 98.5% | 76.8% | 76.2% |
| Power County | | | | | 8,068 | 87.5% | 85.6% | 80.8% |
| Shoshone County | | | | | 14,012 | 35.0% | 46.5% | 29.4% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Teton County | | | | | 12,544 | 71.1% | 72.0% | 50.3% |
| Twin Falls County | 60,983 | 100.0% | 91.4% | 91.4% | 32,713 | 98.7% | 47.7% | 46.8% |
| Valley County | 3,973 | 96.5% | 96.7% | 94.6% | 8,491 | 32.3% | 34.0% | 18.7% |
| Washington County | 5,770 | 98.9% | 98.6% | 97.6% | 5,317 | 20.8% | 61.0% | 14.7% |
| Illinois | 0,913,310 | 99.3% | 99.0% | 98.3% | 1,668,722 | 69.2% | 65.1% | 48.7% |
| Adams County | 42,627 | 99.8% | 97.8% | 97.7% | 22,098 | 77.2% | 44.1% | 36.8% |
| Alexander County | 154 | 2.5% | 100.0% | 2.5% | 4,704 | 45.5% | 75.8% | 45.1% |
| Bond County | 6,283 | 99.6% | 100.0% | 99.6% | 10,283 | 35.8% | 63.4% | 20.9% |
| Boone County | 37,221 | 99.9% | 99.7% | 99.6% | 15,933 | 78.6% | 97.6% | 77.7% |
| Brown County | | | | | 6,330 | 72.4% | 67.3% | 54.6% |
| Bureau County | 14,919 | 99.7% | 89.8% | 89.7% | 17,909 | 67.9% | 32.1% | 25.9% |
| Calhoun County | | | | | 4,360 | 38.3% | 41.6% | 16.8% |
| Carroll County | | | | | 15,529 | 66.9% | 41.7% | 29.8% |
| Cass County | 6,023 | 100.0% | 32.6% | 32.6% | 6,634 | 69.3% | 44.5% | 31.6% |
| Champaign County | 171,628 | 96.6% | 99.0% | 95.6% | 34,914 | 69.1% | 85.0% | 59.0% |
| Christian County | 16,825 | 99.7% | 91.5% | 91.5% | 16,611 | 57.3% | 55.8% | 40.2% |
| Clark County | | | | | 15,229 | 56.5% | 57.6% | 42.3% |
| Clay County | 4,761 | 100.0% | 99.9% | 99.9% | 8,286 | 94.9% | 38.1% | 38.0% |
| Clinton County | 7,623 | 96.8% | 99.3% | 96.2% | 29,286 | 66.3% | 93.1% | 65.5% |
| Coles County | 33,925 | 98.5% | 99.0% | 97.6% | 12,409 | 33.6% | 47.3% | 22.0% |
| Cook County | 5,106,440 | 99.6% | 99.8% | 99.5% | 2,852 | 80.7% | 94.1% | 75.9% |
| Crawford County | 6,102 | 99.7% | 95.6% | 95.3% | 12,434 | 56.2% | 55.4% | 41.7% |
| Cumberland County | | | | | 10,324 | 49.3% | 48.7% | 33.3% |
| De Witt County | 7,192 | 98.8% | 97.2% | 96.1% | 8,118 | 60.7% | 71.0% | 47.0% |
| DeKalb County | 81,432 | 99.6% | 99.6% | 99.3% | 18,800 | 82.2% | 89.4% | 74.9% |
| Douglas County | 4,972 | 99.9% | 100.0% | 99.9% | 14,783 | 71.0% | 49.1% | 38.8% |
| DuPage County | 919,133 | 99.6% | 100.0% | 99.6% | 1,768 | 76.9% | 100.0% | 76.9% |
| Edgar County | 8,159 | 99.8% | 51.5% | 51.4% | 8,274 | 28.5% | 22.9% | 12.5% |
| Edwards County | | | | | 6,071 | 97.9% | 66.5% | 66.1% |
| Effingham County | 13,673 | 99.5% | 91.2% | 90.8% | 20,652 | 85.4% | 55.2% | 49.1% |
| Fayette County | 7,798 | 99.9% | 91.9% | 91.9% | 13,507 | 59.4% | 50.7% | 42.3% |
| Ford County | 4,361 | 99.6% | 92.8% | 92.5% | 8,888 | 65.4% | 57.0% | 45.6% |
| Franklin County | 15,166 | 98.4% | 94.7% | 93.3% | 22,076 | 72.4% | 78.5% | 62.8% |
| Fulton County | 12,977 | 87.4% | 84.0% | 71.5% | 20,044 | 87.1% | 40.9% | 37.0% |
| Gallatin County | | | | | 4,855 | 86.1% | 51.8% | 48.2% |
| Greene County | | | | | 11,651 | 89.1% | 60.0% | 57.6% |
| Grundy County | 39,515 | 97.7% | 98.2% | 96.2% | 13,526 | 54.9% | 86.7% | 50.7% |
| Hamilton County | | | | | 7,984 | 65.0% | 56.0% | 45.7% |
| Hancock County | 2,783 | 95.0% | 95.5% | 90.9% | 14,461 | 73.2% | 35.4% | 30.8% |
| Hardin County | | | | | 3,597 | 75.2% | 16.1% | 13.2% |
| Henderson County | 29 | 0.0% | 37.9% | 0.0% | 6,122 | 67.9% | 38.1% | 29.6% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Henry County | 24,140 | 99.9% | 99.2% | 99.1% | 24,279 | 94.7% | 59.6% | 58.0% |
| Iroquois County | 4,459 | 99.4% | 75.5% | 75.3% | 22,014 | 52.8% | 49.1% | 27.7% |
| Jackson County | 30,173 | 98.2% | 99.9% | 98.2% | 22,444 | 77.8% | 79.4% | 65.3% |
| Jasper County | | | | | 9,212 | 57.1% | 55.0% | 39.9% |
| Jefferson County | 15,218 | 98.9% | 99.3% | 98.2% | 21,182 | 67.0% | 64.1% | 47.1% |
| Jersey County | 8,603 | 99.9% | 100.0% | 99.9% | 12,643 | 73.3% | 59.5% | 45.5% |
| Jo Daviess County | 2,507 | 97.5% | 31.9% | 31.7% | 19,251 | 67.8% | 57.3% | 44.9% |
| Johnson County | | | | | 13,381 | 69.8% | 70.9% | 56.6% |
| Kane County | 493,101 | 99.4% | 99.9% | 99.4% | 21,081 | 66.0% | 99.6% | 65.9% |
| Kankakee County | 75,409 | 99.3% | 99.8% | 99.2% | 30,665 | 66.6% | 85.9% | 61.3% |
| Kendall County | 121,340 | 99.6% | 99.9% | 99.6% | 15,914 | 79.7% | 96.9% | 77.1% |
| Knox County | 31,551 | 99.9% | 87.8% | 87.7% | 17,089 | 87.1% | 33.2% | 29.4% |
| LaSalle County | 73,968 | 99.7% | 96.8% | 96.6% | 34,110 | 51.5% | 68.2% | 38.3% |
| Lake County | 698,751 | 99.2% | 99.8% | 99.0% | 10,399 | 75.5% | 99.4% | 75.0% |
| Lawrence County | 4,472 | 100.0% | 92.3% | 92.3% | 10,442 | 97.2% | 22.4% | 21.6% |
| Lee County | 14,668 | 99.6% | 54.4% | 54.2% | 19,180 | 50.1% | 38.5% | 23.4% |
| Livingston County | 12,512 | 93.2% | 86.9% | 80.1% | 23,009 | 61.9% | 67.8% | 48.4% |
| Logan County | 13,949 | 100.0% | 96.9% | 96.9% | 13,642 | 85.8% | 57.4% | 51.8% |
| Macon County | 84,037 | 99.6% | 89.6% | 89.3% | 17,446 | 67.8% | 51.0% | 37.3% |
| Macoupin County | 15,347 | 99.5% | 85.9% | 85.4% | 28,898 | 68.4% | 62.3% | 49.7% |
| Madison County | 220,121 | 97.5% | 99.9% | 97.5% | 43,743 | 82.6% | 87.2% | 72.4% |
| Marion County | 19,212 | 99.6% | 98.0% | 97.8% | 17,702 | 52.4% | 62.0% | 38.9% |
| Marshall County | | | | | 11,678 | 81.3% | 41.7% | 36.7% |
| Mason County | | | | | 12,748 | 76.5% | 66.9% | 59.9% |
| Massac County | 6,537 | 99.2% | 99.5% | 98.8% | 7,359 | 23.4% | 67.6% | 21.5% |
| McDonough County | 14,613 | 99.8% | 80.8% | 80.7% | 12,248 | 88.4% | 33.6% | 30.9% |
| McHenry County | 267,102 | 99.6% | 99.9% | 99.6% | 44,645 | 75.9% | 96.7% | 73.9% |
| McLean County | 133,195 | 99.8% | 97.9% | 97.8% | 37,946 | 70.0% | 74.4% | 56.6% |
| Menard County | | | | | 12,121 | 70.6% | 62.8% | 52.6% |
| Mercer County | | | | | 15,504 | 91.8% | 51.4% | 49.0% |
| Monroe County | 20,288 | 98.9% | 99.7% | 98.7% | 14,745 | 42.3% | 81.8% | 39.4% |
| Montgomery County | 12,899 | 92.9% | 89.8% | 88.6% | 15,121 | 49.0% | 48.0% | 29.5% |
| Morgan County | 20,544 | 99.7% | 92.5% | 92.2% | 11,665 | 60.4% | 50.5% | 37.0% |
| Moultrie County | 4,320 | 99.5% | 100.0% | 99.5% | 10,003 | 56.4% | 28.6% | 17.3% |
| Ogle County | 16,677 | 98.9% | 99.6% | 98.6% | 34,674 | 62.9% | 71.1% | 45.2% |
| Peoria County | 147,087 | 98.8% | 90.3% | 89.2% | 31,296 | 92.0% | 47.6% | 45.5% |
| Perry County | 5,871 | 99.1% | 100.0% | 99.1% | 14,717 | 63.9% | 83.0% | 59.8% |
| Piatt County | 5,933 | 99.9% | 100.0% | 99.9% | 10,790 | 76.0% | 46.1% | 36.9% |
| Pike County | | | | | 14,484 | 59.4% | 56.7% | 45.2% |
| Pope County | | | | | 3,770 | 48.1% | 34.9% | 23.7% |
| Pulaski County | | | | | 4,991 | 61.1% | 74.3% | 47.9% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Putnam County | | | | | 5,572 | 51.4% | 38.5% | 28.8% |
| Randolph County | 6,002 | 66.8% | 99.1% | 66.1% | 24,066 | 59.6% | 80.6% | 53.2% |
| Richland County | 8,394 | 100.0% | 100.0% | 100.0% | 7,041 | 95.6% | 37.5% | 37.1% |
| Rock Island County | 125,220 | 99.8% | 99.4% | 99.2% | 16,307 | 87.8% | 72.0% | 62.8% |
| Saline County | 8,074 | 99.2% | 85.3% | 84.6% | 15,013 | 77.2% | 27.6% | 22.6% |
| Sangamon County | 157,623 | 99.6% | 99.8% | 99.5% | 36,911 | 72.8% | 81.4% | 61.3% |
| Schuyler County | | | | | 6,746 | 63.8% | 61.0% | 52.2% |
| Scott County | | | | | 4,790 | 87.7% | 52.0% | 50.7% |
| Shelby County | 4,842 | 99.2% | 92.8% | 92.2% | 15,919 | 37.5% | 42.4% | 25.8% |
| St. Clair County | 214,745 | 96.4% | 99.9% | 96.4% | 37,926 | 66.0% | 98.4% | 65.8% |
| Stark County | | | | | 5,345 | 96.3% | 9.0% | 9.0% |
| Stephenson County | 23,445 | 99.7% | 96.5% | 96.3% | 20,182 | 54.3% | 42.3% | 27.4% |
| Tazewell County | 101,307 | 99.2% | 94.8% | 94.1% | 28,604 | 69.2% | 48.0% | 34.2% |
| Union County | 5,906 | 99.9% | 99.9% | 99.9% | 10,861 | 57.4% | 68.8% | 46.5% |
| Vermilion County | 43,260 | 97.1% | 94.1% | 91.3% | 29,077 | 58.1% | 62.5% | 40.0% |
| Wabash County | 6,764 | 97.0% | 13.2% | 11.9% | 4,323 | 52.0% | 14.7% | 7.5% |
| Warren County | 8,942 | 100.0% | 94.2% | 94.2% | 7,412 | 83.4% | 13.9% | 11.5% |
| Washington County | 96 | 98.9% | 87.5% | 86.4% | 13,547 | 56.3% | 80.4% | 48.4% |
| Wayne County | 4,661 | 100.0% | 94.5% | 94.5% | 11,211 | 90.6% | 32.1% | 28.6% |
| White County | 4,969 | 100.0% | 71.5% | 71.5% | 8,645 | 90.5% | 37.2% | 35.1% |
| Whiteside County | 30,888 | 99.9% | 94.6% | 94.6% | 23,770 | 68.0% | 60.2% | 47.4% |
| Will County | 662,766 | 99.2% | 99.9% | 99.1% | 33,991 | 81.5% | 98.7% | 80.9% |
| Williamson County | 39,139 | 99.4% | 98.8% | 98.2% | 27,556 | 67.6% | 78.8% | 61.5% |
| Winnebago County | 254,649 | 99.3% | 99.7% | 99.0% | 27,539 | 70.6% | 96.6% | 68.6% |
| Woodford County | 11,293 | 99.2% | 74.2% | 73.5% | 26,835 | 75.2% | 69.4% | 57.4% |
| Indiana | 4,849,117 | 98.8% | 98.3% | 97.2% | 1,983,920 | 69.8% | 65.1% | 49.1% |
| Adams County | 10,613 | 99.9% | 99.9% | 99.9% | 25,455 | 56.6% | 74.8% | 46.0% |
| Allen County | 340,436 | 99.0% | 99.9% | 99.0% | 51,013 | 92.7% | 93.2% | 86.4% |
| Bartholomew County | 57,332 | 99.3% | 99.4% | 98.7% | 26,208 | 74.4% | 63.6% | 48.8% |
| Benton County | | | | | 8,719 | 67.3% | 39.6% | 28.4% |
| Blackford County | 5,961 | 99.7% | 100.0% | 99.7% | 5,958 | 13.5% | 80.6% | 9.5% |
| Boone County | 53,690 | 99.4% | 100.0% | 99.4% | 20,474 | 37.2% | 92.7% | 37.0% |
| Brown County | | | | | 15,570 | 88.4% | 44.8% | 40.6% |
| Carroll County | 1,058 | 100.0% | 31.7% | 31.7% | 19,497 | 53.6% | 65.0% | 42.0% |
| Cass County | 20,020 | 99.2% | 99.6% | 98.8% | 17,520 | 45.3% | 61.6% | 38.1% |
| Clark County | 97,351 | 97.1% | 100.0% | 97.1% | 26,886 | 68.0% | 79.3% | 59.0% |
| Clay County | 10,512 | 99.4% | 99.3% | 98.8% | 15,867 | 48.9% | 55.4% | 28.9% |
| Clinton County | 16,410 | 99.5% | 97.1% | 96.7% | 16,433 | 48.5% | 70.0% | 41.5% |
| Crawford County | | | | | 10,536 | 28.8% | 35.4% | 16.0% |
| Daviess County | 12,957 | 99.9% | 97.5% | 97.5% | 20,461 | 46.0% | 42.9% | 22.8% |
| DeKalb County | 20,559 | 100.0% | 99.6% | 99.6% | 23,172 | 98.5% | 78.7% | 77.7% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Dearborn County | 20,367 | 98.8% | 90.3% | 89.4% | 30,771 | 88.5% | 61.2% | 54.9% |
| Decatur County | 12,330 | 98.9% | 99.8% | 98.8% | 14,086 | 26.9% | 63.4% | 21.5% |
| Delaware County | 85,610 | 99.4% | 99.9% | 99.3% | 26,421 | 60.2% | 94.2% | 58.7% |
| Dubois County | 22,883 | 99.5% | 82.6% | 82.2% | 20,749 | 69.8% | 26.8% | 20.2% |
| Elkhart County | 158,198 | 98.5% | 95.6% | 94.2% | 48,692 | 93.6% | 63.4% | 59.1% |
| Fayette County | 14,331 | 99.1% | 93.7% | 92.8% | 9,018 | 37.2% | 38.1% | 19.5% |
| Floyd County | 52,977 | 97.2% | 100.0% | 97.2% | 27,737 | 93.2% | 96.1% | 89.9% |
| Fountain County | | | | | 16,574 | 74.5% | 71.0% | 56.5% |
| Franklin County | 2,529 | 98.1% | 76.0% | 74.2% | 20,499 | 33.3% | 39.0% | 20.2% |
| Fulton County | 7,251 | 99.7% | 99.7% | 99.6% | 13,076 | 50.5% | 50.5% | 31.0% |
| Gibson County | 8,233 | 96.0% | 91.6% | 87.9% | 24,760 | 62.2% | 73.2% | 54.4% |
| Grant County | 40,371 | 96.2% | 99.3% | 95.6% | 25,651 | 57.6% | 83.1% | 50.4% |
| Greene County | 5,473 | 99.8% | 100.0% | 99.8% | 25,533 | 53.4% | 52.7% | 39.2% |
| Hamilton County | 343,370 | 99.6% | 99.9% | 99.6% | 21,551 | 61.7% | 99.0% | 61.4% |
| Hancock County | 59,725 | 99.6% | 99.7% | 99.4% | 23,345 | 92.4% | 91.5% | 85.0% |
| Harrison County | 5,598 | 91.7% | 71.8% | 66.1% | 34,253 | 74.9% | 44.8% | 36.1% |
| Hendricks County | 154,006 | 98.7% | 100.0% | 98.7% | 28,528 | 76.7% | 97.9% | 75.4% |
| Henry County | 18,499 | 99.8% | 84.8% | 84.7% | 30,416 | 69.6% | 60.3% | 46.1% |
| Howard County | 61,866 | 99.6% | 98.7% | 98.4% | 21,708 | 66.4% | 82.9% | 57.0% |
| Huntington County | 17,625 | 99.8% | 96.1% | 96.0% | 19,209 | 85.3% | 73.8% | 66.5% |
| Jackson County | 23,877 | 99.6% | 94.4% | 94.1% | 22,423 | 94.0% | 56.7% | 53.8% |
| Jasper County | 5,450 | 99.7% | 77.6% | 77.4% | 27,831 | 56.7% | 57.4% | 43.4% |
| Jay County | 6,309 | 99.6% | 97.4% | 97.1% | 13,889 | 42.2% | 59.2% | 26.6% |
| Jefferson County | 17,342 | 99.1% | 85.5% | 84.9% | 15,604 | 47.0% | 39.5% | 22.0% |
| Jennings County | 6,909 | 99.6% | 85.8% | 85.5% | 20,627 | 79.1% | 49.6% | 42.8% |
| Johnson County | 144,369 | 99.6% | 100.0% | 99.6% | 21,413 | 85.6% | 91.1% | 79.8% |
| Knox County | 19,261 | 100.0% | 90.4% | 90.4% | 16,528 | 67.0% | 55.7% | 38.6% |
| Kosciusko County | 41,315 | 99.8% | 82.1% | 82.0% | 39,511 | 90.7% | 57.2% | 52.6% |
| LaGrange County | | | | | 40,866 | 85.6% | 53.6% | 47.2% |
| LaPorte County | 70,468 | 94.1% | 93.4% | 87.6% | 41,207 | 69.3% | 83.3% | 57.8% |
| Lake County | 477,024 | 99.4% | 99.9% | 99.4% | 22,665 | 68.0% | 95.4% | 65.4% |
| Lawrence County | 14,556 | 99.4% | 95.8% | 95.3% | 30,666 | 77.6% | 53.3% | 46.9% |
| Madison County | 98,482 | 98.1% | 99.9% | 98.0% | 33,262 | 60.4% | 97.9% | 60.0% |
| Marion County | 960,821 | 99.1% | 100.0% | 99.1% | 8,645 | 94.9% | 100.0% | 94.9% |
| Marshall County | 12,166 | 98.8% | 92.4% | 91.4% | 34,166 | 70.4% | 58.5% | 47.5% |
| Martin County | | | | | 9,803 | 61.5% | 59.0% | 47.9% |
| Miami County | 18,005 | 95.7% | 90.1% | 85.9% | 17,669 | 36.2% | 51.0% | 21.7% |
| Monroe County | 109,245 | 99.1% | 96.2% | 95.3% | 30,500 | 85.7% | 60.2% | 53.4% |
| Montgomery County | 17,879 | 99.8% | 95.7% | 95.6% | 20,394 | 47.5% | 43.9% | 24.9% |
| Morgan County | 33,061 | 89.3% | 99.9% | 89.2% | 39,175 | 88.7% | 77.4% | 67.7% |
| Newton County | | | | | 13,823 | 72.1% | 46.5% | 35.1% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Noble County | 10,400 | 99.9% | 94.9% | 94.8% | 36,967 | 96.8% | 57.1% | 56.5% |
| Ohio County | | | | | 6,114 | 57.9% | 50.1% | 44.8% |
| Orange County | | | | | 19,623 | 98.5% | 56.0% | 55.6% |
| Owen County | | | | | 21,482 | 62.8% | 32.4% | 24.7% |
| Parke County | 110 | 100.0% | 0.9% | 0.9% | 16,259 | 50.9% | 46.5% | 28.7% |
| Perry County | 8,802 | 99.6% | 74.1% | 73.8% | 10,381 | 82.9% | 38.6% | 35.1% |
| Pike County | | | | | 12,168 | 49.5% | 42.7% | 29.7% |
| Porter County | 132,955 | 99.3% | 99.6% | 99.0% | 41,836 | 81.4% | 96.5% | 79.7% |
| Posey County | 7,428 | 90.1% | 99.9% | 90.1% | 17,635 | 54.9% | 74.4% | 40.8% |
| Pulaski County | | | | | 12,485 | 44.6% | 39.7% | 24.6% |
| Putnam County | 10,775 | 100.0% | 69.3% | 69.3% | 26,526 | 57.8% | 52.9% | 34.0% |
| Randolph County | 8,096 | 97.7% | 96.5% | 94.3% | 16,341 | 44.5% | 53.0% | 33.0% |
| Ripley County | 5,390 | 97.3% | 100.0% | 97.3% | 23,697 | 78.3% | 53.4% | 45.1% |
| Rush County | 6,402 | 98.8% | 99.6% | 98.5% | 10,271 | 25.9% | 43.3% | 12.6% |
| Scott County | 7,577 | 100.0% | 73.1% | 73.1% | 17,011 | 80.5% | 40.2% | 29.6% |
| Shelby County | 21,071 | 99.8% | 90.1% | 89.9% | 23,920 | 79.5% | 73.4% | 61.1% |
| Spencer County | | | | | 19,967 | 83.9% | 49.7% | 41.7% |
| St. Joseph County | 244,642 | 98.4% | 99.1% | 97.5% | 27,592 | 75.2% | 76.5% | 61.3% |
| Starke County | | | | | 23,258 | 50.4% | 48.7% | 31.4% |
| Steuben County | 12,016 | 99.8% | 85.0% | 85.0% | 22,709 | 97.9% | 57.7% | 56.7% |
| Sullivan County | 4,854 | 99.0% | 100.0% | 99.0% | 15,816 | 40.8% | 55.2% | 24.4% |
| Switzerland County | | | | | 10,006 | 50.1% | 40.9% | 25.0% |
| Tippecanoe County | 157,861 | 98.7% | 99.7% | 98.5% | 30,856 | 78.3% | 68.0% | 55.5% |
| Tipton County | 5,829 | 99.2% | 100.0% | 99.2% | 9,532 | 47.4% | 82.9% | 38.7% |
| Union County | | | | | 6,952 | 14.4% | 57.2% | 11.0% |
| Vanderburgh County | 164,669 | 99.4% | 98.7% | 98.1% | 15,075 | 84.1% | 87.1% | 72.5% |
| Vermillion County | 6,360 | 99.9% | 83.4% | 83.4% | 9,091 | 54.6% | 30.9% | 16.1% |
| Vigo County | 78,656 | 95.0% | 98.3% | 93.3% | 27,350 | 65.6% | 67.4% | 50.2% |
| Wabash County | 15,132 | 99.6% | 99.2% | 98.9% | 15,696 | 49.5% | 52.3% | 30.2% |
| Warren County | | | | | 8,461 | 24.7% | 48.5% | 22.4% |
| Warrick County | 47,713 | 99.5% | 97.7% | 97.3% | 17,472 | 47.7% | 74.7% | 41.0% |
| Washington County | 6,632 | 95.4% | 81.7% | 77.6% | 21,592 | 91.6% | 41.3% | 37.5% |
| Wayne County | 41,014 | 99.4% | 86.2% | 85.8% | 25,259 | 52.3% | 46.8% | 27.0% |
| Wells County | 9,986 | 99.9% | 99.2% | 99.1% | 18,349 | 83.2% | 72.0% | 60.6% |
| White County | 9,528 | 99.6% | 87.7% | 87.4% | 15,070 | 73.6% | 61.9% | 49.2% |
| Whitley County | 10,539 | 99.8% | 97.9% | 97.8% | 24,088 | 85.7% | 76.8% | 67.6% |
| Iowa | 2,017,794 | 99.4% | 95.9% | 95.4% | 1,182,723 | 85.2% | 58.2% | 50.8% |
| Adair County | | | | | 7,494 | 94.2% | 57.0% | 56.7% |
| Adams County | | | | | 3,611 | 63.4% | 8.5% | 4.4% |
| Allamakee County | | | | | 13,960 | 88.0% | 48.3% | 47.6% |
| Appanoose County | 5,161 | 99.9% | 99.3% | 99.3% | 6,933 | 68.0% | 64.0% | 50.5% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Audubon County | | | | | 5,598 | 96.3% | 32.0% | 31.6% |
| Benton County | 4,768 | 100.0% | 100.0% | 100.0% | 20,943 | 84.4% | 65.9% | 59.8% |
| Black Hawk County | 113,294 | 99.8% | 93.8% | 93.7% | 16,980 | 90.0% | 69.7% | 64.5% |
| Boone County | 12,373 | 99.4% | 90.3% | 89.8% | 14,236 | 73.7% | 72.4% | 56.1% |
| Bremer County | 9,120 | 100.0% | 99.8% | 99.8% | 16,139 | 93.6% | 53.0% | 51.0% |
| Buchanan County | 6,824 | 100.0% | 100.0% | 100.0% | 13,890 | 87.7% | 58.5% | 53.4% |
| Buena Vista County | 11,590 | 100.0% | 85.1% | 85.1% | 9,010 | 99.1% | 52.2% | 52.2% |
| Butler County | | | | | 14,269 | 91.6% | 50.7% | 47.4% |
| Calhoun County | | | | | 9,725 | 94.8% | 41.6% | 40.1% |
| Carroll County | 10,073 | 99.7% | 94.1% | 93.8% | 10,494 | 90.0% | 17.2% | 16.6% |
| Cass County | 6,598 | 100.0% | 57.3% | 57.3% | 6,506 | 95.9% | 18.6% | 18.3% |
| Cedar County | | | | | 18,399 | 88.4% | 79.7% | 73.6% |
| Cerro Gordo County | 33,697 | 99.9% | 81.9% | 81.8% | 8,712 | 93.0% | 29.0% | 27.7% |
| Cherokee County | 4,666 | 96.3% | 66.9% | 66.7% | 6,825 | 86.5% | 32.7% | 30.6% |
| Chickasaw County | | | | | 11,716 | 96.9% | 60.8% | 59.4% |
| Clarke County | 5,259 | 98.8% | 100.0% | 98.8% | 4,433 | 50.1% | 61.4% | 30.2% |
| Clay County | 10,946 | 100.0% | 99.2% | 99.2% | 5,529 | 97.2% | 22.7% | 22.4% |
| Clayton County | 166 | 100.0% | 74.0% | 74.0% | 16,861 | 88.8% | 50.7% | 49.0% |
| Clinton County | 32,390 | 99.9% | 98.2% | 98.2% | 13,954 | 93.9% | 46.1% | 43.3% |
| Crawford County | 8,013 | 99.6% | 62.2% | 62.0% | 8,110 | 86.7% | 10.0% | 8.7% |
| Dallas County | 83,659 | 99.3% | 100.0% | 99.3% | 24,357 | 76.3% | 87.6% | 67.1% |
| Davis County | | | | | 9,130 | 96.8% | 50.1% | 49.7% |
| Decatur County | | | | | 7,683 | 97.3% | 67.4% | 66.7% |
| Delaware County | 4,906 | 100.0% | 93.3% | 93.3% | 12,662 | 95.4% | 56.4% | 53.9% |
| Des Moines County | 27,759 | 98.8% | 92.5% | 91.5% | 10,534 | 84.9% | 59.8% | 51.2% |
| Dickinson County | 13,158 | 99.7% | 72.9% | 72.7% | 4,870 | 95.5% | 53.4% | 50.4% |
| Dubuque County | 67,471 | 99.8% | 94.1% | 94.0% | 31,206 | 95.9% | 59.2% | 57.5% |
| Emmet County | 5,654 | 100.0% | 99.0% | 99.0% | 3,522 | 98.9% | 39.0% | 38.7% |
| Fayette County | 5,835 | 100.0% | 100.0% | 100.0% | 13,459 | 90.2% | 47.8% | 46.8% |
| Floyd County | 7,096 | 99.6% | 86.2% | 86.0% | 8,241 | 86.7% | 29.6% | 26.1% |
| Franklin County | | | | | 9,916 | 88.1% | 57.5% | 54.4% |
| Fremont County | 14 | 100.0% | 64.2% | 64.2% | 6,450 | 92.9% | 16.8% | 13.4% |
| Greene County | | | | | 8,741 | 88.3% | 68.9% | 63.2% |
| Grundy County | | | | | 12,356 | 94.0% | 43.6% | 41.4% |
| Guthrie County | | | | | 10,647 | 93.6% | 53.3% | 50.9% |
| Hamilton County | 7,501 | 99.9% | 100.0% | 99.9% | 7,319 | 80.1% | 48.3% | 38.3% |
| Hancock County | | | | | 10,685 | 96.8% | 66.3% | 65.4% |
| Hardin County | 4,994 | 100.0% | 100.0% | 100.0% | 11,573 | 96.2% | 59.5% | 57.8% |
| Harrison County | | | | | 14,658 | 87.9% | 56.5% | 50.8% |
| Henry County | 9,104 | 100.0% | 99.9% | 99.9% | 11,092 | 89.1% | 67.6% | 65.2% |
| Howard County | | | | | 9,533 | 92.9% | 61.1% | 59.6% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Humboldt County | 5,336 | 100.0% | 99.6% | 99.6% | 4,236 | 95.6% | 57.8% | 57.3% |
| Ida County | | | | | 6,888 | 65.4% | 37.1% | 26.5% |
| Iowa County | | | | | 16,475 | 83.8% | 76.4% | 67.2% |
| Jackson County | 6,084 | 100.0% | 99.0% | 99.0% | 13,240 | 93.4% | 46.3% | 42.8% |
| Jasper County | 15,923 | 99.9% | 95.8% | 95.7% | 22,015 | 84.9% | 69.4% | 59.0% |
| Jefferson County | 9,106 | 98.4% | 96.4% | 94.9% | 6,592 | 41.1% | 61.2% | 33.2% |
| Johnson County | 129,440 | 99.0% | 97.6% | 96.6% | 26,980 | 85.6% | 67.7% | 59.5% |
| Jones County | 5,471 | 100.0% | 99.9% | 99.9% | 15,377 | 97.9% | 52.3% | 51.6% |
| Keokuk County | | | | | 9,904 | 98.3% | 61.4% | 61.2% |
| Kossuth County | 5,289 | 99.6% | 99.9% | 99.6% | 9,186 | 85.0% | 27.6% | 21.3% |
| Lee County | 19,499 | 99.7% | 79.6% | 79.5% | 13,341 | 41.1% | 48.5% | 29.2% |
| Linn County | 196,627 | 99.5% | 98.6% | 98.2% | 32,406 | 79.0% | 74.0% | 61.1% |
| Louisa County | | | | | 10,677 | 80.5% | 77.8% | 68.1% |
| Lucas County | | | | | 8,689 | 70.4% | 76.4% | 64.4% |
| Lyon County | | | | | 12,179 | 97.5% | 54.4% | 53.4% |
| Madison County | 5,204 | 99.9% | 100.0% | 99.9% | 11,832 | 51.0% | 70.0% | 39.1% |
| Mahaska County | 12,449 | 99.9% | 81.0% | 80.9% | 9,497 | 74.1% | 51.0% | 41.3% |
| Marion County | 17,747 | 100.0% | 96.6% | 96.6% | 15,895 | 80.8% | 55.3% | 47.2% |
| Marshall County | 27,210 | 99.9% | 99.3% | 99.2% | 12,669 | 92.7% | 57.7% | 54.2% |
| Mills County | 5,034 | 98.0% | 57.0% | 55.1% | 9,519 | 71.5% | 37.1% | 22.8% |
| Mitchell County | | | | | 10,532 | 90.9% | 58.1% | 57.4% |
| Monona County | | | | | 8,486 | 75.6% | 42.1% | 30.6% |
| Monroe County | | | | | 7,550 | 72.5% | 52.6% | 42.8% |
| Montgomery County | 5,495 | 100.0% | 70.3% | 70.3% | 4,710 | 100.0% | 11.0% | 11.0% |
| Muscatine County | 24,604 | 97.3% | 98.0% | 95.4% | 17,773 | 83.7% | 66.6% | 59.7% |
| O'Brien County | 5,120 | 100.0% | 79.4% | 79.4% | 8,940 | 83.0% | 41.9% | 38.7% |
| Osceola County | | | | | 6,036 | 85.4% | 68.7% | 62.6% |
| Page County | 9,097 | 100.0% | 81.4% | 81.4% | 6,046 | 98.4% | 31.6% | 31.6% |
| Palo Alto County | | | | | 8,764 | 84.8% | 66.7% | 59.5% |
| Plymouth County | 9,871 | 99.9% | 95.1% | 95.0% | 15,810 | 78.9% | 60.9% | 54.6% |
| Pocahontas County | | | | | 7,053 | 97.5% | 32.5% | 32.4% |
| Polk County | 478,262 | 99.3% | 99.8% | 99.1% | 22,827 | 62.8% | 91.9% | 59.1% |
| Pottawattamie County | 68,168 | 99.9% | 99.8% | 99.8% | 25,005 | 96.7% | 60.2% | 58.4% |
| Poweshiek County | 9,207 | 100.0% | 99.6% | 99.6% | 9,260 | 64.2% | 73.6% | 48.6% |
| Ringgold County | | | | | 4,670 | 97.0% | 37.8% | 37.5% |
| Sac County | | | | | 9,673 | 85.0% | 36.7% | 33.4% |
| Scott County | 150,733 | 99.8% | 99.7% | 99.6% | 23,191 | 86.6% | 80.0% | 70.2% |
| Shelby County | 4,717 | 100.0% | 0.0% | 0.0% | 6,928 | 92.2% | 2.2% | 2.2% |
| Sioux County | 15,605 | 99.8% | 68.8% | 68.7% | 20,445 | 89.7% | 68.3% | 59.8% |
| Story County | 71,024 | 98.4% | 96.9% | 95.3% | 28,649 | 80.7% | 51.5% | 41.6% |
| Tama County | 5,209 | 100.0% | 81.9% | 81.9% | 11,694 | 90.8% | 60.4% | 58.7% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Taylor County | | | | | 5,858 | 90.8% | 21.4% | 20.2% |
| Union County | 7,366 | 99.9% | 100.0% | 99.9% | 4,521 | 76.6% | 65.8% | 50.3% |
| Van Buren County | | | | | 7,256 | 80.7% | 53.9% | 42.2% |
| Wapello County | 24,691 | 99.1% | 99.3% | 98.5% | 10,352 | 64.9% | 66.1% | 46.7% |
| Warren County | 28,541 | 99.8% | 99.7% | 99.6% | 25,786 | 54.8% | 82.6% | 48.5% |
| Washington County | 6,868 | 100.0% | 100.0% | 100.0% | 15,703 | 96.3% | 68.9% | 67.1% |
| Wayne County | | | | | 6,467 | 80.5% | 39.7% | 35.4% |
| Webster County | 24,517 | 92.9% | 99.8% | 92.7% | 12,109 | 93.5% | 52.7% | 49.2% |
| Winnebago County | | | | | 10,617 | 99.9% | 70.8% | 70.8% |
| Winneshiek County | 7,549 | 99.7% | 38.3% | 38.0% | 12,425 | 88.5% | 36.2% | 34.5% |
| Woodbury County | 88,642 | 99.9% | 93.2% | 93.1% | 17,029 | 79.5% | 70.9% | 60.5% |
| Worth County | | | | | 7,319 | 99.6% | 68.5% | 68.3% |
| Wright County | | | | | 12,681 | 96.6% | 73.4% | 71.6% |
| Kansas | 2,111,557 | 98.3% | 97.3% | 95.8% | 825,593 | 75.1% | 65.8% | 52.7% |
| Allen County | 5,865 | 99.9% | 100.0% | 99.9% | 6,714 | 62.6% | 77.8% | 52.0% |
| Anderson County | | | | | 7,776 | 56.6% | 63.8% | 48.1% |
| Atchison County | 10,687 | 100.0% | 97.9% | 97.9% | 5,421 | 85.5% | 59.8% | 54.1% |
| Barber County | | | | | 4,122 | 92.4% | 73.7% | 72.8% |
| Barton County | 14,514 | 100.0% | 84.2% | 84.2% | 10,566 | 99.1% | 32.5% | 32.5% |
| Bourbon County | 7,673 | 100.0% | 99.1% | 99.1% | 6,820 | 40.6% | 58.2% | 34.1% |
| Brown County | | | | | 9,364 | 90.3% | 79.9% | 75.6% |
| Butler County | 36,802 | 99.8% | 100.0% | 99.8% | 31,438 | 80.8% | 90.8% | 76.7% |
| Chase County | | | | | 2,548 | 59.2% | 13.0% | 7.4% |
| Chautauqua County | | | | | 3,415 | 16.9% | 61.3% | 13.4% |
| Cherokee County | | | | | 19,088 | 70.8% | 70.6% | 59.1% |
| Cheyenne County | | | | | 2,583 | 53.8% | 0.0% | 0.0% |
| Clark County | | | | | 1,933 | 92.3% | 84.6% | 82.1% |
| Clay County | 4,071 | 100.0% | 94.5% | 94.5% | 3,972 | 78.0% | 48.2% | 40.1% |
| Cloud County | 4,967 | 100.0% | 88.7% | 88.7% | 3,979 | 91.8% | 57.7% | 52.8% |
| Coffey County | | | | | 8,280 | 70.0% | 64.8% | 54.4% |
| Comanche County | | | | | 1,681 | 71.9% | 47.8% | 39.7% |
| Cowley County | 23,210 | 100.0% | 85.9% | 85.9% | 11,243 | 89.1% | 39.5% | 36.7% |
| Crawford County | 23,126 | 100.0% | 98.5% | 98.5% | 15,952 | 91.3% | 66.8% | 65.1% |
| Decatur County | | | | | 2,689 | 79.5% | 8.5% | 6.6% |
| Dickinson County | 6,670 | 99.3% | 100.0% | 99.3% | 11,760 | 78.1% | 68.8% | 51.5% |
| Doniphan County | 2,108 | 99.6% | 95.2% | 94.9% | 5,332 | 83.1% | 79.0% | 69.7% |
| Douglas County | 101,337 | 99.0% | 97.8% | 96.9% | 18,627 | 68.4% | 71.5% | 47.0% |
| Edwards County | | | | | 2,739 | 78.5% | 27.4% | 20.5% |
| Elk County | | | | | 2,441 | 60.2% | 27.4% | 24.7% |
| Ellis County | 21,623 | 100.0% | 95.1% | 95.1% | 7,318 | 99.2% | 48.1% | 48.1% |
| Ellsworth County | | | | | 6,355 | 89.7% | 84.3% | 78.7% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Finney County | 30,109 | 99.7% | 97.3% | 97.0% | 7,541 | 63.1% | 88.5% | 58.6% |
| Ford County | 27,326 | 99.8% | 97.1% | 96.9% | 6,522 | 55.6% | 79.2% | 48.0% |
| Franklin County | 12,427 | 100.0% | 100.0% | 100.0% | 13,565 | 38.9% | 51.8% | 26.0% |
| Geary County | 26,054 | 99.8% | 84.4% | 84.3% | 9,637 | 22.4% | 43.9% | 4.2% |
| Gove County | | | | | 2,717 | 78.3% | 15.8% | 13.4% |
| Graham County | | | | | 2,411 | 99.9% | 53.5% | 53.4% |
| Grant County | 5,764 | 99.7% | 31.6% | 31.5% | 1,433 | 31.4% | 19.5% | 9.4% |
| Gray County | | | | | 5,729 | 98.7% | 48.9% | 48.5% |
| Greeley County | | | | | 1,223 | 68.5% | 90.6% | 68.5% |
| Greenwood County | | | | | 5,939 | 22.7% | 60.3% | 17.5% |
| Hamilton County | | | | | 2,430 | 78.3% | 88.1% | 78.3% |
| Harper County | | | | | 5,323 | 97.3% | 70.5% | 70.3% |
| Harvey County | 20,268 | 99.9% | 98.6% | 98.6% | 13,533 | 93.3% | 53.9% | 50.4% |
| Haskell County | | | | | 3,576 | 76.1% | 47.9% | 39.1% |
| Hodgeman County | | | | | 1,755 | 68.8% | 50.5% | 46.0% |
| Jackson County | | | | | 13,286 | 79.2% | 69.3% | 59.7% |
| Jefferson County | 155 | 100.0% | 100.0% | 100.0% | 18,189 | 82.2% | 75.7% | 64.2% |
| Jewell County | | | | | 2,898 | 93.6% | 6.9% | 6.4% |
| Johnson County | 593,903 | 98.5% | 99.9% | 98.4% | 25,292 | 68.6% | 97.6% | 67.6% |
| Kearny County | | | | | 3,855 | 61.7% | 80.3% | 54.9% |
| Kingman County | | | | | 7,193 | 93.0% | 69.3% | 67.5% |
| Kiowa County | | | | | 2,404 | 66.8% | 19.4% | 10.4% |
| Labette County | 9,289 | 99.9% | 95.6% | 95.5% | 10,468 | 41.2% | 63.5% | 24.4% |
| Lane County | | | | | 1,556 | 95.3% | 92.2% | 89.7% |
| Leavenworth County | 50,302 | 91.5% | 100.0% | 91.5% | 32,590 | 83.1% | 90.9% | 75.9% |
| Lincoln County | | | | | 2,899 | 77.0% | 7.4% | 3.7% |
| Linn County | | | | | 9,796 | 61.2% | 50.6% | 41.6% |
| Logan County | | | | | 2,705 | 86.7% | 11.6% | 10.8% |
| Lyon County | 23,726 | 100.0% | 99.6% | 99.6% | 8,172 | 68.4% | 40.3% | 35.1% |
| Marion County | | | | | 11,868 | 69.2% | 67.6% | 55.3% |
| Marshall County | | | | | 9,982 | 72.9% | 55.0% | 43.2% |
| McPherson County | 13,900 | 99.9% | 82.0% | 81.9% | 16,112 | 85.6% | 58.5% | 49.3% |
| Meade County | | | | | 3,897 | 78.8% | 67.8% | 62.2% |
| Miami County | 8,435 | 8.0% | 100.0% | 8.0% | 26,432 | 38.0% | 84.4% | 37.1% |
| Mitchell County | | | | | 5,738 | 95.3% | 69.3% | 68.7% |
| Montgomery County | 17,013 | 99.9% | 62.0% | 61.9% | 13,983 | 51.6% | 56.5% | 38.6% |
| Morris County | | | | | 5,349 | 96.8% | 66.9% | 64.8% |
| Morton County | | | | | 2,599 | 76.1% | 91.4% | 73.6% |
| Nemaha County | | | | | 10,115 | 77.1% | 59.5% | 51.9% |
| Neosho County | 8,624 | 99.8% | 93.3% | 93.2% | 6,982 | 45.0% | 34.8% | 13.5% |
| Ness County | | | | | 2,645 | 95.2% | 75.5% | 72.8% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Norton County | | | | | 5,301 | 83.2% | 63.1% | 59.0% |
| Osage County | | | | | 15,654 | 64.2% | 78.1% | 56.0% |
| Osborne County | | | | | 3,490 | 99.9% | 61.1% | 61.1% |
| Ottawa County | | | | | 5,795 | 84.7% | 69.7% | 61.2% |
| Pawnee County | 3,687 | 100.0% | 22.0% | 22.0% | 2,492 | 91.6% | 11.6% | 11.5% |
| Phillips County | | | | | 4,809 | 81.3% | 56.2% | 51.6% |
| Pottawatomie County | 9,023 | 99.8% | 69.0% | 68.9% | 17,250 | 92.8% | 71.8% | 65.7% |
| Pratt County | 6,498 | 100.0% | 99.5% | 99.5% | 2,569 | 79.7% | 38.7% | 35.2% |
| Rawlins County | | | | | 2,528 | 54.0% | 8.1% | 3.4% |
| Reno County | 41,943 | 97.9% | 79.5% | 77.7% | 19,573 | 70.5% | 33.6% | 27.9% |
| Republic County | | | | | 4,642 | 81.1% | 69.9% | 60.9% |
| Rice County | | | | | 9,407 | 88.9% | 46.7% | 43.1% |
| Riley County | 63,599 | 99.9% | 92.9% | 92.8% | 7,509 | 74.5% | 70.9% | 58.5% |
| Rooks County | | | | | 4,813 | 88.3% | 78.7% | 72.4% |
| Rush County | | | | | 2,927 | 90.5% | 8.1% | 7.6% |
| Russell County | 4,059 | 100.0% | 60.3% | 60.3% | 2,580 | 99.7% | 33.9% | 33.8% |
| Saline County | 45,890 | 99.9% | 100.0% | 99.9% | 7,706 | 97.0% | 53.5% | 52.5% |
| Scott County | | | | | 5,014 | 80.1% | 94.7% | 80.1% |
| Sedgwick County | 485,427 | 99.8% | 99.9% | 99.8% | 40,098 | 91.0% | 94.8% | 86.1% |
| Seward County | 19,263 | 98.9% | 99.0% | 97.9% | 2,095 | 38.5% | 72.1% | 33.2% |
| Shawnee County | 147,314 | 99.8% | 99.8% | 99.7% | 30,166 | 91.7% | 82.4% | 75.7% |
| Sheridan County | | | | | 2,425 | 79.5% | 57.7% | 55.1% |
| Sherman County | 4,347 | 100.0% | 100.0% | 100.0% | 1,483 | 41.6% | 49.3% | 32.6% |
| Smith County | | | | | 3,533 | 93.0% | 57.4% | 53.3% |
| Stafford County | | | | | 3,993 | 94.6% | 7.4% | 7.1% |
| Stanton County | | | | | 1,963 | 76.5% | 28.6% | 24.6% |
| Stevens County | | | | | 5,175 | 72.5% | 84.4% | 72.5% |
| Sumner County | 8,213 | 17.6% | 61.7% | 17.6% | 14,260 | 67.9% | 42.0% | 28.2% |
| Thomas County | 5,426 | 100.0% | 93.5% | 93.5% | 2,467 | 67.0% | 45.2% | 32.1% |
| Trego County | | | | | 2,752 | 99.4% | 30.5% | 30.5% |
| Wabaunsee County | | | | | 7,019 | 89.2% | 64.5% | 59.8% |
| Wallace County | | | | | 1,488 | 51.2% | 5.3% | 0.0% |
| Washington County | | | | | 5,501 | 39.9% | 43.3% | 14.6% |
| Wichita County | | | | | 2,064 | 72.9% | 10.7% | 6.5% |
| Wilson County | | | | | 8,622 | 60.9% | 67.8% | 55.4% |
| Woodson County | | | | | 3,109 | 43.1% | 57.0% | 43.1% |
| Wyandotte County | 156,920 | 97.0% | 99.8% | 96.8% | 8,826 | 92.4% | 94.9% | 87.7% |
| Kentucky | 2,639,493 | 97.4% | 95.6% | 93.3% | 1,872,817 | 67.9% | 46.5% | 34.0% |
| Adair County | 5,133 | 99.9% | 99.9% | 99.8% | 13,934 | 38.9% | 29.8% | 19.4% |
| Allen County | 4,797 | 99.4% | 84.9% | 84.4% | 16,478 | 98.6% | 37.3% | 37.0% |
| Anderson County | 13,761 | 97.5% | 97.1% | 94.8% | 10,463 | 36.0% | 53.8% | 28.0% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Ballard County | | | | | 7,650 | 100.0% | 38.3% | 38.3% |
| Barren County | 16,895 | 92.9% | 80.7% | 74.7% | 27,959 | 77.3% | 31.1% | 23.2% |
| Bath County | | | | | 12,829 | 67.9% | 49.8% | 39.1% |
| Bell County | 10,373 | 94.9% | 98.2% | 93.1% | 13,195 | 87.2% | 38.1% | 35.1% |
| Boone County | 122,839 | 98.6% | 98.0% | 96.6% | 16,254 | 95.5% | 78.3% | 75.2% |
| Bourbon County | 11,196 | 97.7% | 100.0% | 97.7% | 8,897 | 32.2% | 74.9% | 29.1% |
| Boyd County | 36,575 | 99.2% | 73.5% | 73.0% | 11,535 | 74.9% | 49.7% | 43.6% |
| Boyle County | 20,059 | 95.9% | 87.1% | 83.3% | 10,845 | 37.1% | 51.8% | 27.7% |
| Bracken County | | | | | 8,452 | 44.1% | 73.6% | 41.4% |
| Breathitt County | | | | | 13,351 | 65.9% | 29.5% | 28.3% |
| Breckinridge County | | | | | 20,943 | 53.2% | 53.1% | 26.1% |
| Bullitt County | 58,944 | 98.1% | 99.9% | 98.1% | 24,892 | 80.5% | 81.2% | 67.4% |
| Butler County | | | | | 12,295 | 36.9% | 48.0% | 27.5% |
| Caldwell County | 6,030 | 99.6% | 99.2% | 98.8% | 6,540 | 33.4% | 31.1% | 12.6% |
| Calloway County | 19,247 | 93.8% | 96.3% | 90.3% | 18,438 | 77.6% | 32.4% | 23.3% |
| Campbell County | 77,289 | 99.3% | 98.0% | 97.4% | 16,011 | 97.1% | 80.0% | 77.7% |
| Carlisle County | | | | | 4,720 | 70.2% | 18.8% | 10.7% |
| Carroll County | 5,530 | 92.5% | 100.0% | 92.5% | 5,408 | 44.5% | 66.9% | 37.0% |
| Carter County | 5,521 | 90.7% | 96.8% | 88.0% | 20,874 | 50.7% | 44.8% | 30.4% |
| Casey County | | | | | 15,920 | 50.2% | 23.7% | 19.4% |
| Christian County | 48,685 | 96.8% | 97.9% | 94.7% | 24,352 | 66.4% | 67.2% | 48.5% |
| Clark County | 26,302 | 97.6% | 95.8% | 93.5% | 10,759 | 36.4% | 71.0% | 29.6% |
| Clay County | | | | | 19,913 | 85.8% | 21.7% | 21.0% |
| Clinton County | | | | | 9,123 | 62.2% | 51.6% | 37.4% |
| Crittenden County | | | | | 8,981 | 41.8% | 49.6% | 37.1% |
| Cumberland County | | | | | 5,946 | 44.1% | 42.1% | 31.1% |
| Daviess County | 78,142 | 97.2% | 94.5% | 92.1% | 25,080 | 52.6% | 63.6% | 36.8% |
| Edmonson County | | | | | 12,269 | 48.7% | 28.6% | 14.9% |
| Elliott County | | | | | 7,293 | 100.0% | 0.0% | 0.0% |
| Estill County | 3,996 | 98.6% | 39.4% | 38.7% | 10,048 | 67.5% | 31.3% | 26.3% |
| Fayette County | 310,737 | 99.2% | 100.0% | 99.2% | 9,610 | 64.0% | 95.1% | 62.8% |
| Fleming County | | | | | 15,288 | 55.6% | 53.1% | 37.0% |
| Floyd County | 7,828 | 86.2% | 26.0% | 21.7% | 27,150 | 91.2% | 7.7% | 6.9% |
| Franklin County | 37,638 | 71.5% | 95.8% | 67.8% | 13,969 | 20.9% | 67.2% | 17.4% |
| Fulton County | 2,361 | 94.7% | 82.8% | 78.6% | 4,021 | 61.3% | 59.8% | 47.5% |
| Gallatin County | | | | | 8,763 | 81.4% | 91.2% | 75.8% |
| Garrard County | | | | | 17,589 | 58.6% | 58.3% | 42.7% |
| Grant County | | | | | 25,502 | 90.9% | 78.8% | 73.1% |
| Graves County | 12,218 | 98.4% | 81.1% | 79.9% | 24,194 | 90.6% | 44.5% | 41.1% |
| Grayson County | 6,560 | 97.5% | 46.8% | 46.1% | 20,071 | 75.2% | 31.3% | 24.5% |
| Green County | | | | | 11,365 | 39.4% | 27.0% | 17.3% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Greenup County | 20,393 | 99.3% | 93.7% | 93.1% | 15,010 | 60.6% | 45.4% | 35.0% |
| Hancock County | 779 | 86.6% | 0.1% | 0.1% | 8,242 | 14.7% | 33.8% | 9.0% |
| Hardin County | 70,020 | 99.8% | 99.8% | 99.6% | 41,842 | 73.1% | 68.5% | 52.4% |
| Harlan County | 5,920 | 82.1% | 43.1% | 35.7% | 19,742 | 65.3% | 22.9% | 15.7% |
| Harrison County | 6,601 | 97.9% | 97.2% | 95.1% | 12,502 | 14.2% | 59.5% | 12.0% |
| Hart County | 2,262 | 98.8% | 47.5% | 46.6% | 17,338 | 63.7% | 21.1% | 16.7% |
| Henderson County | 27,865 | 94.5% | 97.8% | 92.4% | 16,181 | 51.5% | 59.2% | 28.5% |
| Henry County | | | | | 15,771 | 54.9% | 73.6% | 46.8% |
| Hickman County | | | | | 4,422 | 42.8% | 57.6% | 34.3% |
| Hopkins County | 21,114 | 95.9% | 92.2% | 88.2% | 23,698 | 58.5% | 65.8% | 42.8% |
| Jackson County | | | | | 12,973 | 100.0% | 2.2% | 2.2% |
| Jefferson County | 760,575 | 98.2% | 99.9% | 98.2% | 12,824 | 72.8% | 94.9% | 70.4% |
| Jessamine County | 40,812 | 99.9% | 99.1% | 99.1% | 13,442 | 65.9% | 88.7% | 63.4% |
| Johnson County | 5,934 | 99.9% | 67.9% | 67.8% | 16,310 | 96.0% | 7.4% | 7.2% |
| Kenton County | 158,473 | 99.4% | 98.3% | 97.7% | 11,840 | 96.8% | 78.3% | 76.1% |
| Knott County | | | | | 13,874 | 99.3% | 9.2% | 9.2% |
| Knox County | 11,542 | 99.9% | 58.7% | 58.7% | 18,249 | 76.9% | 26.7% | 22.6% |
| Larue County | | | | | 15,163 | 65.5% | 44.7% | 36.6% |
| Laurel County | 24,497 | 97.0% | 66.5% | 65.3% | 38,388 | 85.4% | 30.8% | 28.5% |
| Lawrence County | 3,905 | 99.6% | 99.8% | 99.4% | 12,204 | 99.7% | 12.9% | 12.8% |
| Lee County | | | | | 7,261 | 52.8% | 23.5% | 13.6% |
| Leslie County | | | | | 10,093 | 40.8% | 4.8% | 2.1% |
| Letcher County | | | | | 20,893 | 97.0% | 17.6% | 17.4% |
| Lewis County | | | | | 12,954 | 53.0% | 56.6% | 41.4% |
| Lincoln County | 22 | 100.0% | 0.0% | 0.0% | 24,338 | 50.4% | 54.2% | 33.1% |
| Livingston County | 375 | 98.4% | 12.2% | 12.2% | 8,588 | 43.6% | 44.2% | 24.8% |
| Logan County | 6,795 | 98.8% | 94.8% | 94.6% | 21,082 | 65.2% | 41.6% | 31.6% |
| Lyon County | | | | | 9,101 | 43.6% | 47.1% | 20.6% |
| Madison County | 60,597 | 98.5% | 97.7% | 96.3% | 34,590 | 79.1% | 58.0% | 49.6% |
| Magoffin County | | | | | 11,357 | 100.0% | 17.6% | 17.6% |
| Marion County | 6,320 | 95.0% | 94.0% | 89.2% | 13,455 | 59.1% | 30.4% | 22.6% |
| Marshall County | 4,771 | 94.3% | 90.4% | 84.7% | 27,006 | 82.1% | 44.5% | 37.7% |
| Martin County | | | | | 11,095 | 36.0% | 7.0% | 3.2% |
| Mason County | 7,887 | 98.7% | 98.7% | 97.6% | 9,043 | 51.3% | 72.3% | 43.6% |
| McCracken County | 49,238 | 98.7% | 88.7% | 87.6% | 18,252 | 90.6% | 63.5% | 59.3% |
| McCreary County | | | | | 16,701 | 99.8% | 39.0% | 39.0% |
| McLean County | | | | | 9,105 | 37.9% | 47.0% | 23.8% |
| Meade County | 1,130 | 92.5% | 100.0% | 92.5% | 28,871 | 98.7% | 47.1% | 46.7% |
| Menifee County | | | | | 6,250 | 100.0% | 32.9% | 32.9% |
| Mercer County | 9,908 | 96.5% | 96.2% | 93.0% | 12,994 | 43.9% | 48.9% | 23.4% |
| Metcalfe County | | | | | 10,370 | 53.3% | 21.3% | 15.1% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Monroe County | | | | | 11,355 | 52.6% | 10.7% | 8.5% |
| Montgomery County | 14,087 | 95.7% | 81.6% | 78.0% | 14,280 | 59.7% | 63.5% | 45.3% |
| Morgan County | | | | | 14,120 | 100.0% | 11.9% | 11.9% |
| Muhlenberg County | 11,077 | 90.3% | 81.7% | 72.5% | 19,378 | 59.3% | 30.5% | 17.5% |
| Nelson County | 17,847 | 100.0% | 95.2% | 95.2% | 29,545 | 88.9% | 62.4% | 58.3% |
| Nicholas County | | | | | 7,805 | 33.8% | 66.0% | 33.6% |
| Ohio County | 6,148 | 93.1% | 92.2% | 86.1% | 17,379 | 25.7% | 40.1% | 13.9% |
| Oldham County | 51,962 | 96.4% | 99.0% | 95.5% | 17,469 | 69.1% | 91.8% | 64.9% |
| Owen County | | | | | 11,290 | 47.6% | 68.7% | 41.2% |
| Owsley County | | | | | 3,929 | 99.5% | 31.6% | 31.6% |
| Pendleton County | | | | | 14,676 | 82.6% | 59.4% | 52.5% |
| Perry County | 7,863 | 98.5% | 48.9% | 48.5% | 19,498 | 85.1% | 5.8% | 5.4% |
| Pike County | 8,683 | 68.6% | 45.7% | 33.2% | 47,603 | 67.7% | 7.4% | 3.6% |
| Powell County | | | | | 13,083 | 47.7% | 61.7% | 36.3% |
| Pulaski County | 31,109 | 98.5% | 87.3% | 86.0% | 34,686 | 64.2% | 47.9% | 38.2% |
| Robertson County | | | | | 2,229 | 8.5% | 29.3% | 4.3% |
| Rockcastle County | | | | | 16,242 | 55.0% | 54.5% | 39.1% |
| Rowan County | 8,436 | 99.2% | 82.4% | 81.8% | 15,952 | 82.9% | 49.4% | 46.5% |
| Russell County | | | | | 18,178 | 94.6% | 32.9% | 32.2% |
| Scott County | 39,768 | 97.6% | 100.0% | 97.6% | 19,331 | 42.5% | 80.6% | 39.4% |
| Shelby County | 23,200 | 94.4% | 99.6% | 94.0% | 25,686 | 51.3% | 78.1% | 46.2% |
| Simpson County | 11,973 | 99.9% | 96.4% | 96.3% | 7,976 | 90.8% | 56.6% | 52.9% |
| Spencer County | | | | | 20,204 | 63.1% | 50.6% | 35.5% |
| Taylor County | 13,097 | 99.1% | 85.5% | 84.8% | 13,310 | 52.1% | 19.3% | 13.3% |
| Todd County | | | | | 12,404 | 44.2% | 51.3% | 28.8% |
| Trigg County | | | | | 14,332 | 52.9% | 49.4% | 34.8% |
| Trimble County | | | | | 8,539 | 62.9% | 53.4% | 33.1% |
| Union County | | | | | 12,961 | 70.6% | 64.2% | 53.5% |
| Warren County | 100,744 | 93.2% | 96.9% | 90.3% | 39,099 | 90.1% | 62.2% | 58.3% |
| Washington County | | | | | 12,061 | 52.2% | 64.2% | 38.0% |
| Wayne County | 6,735 | 93.4% | 94.4% | 88.0% | 12,946 | 62.1% | 22.5% | 18.4% |
| Webster County | | | | | 12,726 | 53.3% | 52.3% | 31.8% |
| Whitley County | 13,375 | 92.9% | 43.6% | 42.9% | 23,498 | 66.2% | 29.9% | 19.7% |
| Wolfe County | | | | | 6,400 | 100.0% | 28.1% | 28.1% |
| Woodford County | 16,998 | 99.8% | 100.0% | 99.8% | 10,064 | 52.2% | 79.6% | 47.3% |
| Louisiana | 3,275,134 | 95.9% | 96.8% | 93.2% | 1,315,107 | 52.1% | 63.5% | 39.1% |
| Acadia Parish | 21,957 | 99.5% | 99.9% | 99.4% | 34,787 | 53.6% | 58.9% | 36.1% |
| Allen Parish | 6,655 | 5.8% | 99.9% | 5.8% | 15,665 | 25.0% | 62.4% | 21.9% |
| Ascension Parish | 116,460 | 99.9% | 99.3% | 99.3% | 13,998 | 97.8% | 92.3% | 90.7% |
| Assumption Parish | 7,261 | 96.0% | 92.5% | 88.6% | 13,343 | 95.1% | 65.2% | 62.1% |
| Avoyelles Parish | 7,098 | 0.0% | 77.7% | 0.0% | 31,653 | 0.6% | 71.9% | 0.6% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Beauregard Parish | 10,132 | 86.2% | 81.3% | 69.7% | 26,438 | 7.9% | 46.3% | 4.9% |
| Bienville Parish | | | | | 12,641 | 15.9% | 44.5% | 15.3% |
| Bossier Parish | 94,277 | 92.3% | 91.5% | 84.3% | 34,999 | 47.3% | 56.4% | 34.1% |
| Caddo Parish | 192,575 | 98.8% | 87.8% | 86.7% | 36,450 | 76.4% | 46.5% | 39.9% |
| Calcasieu Parish | 151,496 | 91.8% | 98.1% | 90.1% | 50,922 | 53.7% | 76.8% | 43.9% |
| Caldwell Parish | | | | | 9,554 | 42.5% | 65.3% | 38.5% |
| Cameron Parish | | | | | 4,902 | 66.2% | 57.9% | 37.5% |
| Catahoula Parish | | | | | 8,566 | 5.0% | 58.4% | 5.0% |
| Claiborne Parish | | | | | 13,744 | 43.9% | 42.3% | 33.6% |
| Concordia Parish | 12,004 | 34.9% | 98.8% | 34.9% | 6,112 | 7.0% | 65.4% | 3.6% |
| De Soto Parish | 5,622 | 100.0% | 100.0% | 100.0% | 21,231 | 55.2% | 48.2% | 35.9% |
| East Baton Rouge Parish | 418,268 | 100.0% | 99.9% | 99.9% | 32,276 | 100.0% | 86.6% | 86.6% |
| East Carroll Parish | | | | | 6,990 | 64.6% | 86.6% | 63.5% |
| East Feliciana Parish | | | | | 19,135 | 10.7% | 60.7% | 9.5% |
| Evangeline Parish | 8,166 | 64.9% | 69.0% | 45.7% | 23,820 | 24.4% | 55.8% | 14.5% |
| Franklin Parish | 5,143 | 100.0% | 91.2% | 91.2% | 14,165 | 32.3% | 49.3% | 17.4% |
| Grant Parish | | | | | 22,000 | 23.8% | 37.4% | 15.8% |
| Iberia Parish | 46,124 | 88.7% | 95.1% | 86.8% | 22,203 | 35.8% | 71.4% | 31.0% |
| Iberville Parish | 12,379 | 99.5% | 97.5% | 97.1% | 17,127 | 83.4% | 78.7% | 64.0% |
| Jackson Parish | 5,212 | 6.1% | 96.8% | 6.1% | 9,627 | 0.6% | 25.6% | 0.2% |
| Jefferson Davis Parish | 9,451 | 90.6% | 81.6% | 74.3% | 22,575 | 51.6% | 67.4% | 39.0% |
| Jefferson Parish | 419,008 | 99.9% | 99.9% | 99.9% | 6,876 | 97.2% | 99.1% | 96.4% |
| LaSalle Parish | | | | | 14,729 | 0.0% | 53.0% | 0.0% |
| Lafayette Parish | 225,336 | 99.5% | 99.5% | 99.0% | 22,530 | 86.1% | 69.5% | 62.8% |
| Lafourche Parish | 73,273 | 72.5% | 93.0% | 69.7% | 22,597 | 72.3% | 75.5% | 52.5% |
| Lincoln Parish | 28,300 | 81.1% | 88.0% | 72.2% | 19,829 | 34.3% | 46.9% | 19.4% |
| Livingston Parish | 90,771 | 99.3% | 95.1% | 94.5% | 57,654 | 93.5% | 82.4% | 77.8% |
| Madison Parish | 6,915 | 97.3% | 97.8% | 95.1% | 2,563 | 11.5% | 47.6% | 11.5% |
| Morehouse Parish | 12,017 | 86.1% | 82.3% | 72.8% | 12,429 | 86.3% | 49.4% | 43.3% |
| Natchitoches Parish | 17,568 | 87.2% | 75.8% | 68.4% | 19,095 | 34.9% | 24.5% | 12.7% |
| Orleans Parish | 368,139 | 99.9% | 100.0% | 99.9% | 1,610 | 91.1% | 99.8% | 91.1% |
| Ouachita Parish | 118,154 | 99.4% | 97.6% | 97.0% | 39,548 | 69.1% | 51.2% | 40.9% |
| Plaquemines Parish | 14,400 | 92.2% | 100.0% | 92.2% | 8,116 | 8.0% | 91.2% | 7.9% |
| Pointe Coupee Parish | 6,683 | 99.3% | 94.1% | 93.4% | 13,468 | 78.6% | 58.0% | 46.7% |
| Rapides Parish | 77,738 | 87.7% | 86.9% | 76.8% | 49,451 | 41.8% | 49.7% | 21.1% |
| Red River Parish | | | | | 7,420 | 21.8% | 16.1% | 1.6% |
| Richland Parish | | | | | 19,826 | 49.5% | 76.9% | 47.1% |
| Sabine Parish | | | | | 21,985 | 6.2% | 16.2% | 2.5% |
| St. Bernard Parish | 42,059 | 99.9% | 100.0% | 99.9% | 2,420 | 98.2% | 99.2% | 97.4% |
| St. Charles Parish | 42,007 | 99.8% | 99.8% | 99.7% | 8,991 | 97.3% | 82.8% | 80.4% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| St. Helena Parish | | | | | 10,822 | 32.1% | 35.2% | 10.9% |
| St. James Parish | 9,850 | 85.8% | 100.0% | 85.8% | 9,573 | 82.7% | 95.2% | 78.7% |
| St. John the Baptist Parish | 35,273 | 99.0% | 100.0% | 99.0% | 4,591 | 92.2% | 95.5% | 92.1% |
| St. Landry Parish | 33,387 | 92.6% | 97.0% | 89.6% | 48,386 | 65.0% | 65.0% | 44.3% |
| St. Martin Parish | 24,462 | 96.4% | 92.0% | 88.9% | 26,774 | 70.5% | 71.9% | 52.7% |
| St. Mary Parish | 38,496 | 99.1% | 95.9% | 95.1% | 9,293 | 61.9% | 86.6% | 57.5% |
| St. Tammany Parish | 210,234 | 96.7% | 98.3% | 95.1% | 63,029 | 83.0% | 84.8% | 72.4% |
| Tangipahoa Parish | 74,093 | 97.3% | 97.1% | 94.4% | 62,955 | 78.0% | 82.1% | 66.8% |
| Tensas Parish | | | | | 3,846 | 14.0% | 17.7% | 1.6% |
| Terrebonne Parish | 83,080 | 99.1% | 92.5% | 91.7% | 21,706 | 96.4% | 84.3% | 81.7% |
| Union Parish | | | | | 20,721 | 24.8% | 39.1% | 16.5% |
| Vermilion Parish | 23,513 | 99.2% | 92.1% | 91.3% | 33,439 | 51.6% | 67.8% | 39.7% |
| Vernon Parish | 15,568 | 65.7% | 99.0% | 65.3% | 31,679 | 17.5% | 57.6% | 13.5% |
| Washington Parish | 11,218 | 47.7% | 99.5% | 47.6% | 33,807 | 4.1% | 70.6% | 3.9% |
| Webster Parish | 18,115 | 80.7% | 79.1% | 61.2% | 17,528 | 19.9% | 39.2% | 8.9% |
| West Baton Rouge Parish | 20,751 | 100.0% | 99.9% | 99.9% | 7,283 | 99.8% | 73.0% | 72.8% |
| West Carroll Parish | | | | | 9,475 | 29.7% | 53.1% | 21.4% |
| West Feliciana Parish | | | | | 15,381 | 13.4% | 68.5% | 10.2% |
| Winn Parish | 4,446 | 58.1% | 99.6% | 57.9% | 8,759 | 5.4% | 35.1% | 5.2% |
| Maine | 536,251 | 97.6% | 90.3% | 88.2% | 849,089 | 82.1% | 48.4% | 42.4% |
| Androscoggin County | 62,053 | 98.7% | 96.1% | 95.0% | 50,970 | 94.6% | 51.1% | 48.3% |
| Aroostook County | 9,816 | 97.6% | 96.0% | 93.7% | 57,439 | 66.9% | 51.2% | 40.1% |
| Cumberland County | 190,379 | 98.9% | 88.5% | 87.6% | 117,072 | 95.5% | 46.1% | 44.1% |
| Franklin County | | | | | 30,474 | 80.6% | 58.9% | 54.7% |
| Hancock County | | | | | 56,701 | 77.5% | 47.4% | 39.3% |
| Kennebec County | 47,592 | 94.8% | 97.9% | 92.9% | 77,948 | 91.0% | 56.3% | 51.8% |
| Knox County | 14,795 | 97.0% | 87.2% | 84.6% | 26,369 | 80.5% | 36.7% | 28.1% |
| Lincoln County | 3,464 | 96.6% | 59.9% | 58.5% | 32,751 | 85.2% | 28.0% | 24.8% |
| Oxford County | 10,209 | 94.0% | 98.7% | 92.8% | 49,286 | 72.1% | 54.5% | 43.0% |
| Penobscot County | 66,174 | 95.3% | 92.3% | 88.3% | 87,530 | 76.9% | 44.9% | 38.6% |
| Piscataquis County | | | | | 17,417 | 65.1% | 37.8% | 27.6% |
| Sagadahoc County | 14,726 | 99.9% | 93.6% | 93.5% | 22,667 | 90.2% | 46.0% | 43.3% |
| Somerset County | 7,699 | 97.8% | 95.2% | 93.8% | 43,399 | 70.3% | 54.5% | 44.6% |
| Waldo County | 3,947 | 91.5% | 89.3% | 86.4% | 36,294 | 49.8% | 38.6% | 21.2% |
| Washington County | | | | | 31,437 | 68.4% | 34.1% | 28.0% |
| York County | 105,397 | 97.8% | 84.6% | 82.8% | 111,335 | 95.0% | 56.4% | 53.9% |
| Maryland | 5,253,864 | 99.4% | 97.3% | 96.8% | 910,796 | 85.8% | 76.3% | 67.1% |
| Allegany County | 44,208 | 97.9% | 96.7% | 94.8% | 23,059 | 78.5% | 69.4% | 56.9% |
| Anne Arundel County | 547,472 | 99.8% | 97.1% | 97.0% | 45,814 | 97.5% | 85.7% | 83.6% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Baltimore County | 784,280 | 99.6% | 99.1% | 98.8% | 61,881 | 89.9% | 87.0% | 79.5% |
| Baltimore city | 569,931 | 99.6% | 99.7% | 99.4% | | | | |
| Calvert County | 35,871 | 99.6% | 94.4% | 94.1% | 58,702 | 97.0% | 77.0% | 74.7% |
| Caroline County | 5,000 | 99.1% | 100.0% | 99.1% | 28,433 | 73.2% | 82.5% | 62.4% |
| Carroll County | 101,349 | 97.8% | 97.8% | 95.6% | 73,956 | 80.5% | 84.4% | 68.4% |
| Cecil County | 53,984 | 97.2% | 98.6% | 96.0% | 50,958 | 90.6% | 75.2% | 69.4% |
| Charles County | 121,260 | 99.6% | 95.8% | 95.6% | 48,842 | 85.9% | 67.5% | 58.8% |
| Dorchester County | 14,979 | 99.1% | 98.8% | 98.0% | 17,747 | 65.3% | 74.1% | 56.3% |
| Frederick County | 207,400 | 98.8% | 95.1% | 93.9% | 79,679 | 85.5% | 73.4% | 65.0% |
| Garrett County | 4,416 | 98.9% | 96.9% | 95.8% | 24,163 | 62.7% | 60.1% | 41.0% |
| Harford County | 206,360 | 99.7% | 97.2% | 97.0% | 57,507 | 90.7% | 84.5% | 76.6% |
| Howard County | 293,702 | 99.8% | 99.7% | 99.6% | 41,709 | 96.2% | 84.5% | 81.8% |
| Kent County | 5,589 | 99.9% | 98.8% | 98.7% | 13,731 | 85.1% | 48.2% | 42.4% |
| Montgomery County | 1,023,429 | 99.8% | 95.1% | 94.9% | 29,092 | 95.3% | 63.1% | 60.2% |
| Prince George's County | 923,186 | 99.7% | 96.9% | 96.6% | 23,785 | 95.2% | 78.9% | 75.7% |
| Queen Anne's County | 21,109 | 98.9% | 90.0% | 89.1% | 30,602 | 83.7% | 70.7% | 58.8% |
| Somerset County | 10,083 | 98.5% | 97.8% | 96.4% | 14,463 | 63.8% | 55.6% | 37.2% |
| St. Mary's County | 48,848 | 97.1% | 96.8% | 95.3% | 66,029 | 88.0% | 73.2% | 64.9% |
| Talbot County | 18,211 | 100.0% | 98.1% | 98.1% | 19,721 | 79.1% | 48.1% | 41.2% |
| Washington County | 105,220 | 93.1% | 99.9% | 93.1% | 50,370 | 84.2% | 85.0% | 73.7% |
| Wicomico County | 75,800 | 99.2% | 99.4% | 98.7% | 28,864 | 78.3% | 79.9% | 65.6% |
| Worcester County | 32,177 | 99.5% | 91.0% | 90.7% | 21,689 | 68.9% | 74.8% | 58.1% |
| Massachusetts | 6,355,065 | 98.9% | 95.0% | 94.0% | 626,909 | 96.0% | 62.5% | 60.5% |
| Barnstable County | 226,371 | 99.6% | 85.9% | 85.7% | 6,086 | 94.3% | 77.2% | 73.0% |
| Berkshire County | 83,002 | 94.0% | 86.7% | 81.3% | 44,857 | 88.2% | 51.4% | 45.6% |
| Bristol County | 516,596 | 99.7% | 95.7% | 95.5% | 63,472 | 98.6% | 74.4% | 73.6% |
| Dukes County | 14,140 | 99.7% | 73.9% | 73.7% | 6,728 | 93.4% | 39.8% | 36.6% |
| Essex County | 764,734 | 99.8% | 95.8% | 95.6% | 42,031 | 98.8% | 70.8% | 70.1% |
| Franklin County | 31,689 | 99.1% | 84.5% | 83.7% | 39,205 | 92.0% | 48.9% | 46.0% |
| Hampden County | 416,511 | 98.8% | 96.4% | 95.3% | 44,530 | 96.9% | 63.3% | 61.5% |
| Hampshire County | 111,271 | 98.6% | 97.0% | 95.6% | 51,317 | 95.8% | 72.0% | 69.2% |
| Middlesex County | 1,558,677 | 99.7% | 96.1% | 95.8% | 58,428 | 98.8% | 60.5% | 59.8% |
| Nantucket County | 12,044 | 99.8% | 62.2% | 62.0% | 2,377 | 97.6% | 34.8% | 34.6% |
| Norfolk County | 710,431 | 99.4% | 94.8% | 94.2% | 15,100 | 98.8% | 81.1% | 80.2% |
| Plymouth County | 465,915 | 99.5% | 90.4% | 90.0% | 67,154 | 98.5% | 69.3% | 68.4% |
| Suffolk County | 766,380 | 99.8% | 99.0% | 98.9% | 1 | 0.0% | 100.0% | 0.0% |
| Worcester County | 677,304 | 94.1% | 94.0% | 88.5% | 185,623 | 95.2% | 56.8% | 54.3% |
| Michigan | 7,322,557 | 98.2% | 97.3% | 95.7% | 2,711,556 | 70.5% | 63.9% | 48.1% |
| Alcona County | 757 | 96.9% | 31.4% | 30.7% | 9,660 | 42.5% | 21.9% | 7.5% |
| Alger County | | | | | 8,807 | 57.6% | 39.5% | 30.2% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Allegan County | 38,365 | 95.1% | 89.3% | 85.3% | 82,845 | 51.5% | 64.8% | 36.6% |
| Alpena County | 15,396 | 99.5% | 91.6% | 91.2% | 13,451 | 99.5% | 35.6% | 35.4% |
| Antrim County | | | | | 24,249 | 72.3% | 51.8% | 40.6% |
| Arenac County | 2,066 | 92.1% | 54.0% | 48.0% | 13,023 | 46.7% | 35.6% | 15.3% |
| Baraga County | | | | | 8,277 | 72.1% | 34.2% | 24.3% |
| Barry County | 8,042 | 86.5% | 89.0% | 82.9% | 55,512 | 58.8% | 53.5% | 32.4% |
| Bay County | 73,083 | 96.1% | 99.7% | 95.9% | 29,738 | 55.1% | 89.7% | 53.0% |
| Benzie County | 2,650 | 92.6% | 70.2% | 64.7% | 15,647 | 62.6% | 47.4% | 33.3% |
| Berrien County | 106,293 | 98.5% | 90.4% | 89.3% | 46,607 | 88.3% | 66.8% | 59.9% |
| Branch County | 13,504 | 97.7% | 95.4% | 93.3% | 31,027 | 60.5% | 41.9% | 31.1% |
| Calhoun County | 89,003 | 96.7% | 93.7% | 90.9% | 44,286 | 67.1% | 54.7% | 42.4% |
| Cass County | 13,137 | 97.9% | 69.4% | 67.5% | 38,266 | 85.8% | 49.4% | 42.2% |
| Charlevoix County | 7,905 | 92.6% | 67.5% | 62.0% | 18,388 | 88.0% | 53.0% | 48.1% |
| Cheboygan County | 5,325 | 90.8% | 90.4% | 82.8% | 20,615 | 55.6% | 42.4% | 26.3% |
| Chippewa County | 17,579 | 77.7% | 90.7% | 69.5% | 18,714 | 35.4% | 28.7% | 14.9% |
| Clare County | 3,912 | 91.0% | 78.2% | 69.5% | 27,440 | 69.7% | 48.2% | 39.0% |
| Clinton County | 37,467 | 93.9% | 100.0% | 93.9% | 42,281 | 76.7% | 82.1% | 62.7% |
| Crawford County | 45 | 91.1% | 57.7% | 48.8% | 13,446 | 52.3% | 48.8% | 33.0% |
| Delta County | 20,938 | 95.0% | 84.9% | 81.0% | 15,803 | 57.9% | 33.0% | 22.1% |
| Dickinson County | 16,654 | 93.9% | 94.6% | 88.8% | 9,220 | 49.0% | 36.3% | 22.8% |
| Eaton County | 66,246 | 97.5% | 99.0% | 96.5% | 42,746 | 63.4% | 76.9% | 52.0% |
| Emmet County | 12,482 | 85.8% | 81.6% | 69.5% | 21,681 | 88.7% | 38.8% | 34.4% |
| Genesee County | 328,049 | 98.7% | 99.8% | 98.6% | 73,934 | 84.1% | 95.9% | 81.8% |
| Gladwin County | | | | | 25,728 | 71.6% | 42.2% | 35.9% |
| Gogebic County | 5,111 | 94.1% | 88.0% | 82.4% | 9,208 | 60.4% | 68.1% | 51.2% |
| Grand Traverse County | 54,575 | 93.3% | 61.3% | 56.8% | 41,889 | 76.2% | 51.7% | 42.2% |
| Gratiot County | 15,608 | 99.9% | 90.2% | 90.2% | 25,492 | 97.4% | 59.7% | 59.0% |
| Hillsdale County | 10,265 | 98.4% | 90.1% | 88.9% | 35,497 | 85.2% | 51.2% | 46.5% |
| Houghton County | 19,694 | 93.7% | 93.3% | 87.2% | 17,341 | 60.2% | 48.1% | 36.4% |
| Huron County | | | | | 31,248 | 59.5% | 40.0% | 26.8% |
| Ingham County | 238,867 | 97.5% | 100.0% | 97.5% | 45,241 | 70.2% | 84.5% | 62.1% |
| Ionia County | 24,787 | 97.6% | 99.6% | 97.3% | 42,022 | 84.0% | 78.2% | 65.4% |
| Iosco County | 12,980 | 93.8% | 74.0% | 69.4% | 12,541 | 54.3% | 35.6% | 20.9% |
| Iron County | | | | | 11,622 | 53.4% | 52.8% | 43.0% |
| Isabella County | 29,841 | 99.8% | 99.2% | 99.0% | 34,606 | 89.5% | 49.3% | 45.7% |
| Jackson County | 83,712 | 89.0% | 99.9% | 88.9% | 76,354 | 72.8% | 73.0% | 54.7% |
| Kalamazoo County | 203,038 | 97.1% | 90.7% | 88.0% | 58,135 | 92.6% | 60.3% | 56.8% |
| Kalkaska County | | | | | 18,182 | 47.2% | 42.8% | 23.8% |
| Kent County | 551,643 | 98.2% | 99.4% | 97.7% | 107,440 | 82.2% | 81.5% | 67.8% |
| Keweenaw County | | | | | 2,180 | 47.0% | 40.2% | 34.6% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Lake County | | | | | 12,594 | 32.4% | 43.9% | 16.7% |
| Lapeer County | 13,209 | 86.9% | 99.9% | 86.8% | 75,571 | 56.7% | 80.5% | 48.2% |
| Leelanau County | 2,788 | 93.4% | 18.7% | 17.6% | 20,082 | 66.0% | 38.2% | 26.0% |
| Lenawee County | 41,160 | 99.6% | 89.9% | 89.6% | 57,407 | 95.3% | 59.8% | 57.9% |
| Livingston County | 118,590 | 98.1% | 96.0% | 94.3% | 77,571 | 77.1% | 84.7% | 65.9% |
| Luce County | | | | | 5,330 | 53.3% | 24.7% | 17.5% |
| Mackinac County | 2,702 | 89.1% | 81.5% | 73.1% | 8,239 | 43.9% | 32.6% | 17.6% |
| Macomb County | 845,553 | 99.8% | 99.7% | 99.5% | 28,642 | 75.2% | 93.0% | 71.3% |
| Manistee County | 8,191 | 93.6% | 73.7% | 68.1% | 17,096 | 38.0% | 36.4% | 15.9% |
| Marquette County | 36,200 | 94.8% | 86.9% | 82.6% | 30,461 | 61.6% | 43.8% | 34.7% |
| Mason County | 11,802 | 90.3% | 88.1% | 80.5% | 17,607 | 39.3% | 51.0% | 23.2% |
| Mecosta County | 8,935 | 98.7% | 94.2% | 93.0% | 31,785 | 91.6% | 42.8% | 40.9% |
| Menominee County | 8,549 | 94.4% | 93.8% | 89.7% | 14,717 | 31.1% | 35.0% | 17.2% |
| Midland County | 46,886 | 95.2% | 99.7% | 94.9% | 36,788 | 61.4% | 84.4% | 55.0% |
| Missaukee County | | | | | 15,213 | 33.2% | 44.4% | 16.7% |
| Monroe County | 96,257 | 98.7% | 96.7% | 95.5% | 59,352 | 80.7% | 87.7% | 71.2% |
| Montcalm County | 10,061 | 99.9% | 100.0% | 99.9% | 57,372 | 96.6% | 67.3% | 65.6% |
| Montmorency County | | | | | 9,569 | 57.2% | 27.9% | 17.6% |
| Muskegon County | 130,331 | 97.9% | 81.8% | 80.0% | 46,234 | 68.4% | 49.2% | 33.0% |
| Newaygo County | 5,170 | 99.4% | 94.5% | 94.0% | 45,716 | 61.2% | 40.9% | 25.9% |
| Oakland County | 1,197,505 | 99.4% | 99.4% | 98.8% | 71,926 | 90.4% | 94.3% | 85.8% |
| Oceana County | | | | | 26,973 | 76.6% | 54.0% | 43.6% |
| Ogemaw County | | | | | 20,970 | 63.4% | 43.7% | 30.9% |
| Ontonagon County | | | | | 5,863 | 58.5% | 39.8% | 29.2% |
| Osceola County | | | | | 23,274 | 72.2% | 66.7% | 52.4% |
| Oscoda County | | | | | 8,404 | 60.2% | 32.5% | 26.0% |
| Otsego County | 8,516 | 95.0% | 80.0% | 77.1% | 17,128 | 55.1% | 44.4% | 28.5% |
| Ottawa County | 237,228 | 97.3% | 92.6% | 90.2% | 63,645 | 74.0% | 80.0% | 58.4% |
| Presque Isle County | | | | | 13,361 | 57.4% | 40.0% | 29.1% |
| Roscommon County | 13,368 | 95.6% | 54.8% | 51.8% | 10,340 | 71.1% | 59.0% | 41.8% |
| Saginaw County | 125,077 | 96.0% | 100.0% | 96.0% | 63,253 | 71.6% | 89.7% | 65.3% |
| Sanilac County | 2,717 | 88.1% | 45.0% | 34.5% | 37,940 | 47.5% | 26.4% | 15.7% |
| Schoolcraft County | | | | | 8,188 | 51.0% | 42.8% | 30.6% |
| Shiawassee County | 27,211 | 95.3% | 96.3% | 92.2% | 40,811 | 52.9% | 94.1% | 51.5% |
| St. Clair County | 97,029 | 98.9% | 94.8% | 93.8% | 63,122 | 50.0% | 84.6% | 43.3% |
| St. Joseph County | 21,842 | 95.9% | 95.7% | 91.8% | 39,032 | 94.4% | 52.5% | 49.7% |
| Tuscola County | 5,365 | 91.9% | 87.4% | 80.3% | 47,580 | 63.5% | 34.0% | 22.7% |
| Van Buren County | 16,479 | 89.8% | 85.0% | 76.3% | 59,213 | 64.2% | 50.0% | 32.9% |
| Washtenaw County | 301,309 | 96.4% | 99.9% | 96.4% | 65,067 | 80.4% | 91.0% | 74.5% |
| Wayne County | 1,741,200 | 99.4% | 99.7% | 99.2% | 15,843 | 94.1% | 86.1% | 82.2% |
| Wexford County | 12,308 | 92.8% | 82.4% | 76.6% | 21,888 | 44.6% | 50.2% | 26.1% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Minnesota | 4,083,777 | 99.2% | 98.0% | 97.3% | 1,633,407 | 81.6% | 65.7% | 55.5% |
| Aitkin County | | | | | 16,126 | 69.4% | 48.5% | 38.5% |
| Anoka County | 309,652 | 99.5% | 98.8% | 98.4% | 59,212 | 86.6% | 87.2% | 75.3% |
| Becker County | 10,276 | 99.0% | 75.9% | 75.3% | 25,095 | 73.6% | 39.2% | 31.4% |
| Beltrami County | 15,223 | 100.0% | 89.6% | 89.6% | 31,576 | 98.8% | 37.4% | 37.3% |
| Benton County | 22,751 | 95.0% | 100.0% | 95.0% | 18,712 | 80.2% | 86.9% | 68.5% |
| Big Stone County | | | | | 5,144 | 98.9% | 24.3% | 24.0% |
| Blue Earth County | 44,685 | 97.8% | 95.3% | 93.1% | 24,946 | 95.3% | 60.5% | 57.6% |
| Brown County | 13,431 | 99.9% | 83.3% | 83.3% | 12,292 | 88.4% | 60.7% | 57.3% |
| Carlton County | 13,055 | 99.1% | 73.0% | 72.5% | 23,653 | 39.3% | 50.8% | 24.6% |
| Carver County | 82,827 | 99.6% | 99.8% | 99.5% | 27,207 | 96.6% | 96.5% | 93.4% |
| Cass County | | | | | 31,274 | 63.7% | 55.3% | 39.9% |
| Chippewa County | 5,248 | 100.0% | 83.3% | 83.3% | 7,036 | 98.3% | 53.7% | 52.9% |
| Chisago County | 19,811 | 97.0% | 97.7% | 94.8% | 38,177 | 65.3% | 89.5% | 60.8% |
| Clay County | 48,609 | 100.0% | 99.2% | 99.2% | 17,320 | 97.3% | 64.5% | 63.6% |
| Clearwater County | | | | | 8,649 | 99.1% | 53.2% | 52.9% |
| Cook County | | | | | 5,708 | 95.2% | 54.0% | 53.2% |
| Cottonwood County | | | | | 11,356 | 88.6% | 76.5% | 71.1% |
| Crow Wing County | 20,717 | 99.6% | 95.3% | 94.9% | 47,231 | 83.2% | 60.2% | 52.7% |
| Dakota County | 420,676 | 99.4% | 99.4% | 98.8% | 22,665 | 96.0% | 96.6% | 93.0% |
| Dodge County | 7,697 | 100.0% | 93.4% | 93.4% | 13,284 | 99.8% | 59.6% | 59.6% |
| Douglas County | 19,301 | 96.4% | 78.9% | 76.2% | 20,367 | 73.2% | 34.5% | 27.5% |
| Faribault County | | | | | 13,926 | 86.2% | 49.2% | 43.1% |
| Fillmore County | | | | | 21,414 | 85.9% | 63.4% | 58.6% |
| Freeborn County | 17,814 | 99.6% | 96.6% | 96.3% | 12,904 | 99.1% | 34.4% | 34.0% |
| Goodhue County | 15,741 | 99.9% | 83.8% | 83.8% | 32,272 | 91.1% | 68.4% | 65.7% |
| Grant County | | | | | 6,136 | 82.2% | 39.1% | 36.6% |
| Hennepin County | 1,229,360 | 99.6% | 99.8% | 99.4% | 30,761 | 85.7% | 99.1% | 84.9% |
| Houston County | 5,468 | 100.0% | 80.5% | 80.5% | 13,332 | 78.1% | 36.2% | 33.1% |
| Hubbard County | | | | | 21,960 | 92.2% | 56.1% | 52.7% |
| Isanti County | 17,136 | 99.3% | 99.7% | 99.0% | 25,591 | 33.1% | 73.2% | 28.4% |
| Itasca County | 10,481 | 100.0% | 90.8% | 90.8% | 34,724 | 90.6% | 53.6% | 49.9% |
| Jackson County | | | | | 9,893 | 95.5% | 56.6% | 54.1% |
| Kanabec County | | | | | 16,463 | 27.4% | 59.8% | 25.1% |
| Kandiyohi County | 24,852 | 97.6% | 98.3% | 95.9% | 18,987 | 93.2% | 69.4% | 64.9% |
| Kittson County | | | | | 4,059 | 95.2% | 33.9% | 33.9% |
| Koochiching County | 6,622 | 99.2% | 76.0% | 75.4% | 5,222 | 62.5% | 21.5% | 15.9% |
| Lac qui Parle County | | | | | 6,689 | 100.0% | 43.6% | 43.6% |
| Lake County | | | | | 10,939 | 90.6% | 75.1% | 71.4% |
| Lake of the Woods County | | | | | 3,871 | 80.9% | 57.5% | 53.2% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Le Sueur County | 4,029 | 99.7% | 97.6% | 97.3% | 25,124 | 98.2% | 74.8% | 74.0% |
| Lincoln County | | | | | 5,580 | 99.0% | 41.6% | 41.0% |
| Lyon County | 13,391 | 100.0% | 98.3% | 98.3% | 11,871 | 99.7% | 55.0% | 54.9% |
| Mahnomen County | | | | | 5,328 | 71.3% | 38.0% | 32.8% |
| Marshall County | | | | | 8,861 | 94.5% | 45.2% | 44.7% |
| Martin County | 8,106 | 100.0% | 81.2% | 81.2% | 11,544 | 97.5% | 48.5% | 48.2% |
| McLeod County | 20,281 | 99.4% | 99.1% | 98.5% | 16,433 | 94.9% | 94.7% | 90.5% |
| Meeker County | 6,652 | 100.0% | 100.0% | 100.0% | 16,844 | 90.0% | 72.8% | 65.7% |
| Mille Lacs County | 4,801 | 99.7% | 100.0% | 99.7% | 22,479 | 77.8% | 71.8% | 58.6% |
| Morrison County | 9,392 | 99.8% | 91.4% | 91.2% | 24,854 | 75.3% | 53.3% | 39.9% |
| Mower County | 25,313 | 100.0% | 96.0% | 96.0% | 14,827 | 96.4% | 40.7% | 40.2% |
| Murray County | | | | | 8,060 | 98.8% | 61.2% | 60.8% |
| Nicollet County | 25,782 | 99.5% | 95.1% | 94.7% | 8,659 | 73.6% | 48.4% | 32.9% |
| Nobles County | 13,661 | 99.9% | 100.0% | 99.9% | 8,286 | 89.4% | 46.3% | 40.0% |
| Norman County | | | | | 6,377 | 87.6% | 50.1% | 46.8% |
| Olmsted County | 135,150 | 99.5% | 100.0% | 99.5% | 28,870 | 96.5% | 85.7% | 83.9% |
| Otter Tail County | 13,183 | 96.5% | 81.8% | 78.6% | 47,336 | 70.1% | 40.3% | 31.5% |
| Pennington County | 8,772 | 100.0% | 99.0% | 99.0% | 5,073 | 96.5% | 33.3% | 31.8% |
| Pine County | | | | | 29,446 | 48.7% | 57.6% | 37.6% |
| Pipestone County | | | | | 9,355 | 99.0% | 59.8% | 59.5% |
| Polk County | 16,371 | 99.5% | 98.2% | 97.8% | 14,360 | 98.2% | 31.2% | 31.1% |
| Pope County | 4,262 | 96.0% | 65.7% | 61.7% | 7,169 | 89.0% | 16.7% | 15.4% |
| Ramsey County | 536,320 | 99.6% | 99.8% | 99.4% | 93 | 81.7% | 95.6% | 77.4% |
| Red Lake County | | | | | 3,874 | 94.7% | 62.2% | 61.7% |
| Redwood County | 4,595 | 99.8% | 99.4% | 99.3% | 10,766 | 72.1% | 35.6% | 28.6% |
| Renville County | | | | | 14,525 | 97.8% | 61.3% | 60.6% |
| Rice County | 45,157 | 98.6% | 99.3% | 98.0% | 22,536 | 91.6% | 81.7% | 75.3% |
| Rock County | 4,764 | 99.9% | 9.0% | 9.0% | 4,773 | 95.3% | 36.7% | 34.7% |
| Roseau County | | | | | 15,292 | 94.7% | 61.3% | 58.8% |
| Scott County | 125,853 | 99.8% | 99.7% | 99.6% | 28,667 | 94.4% | 96.9% | 91.8% |
| Sherburne County | 49,029 | 97.4% | 100.0% | 97.4% | 51,795 | 81.1% | 91.6% | 74.9% |
| Sibley County | | | | | 14,955 | 94.6% | 73.1% | 71.2% |
| St. Louis County | 121,161 | 96.4% | 97.8% | 94.3% | 78,371 | 52.6% | 68.4% | 42.3% |
| Stearns County | 97,952 | 97.0% | 99.8% | 96.9% | 62,453 | 85.3% | 88.1% | 75.8% |
| Steele County | 26,311 | 100.0% | 77.3% | 77.3% | 11,087 | 99.9% | 48.5% | 48.4% |
| Stevens County | 5,030 | 100.0% | 31.9% | 31.9% | 4,607 | 96.1% | 15.8% | 15.6% |
| Swift County | | | | | 9,755 | 99.2% | 27.3% | 27.2% |
| Todd County | 157 | 100.0% | 91.0% | 91.0% | 25,381 | 63.6% | 52.5% | 39.6% |
| Traverse County | | | | | 3,275 | 82.2% | 45.4% | 43.2% |
| Wabasha County | 3,814 | 100.0% | 94.2% | 94.2% | 17,844 | 92.3% | 50.1% | 49.4% |
| Wadena County | 4,010 | 99.9% | 51.7% | 51.6% | 10,297 | 99.0% | 31.1% | 30.9% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Waseca County | 9,034 | 100.0% | 97.2% | 97.2% | 9,859 | 99.9% | 59.4% | 59.4% |
| Washington County | 238,091 | 98.7% | 99.3% | 98.0% | 37,821 | 70.3% | 87.2% | 62.3% |
| Watonwan County | | | | | 11,075 | 99.9% | 76.0% | 76.0% |
| Wilkin County | 3,205 | 99.9% | 99.9% | 99.9% | 3,145 | 68.6% | 26.4% | 16.9% |
| Winona County | 29,391 | 99.9% | 54.4% | 54.4% | 20,087 | 92.8% | 47.7% | 46.1% |
| Wright County | 89,324 | 98.5% | 100.0% | 98.5% | 58,679 | 69.2% | 96.8% | 68.1% |
| Yellow Medicine County | | | | | 9,486 | 99.5% | 56.2% | 56.0% |
| Mississippi | 1,353,531 | 97.5% | 94.5% | 92.6% | 1,586,526 | 63.0% | 49.5% | 34.8% |
| Adams County | 18,027 | 99.6% | 92.8% | 92.8% | 10,381 | 39.5% | 36.3% | 14.4% |
| Alcorn County | 12,290 | 100.0% | 91.6% | 91.6% | 21,914 | 99.8% | 47.2% | 47.1% |
| Amite County | | | | | 12,619 | 0.5% | 30.2% | 0.5% |
| Attala County | 6,589 | 97.0% | 93.9% | 91.1% | 10,920 | 30.3% | 35.0% | 14.4% |
| Benton County | | | | | 7,550 | 37.9% | 35.9% | 12.5% |
| Bolivar County | 13,732 | 98.8% | 68.7% | 68.4% | 15,638 | 62.9% | 39.8% | 31.1% |
| Calhoun County | | | | | 12,781 | 83.7% | 55.6% | 52.8% |
| Carroll County | | | | | 9,731 | 85.9% | 34.7% | 28.7% |
| Chickasaw County | | | | | 16,812 | 85.4% | 51.6% | 45.4% |
| Choctaw County | | | | | 8,037 | 57.3% | 17.8% | 10.5% |
| Claiborne County | | | | | 8,805 | 5.3% | 56.6% | 1.7% |
| Clarke County | | | | | 15,271 | 71.1% | 49.9% | 40.9% |
| Clay County | 8,173 | 99.2% | 99.6% | 98.9% | 10,207 | 86.8% | 31.6% | 29.5% |
| Coahoma County | 13,573 | 99.7% | 99.0% | 98.8% | 6,624 | 25.6% | 41.1% | 15.2% |
| Copiah County | 4,873 | 87.3% | 99.6% | 87.0% | 22,846 | 15.7% | 52.7% | 10.9% |
| Covington County | | | | | 18,098 | 11.0% | 44.1% | 6.3% |
| DeSoto County | 149,067 | 99.3% | 98.2% | 97.6% | 42,656 | 76.2% | 77.6% | 61.7% |
| Forrest County | 49,683 | 99.5% | 99.4% | 99.0% | 28,427 | 75.0% | 62.7% | 48.9% |
| Franklin County | | | | | 7,642 | 35.3% | 42.6% | 25.0% |
| George County | | | | | 25,206 | 48.3% | 35.6% | 18.1% |
| Greene County | | | | | 13,552 | 4.1% | 37.5% | 1.0% |
| Grenada County | 10,036 | 99.8% | 81.3% | 81.2% | 11,052 | 63.2% | 32.4% | 20.6% |
| Hancock County | 28,468 | 99.7% | 88.0% | 87.7% | 17,626 | 97.3% | 27.4% | 25.6% |
| Harrison County | 169,328 | 99.9% | 99.3% | 99.2% | 41,716 | 84.0% | 53.8% | 49.2% |
| Hinds County | 180,011 | 99.2% | 100.0% | 99.2% | 37,719 | 41.9% | 78.0% | 39.3% |
| Holmes County | | | | | 16,121 | 66.1% | 63.7% | 50.5% |
| Humphreys County | | | | | 7,333 | 73.1% | 62.3% | 52.5% |
| Issaquena County | | | | | 1,273 | 0.0% | 27.2% | 0.0% |
| Itawamba County | | | | | 23,903 | 91.9% | 50.7% | 48.0% |
| Jackson County | 99,804 | 99.5% | 98.1% | 97.8% | 45,171 | 77.3% | 61.0% | 47.6% |
| Jasper County | | | | | 16,167 | 43.7% | 30.5% | 17.0% |
| Jefferson County | | | | | 7,087 | 0.0% | 23.4% | 0.0% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Jefferson Davis County | | | | | 11,088 | 23.2% | 37.2% | 8.3% |
| Jones County | 24,911 | 99.1% | 87.7% | 87.2% | 41,658 | 86.0% | 26.2% | 21.8% |
| Kemper County | | | | | 8,654 | 72.1% | 45.0% | 34.0% |
| Lafayette County | 34,292 | 91.5% | 97.8% | 89.6% | 23,323 | 97.3% | 45.6% | 44.9% |
| Lamar County | 29,931 | 99.3% | 99.7% | 99.1% | 35,852 | 45.9% | 57.3% | 37.9% |
| Lauderdale County | 32,419 | 99.2% | 93.7% | 93.0% | 38,485 | 93.7% | 63.6% | 60.1% |
| Lawrence County | | | | | 11,713 | 2.3% | 41.7% | 1.7% |
| Leake County | | | | | 21,135 | 27.7% | 61.9% | 26.6% |
| Lee County | 39,920 | 99.7% | 62.6% | 62.5% | 43,039 | 96.1% | 50.1% | 48.6% |
| Leflore County | 17,668 | 88.7% | 89.8% | 79.5% | 8,902 | 64.4% | 57.0% | 46.3% |
| Lincoln County | 10,120 | 99.1% | 73.1% | 72.8% | 24,597 | 17.4% | 26.6% | 8.0% |
| Lowndes County | 25,928 | 99.9% | 94.7% | 94.7% | 31,675 | 98.7% | 53.7% | 53.3% |
| Madison County | 82,479 | 98.7% | 98.8% | 97.6% | 28,634 | 59.2% | 76.2% | 53.1% |
| Marion County | 6,088 | 6.6% | 52.0% | 0.1% | 17,962 | 66.5% | 12.0% | 10.1% |
| Marshall County | 5,630 | 78.7% | 100.0% | 78.7% | 28,480 | 57.2% | 53.5% | 34.8% |
| Monroe County | 5,894 | 96.6% | 95.0% | 91.7% | 27,683 | 84.4% | 45.2% | 37.6% |
| Montgomery County | | | | | 9,530 | 81.5% | 58.3% | 50.2% |
| Neshoba County | 7,124 | 88.5% | 83.4% | 74.3% | 21,549 | 25.4% | 42.1% | 14.6% |
| Newton County | | | | | 21,029 | 38.8% | 57.7% | 30.4% |
| Noxubee County | | | | | 9,990 | 31.9% | 61.3% | 13.9% |
| Oktibbeha County | 31,997 | 92.0% | 91.3% | 84.5% | 19,430 | 95.7% | 40.8% | 39.2% |
| Panola County | 6,272 | 100.0% | 100.0% | 100.0% | 26,389 | 87.1% | 40.6% | 36.2% |
| Pearl River County | 16,572 | 98.4% | 69.9% | 68.3% | 40,689 | 80.5% | 35.2% | 23.0% |
| Perry County | | | | | 11,368 | 66.9% | 20.3% | 16.8% |
| Pike County | 14,614 | 100.0% | 88.8% | 88.8% | 25,030 | 43.8% | 37.0% | 21.8% |
| Pontotoc County | | | | | 31,389 | 76.7% | 59.7% | 47.1% |
| Prentiss County | 5,974 | 100.0% | 98.4% | 98.4% | 18,818 | 97.9% | 32.4% | 32.3% |
| Quitman County | | | | | 5,701 | 74.2% | 69.0% | 63.1% |
| Rankin County | 103,180 | 97.8% | 99.5% | 97.4% | 55,799 | 70.8% | 80.8% | 62.8% |
| Scott County | | | | | 27,707 | 46.3% | 63.2% | 39.9% |
| Sharkey County | | | | | 3,488 | 62.6% | 55.7% | 50.8% |
| Simpson County | | | | | 25,587 | 8.3% | 60.6% | 6.7% |
| Smith County | | | | | 14,092 | 34.5% | 40.8% | 17.5% |
| Stone County | | | | | 18,669 | 43.6% | 48.2% | 28.3% |
| Sunflower County | 9,125 | 89.2% | 90.1% | 81.3% | 15,686 | 55.2% | 28.6% | 22.9% |
| Tallahatchie County | | | | | 12,035 | 56.9% | 65.3% | 45.3% |
| Tate County | 6,659 | 98.9% | 100.0% | 98.9% | 21,637 | 65.7% | 46.8% | 35.4% |
| Tippah County | | | | | 21,431 | 96.2% | 45.7% | 44.1% |
| Tishomingo County | | | | | 18,619 | 99.4% | 57.5% | 57.0% |
| Tunica County | | | | | 9,458 | 57.7% | 54.0% | 42.8% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Union County | 6,908 | 95.1% | 91.4% | 86.6% | 21,217 | 71.0% | 45.8% | 34.7% |
| Walthall County | | | | | 13,761 | 0.5% | 28.5% | 0.3% |
| Warren County | 24,336 | 98.2% | 86.1% | 85.2% | 18,313 | 57.4% | 56.6% | 38.2% |
| Washington County | 27,678 | 87.6% | 81.8% | 73.0% | 14,836 | 66.9% | 47.4% | 35.2% |
| Wayne County | | | | | 19,681 | 91.0% | 44.1% | 42.4% |
| Webster County | | | | | 9,993 | 91.6% | 46.7% | 44.8% |
| Wilkinson County | | | | | 8,143 | 0.8% | 27.6% | 0.8% |
| Winston County | | | | | 17,543 | 62.4% | 42.5% | 34.9% |
| Yalobusha County | | | | | 12,364 | 54.9% | 48.7% | 37.5% |
| Yazoo County | 14,158 | 75.7% | 70.8% | 59.8% | 11,790 | 14.0% | 22.6% | 8.7% |
| Missouri | 4,260,047 | 98.2% | 98.7% | 97.0% | 1,917,910 | 68.5% | 66.0% | 48.4% |
| Adair County | 16,742 | 100.0% | 100.0% | 100.0% | 8,423 | 68.2% | 39.7% | 27.8% |
| Andrew County | 7,147 | 100.0% | 90.4% | 90.4% | 10,856 | 81.6% | 66.6% | 54.2% |
| Atchison County | | | | | 5,182 | 46.7% | 9.0% | 2.4% |
| Audrain County | 11,303 | 96.2% | 97.2% | 93.5% | 13,131 | 44.5% | 55.2% | 33.1% |
| Barry County | 6,144 | 77.5% | 98.8% | 76.7% | 28,782 | 66.8% | 64.6% | 43.3% |
| Barton County | | | | | 11,694 | 32.8% | 66.2% | 21.0% |
| Bates County | | | | | 16,177 | 58.3% | 74.0% | 52.0% |
| Benton County | | | | | 20,224 | 35.6% | 56.6% | 18.4% |
| Bollinger County | | | | | 10,518 | 5.1% | 50.2% | 2.6% |
| Boone County | 144,213 | 99.7% | 89.5% | 89.3% | 43,477 | 63.6% | 54.3% | 40.0% |
| Buchanan County | 71,454 | 98.7% | 99.8% | 98.5% | 11,457 | 93.4% | 70.1% | 65.9% |
| Butler County | 20,443 | 98.7% | 97.8% | 96.6% | 21,736 | 45.7% | 55.6% | 30.2% |
| Caldwell County | | | | | 8,933 | 44.2% | 77.0% | 39.1% |
| Callaway County | 17,106 | 96.4% | 98.4% | 94.9% | 27,656 | 98.7% | 57.0% | 56.2% |
| Camden County | 18,884 | 100.0% | 96.3% | 96.3% | 24,884 | 99.9% | 59.3% | 59.3% |
| Cape Girardeau County | 56,309 | 95.9% | 98.9% | 94.8% | 26,590 | 62.7% | 66.5% | 47.5% |
| Carroll County | | | | | 8,423 | 67.6% | 70.4% | 53.6% |
| Carter County | | | | | 5,268 | 7.9% | 56.4% | 6.7% |
| Cass County | 77,374 | 99.7% | 99.8% | 99.6% | 33,020 | 71.4% | 92.1% | 67.4% |
| Cedar County | | | | | 14,601 | 74.2% | 47.0% | 39.4% |
| Chariton County | | | | | 7,386 | 66.6% | 74.1% | 54.6% |
| Christian County | 53,685 | 93.9% | 100.0% | 93.9% | 39,429 | 59.3% | 88.3% | 56.5% |
| Clark County | | | | | 6,723 | 49.9% | 59.1% | 33.2% |
| Clay County | 235,755 | 98.9% | 99.8% | 98.7% | 21,278 | 81.7% | 94.8% | 77.7% |
| Clinton County | 5,182 | 100.0% | 100.0% | 100.0% | 16,146 | 80.0% | 79.4% | 68.6% |
| Cole County | 50,634 | 100.0% | 97.5% | 97.5% | 26,335 | 100.0% | 62.6% | 62.6% |
| Cooper County | 7,878 | 86.5% | 90.0% | 80.4% | 8,894 | 77.0% | 39.8% | 34.6% |
| Crawford County | 1,569 | 100.0% | 100.0% | 100.0% | 21,090 | 100.0% | 53.4% | 53.4% |
| Dade County | | | | | 7,660 | 51.7% | 47.4% | 33.6% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Dallas County | | | | | 17,626 | 46.5% | 58.2% | 36.0% |
| Daviess County | | | | | 8,435 | 63.0% | 62.7% | 42.6% |
| DeKalb County | 2,975 | 100.0% | 100.0% | 100.0% | 8,361 | 84.4% | 66.5% | 57.7% |
| Dent County | 4,714 | 100.0% | 79.5% | 79.5% | 9,753 | 100.0% | 30.0% | 30.0% |
| Douglas County | | | | | 11,975 | 38.0% | 29.3% | 17.2% |
| Dunklin County | 10,238 | 99.9% | 98.5% | 98.4% | 17,168 | 86.4% | 72.8% | 66.0% |
| Franklin County | 47,692 | 100.0% | 99.2% | 99.2% | 58,187 | 99.9% | 82.2% | 82.2% |
| Gasconade County | | | | | 14,768 | 100.0% | 65.7% | 65.7% |
| Gentry County | | | | | 6,253 | 92.1% | 70.2% | 67.4% |
| Greene County | 259,025 | 99.3% | 99.6% | 98.9% | 44,268 | 78.6% | 87.1% | 69.6% |
| Grundy County | 5,434 | 91.3% | 100.0% | 91.3% | 4,404 | 74.5% | 36.6% | 29.8% |
| Harrison County | | | | | 8,199 | 74.3% | 62.3% | 51.9% |
| Henry County | 8,953 | 93.3% | 100.0% | 93.3% | 13,485 | 6.0% | 76.2% | 6.0% |
| Hickory County | | | | | 8,630 | 19.7% | 53.0% | 13.4% |
| Holt County | | | | | 4,262 | 29.1% | 40.1% | 24.7% |
| Howard County | | | | | 10,168 | 75.6% | 47.2% | 41.1% |
| Howell County | 11,856 | 99.8% | 94.2% | 94.1% | 28,775 | 57.5% | 52.0% | 36.8% |
| Iron County | | | | | 9,414 | 100.0% | 51.9% | 51.9% |
| Jackson County | 685,810 | 98.9% | 99.9% | 98.8% | 30,721 | 57.9% | 96.2% | 57.4% |
| Jasper County | 94,624 | 95.7% | 98.1% | 93.9% | 29,451 | 54.8% | 75.9% | 43.8% |
| Jefferson County | 149,443 | 97.1% | 99.5% | 96.7% | 79,893 | 73.3% | 91.7% | 69.9% |
| Johnson County | 24,683 | 96.9% | 94.7% | 91.7% | 29,685 | 55.6% | 66.3% | 41.2% |
| Knox County | | | | | 3,776 | 29.4% | 10.3% | 1.5% |
| Laclede County | 14,810 | 100.0% | 57.8% | 57.8% | 21,503 | 99.9% | 33.4% | 33.4% |
| Lafayette County | 9,985 | 99.4% | 100.0% | 99.4% | 22,976 | 47.7% | 83.1% | 42.7% |
| Lawrence County | 11,011 | 86.5% | 98.3% | 84.9% | 27,672 | 52.6% | 74.1% | 43.0% |
| Lewis County | | | | | 9,891 | 51.9% | 69.7% | 44.2% |
| Lincoln County | 17,667 | 99.6% | 100.0% | 99.6% | 45,488 | 71.6% | 85.1% | 64.7% |
| Linn County | 3,867 | 96.6% | 96.8% | 93.5% | 7,953 | 81.1% | 69.4% | 59.1% |
| Livingston County | 8,951 | 91.4% | 91.5% | 91.4% | 5,451 | 55.5% | 53.6% | 27.4% |
| Macon County | 5,258 | 91.0% | 97.8% | 89.2% | 9,791 | 63.5% | 43.3% | 31.7% |
| Madison County | 5,034 | 99.3% | 100.0% | 99.3% | 7,719 | 46.0% | 49.6% | 33.2% |
| Maries County | | | | | 8,431 | 100.0% | 39.3% | 39.3% |
| Marion County | 17,365 | 95.6% | 99.2% | 95.0% | 11,073 | 63.2% | 75.0% | 53.2% |
| McDonald County | 28 | 100.0% | 82.1% | 82.1% | 23,560 | 26.0% | 64.9% | 21.6% |
| Mercer County | | | | | 3,437 | 92.2% | 49.7% | 47.8% |
| Miller County | 6,049 | 100.0% | 99.2% | 99.2% | 19,354 | 100.0% | 60.1% | 60.1% |
| Mississippi County | | | | | 11,688 | 90.7% | 86.5% | 78.2% |
| Moniteau County | | | | | 15,220 | 88.1% | 69.3% | 61.4% |
| Monroe County | | | | | 8,652 | 54.2% | 67.4% | 48.8% |
| Montgomery County | | | | | 11,470 | 64.9% | 63.7% | 45.5% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Morgan County | | | | | 21,785 | 100.0% | 57.8% | 57.8% |
| New Madrid County | 1,914 | 96.7% | 100.0% | 96.7% | 13,781 | 95.4% | 76.0% | 72.9% |
| Newton County | 22,028 | 95.7% | 99.3% | 95.1% | 37,983 | 56.0% | 78.7% | 47.9% |
| Nodaway County | 10,962 | 100.0% | 82.3% | 82.3% | 9,708 | 86.0% | 30.0% | 26.1% |
| Oregon County | | | | | 8,732 | 41.5% | 47.4% | 31.4% |
| Osage County | | | | | 13,399 | 100.0% | 55.1% | 55.1% |
| Ozark County | | | | | 8,940 | 3.6% | 36.7% | 1.0% |
| Pemiscot County | 4,957 | 99.8% | 98.9% | 98.8% | 9,884 | 96.2% | 54.6% | 52.0% |
| Perry County | 8,028 | 99.5% | 94.4% | 94.1% | 10,830 | 49.7% | 50.6% | 33.2% |
| Pettis County | 26,291 | 97.6% | 99.5% | 97.2% | 17,062 | 48.7% | 68.0% | 39.2% |
| Phelps County | 20,819 | 100.0% | 98.9% | 98.9% | 24,494 | 100.0% | 46.5% | 46.5% |
| Pike County | | | | | 17,664 | 75.7% | 64.6% | 58.5% |
| Platte County | 95,084 | 98.4% | 99.3% | 97.7% | 15,450 | 73.9% | 83.2% | 61.9% |
| Polk County | 10,573 | 99.4% | 99.6% | 99.0% | 22,120 | 59.9% | 52.9% | 39.3% |
| Pulaski County | 21,392 | 100.0% | 91.3% | 91.3% | 32,549 | 100.0% | 51.7% | 51.7% |
| Putnam County | | | | | 4,666 | 97.7% | 64.2% | 64.1% |
| Ralls County | 273 | 91.5% | 100.0% | 91.5% | 10,147 | 96.0% | 62.4% | 60.4% |
| Randolph County | 12,102 | 96.3% | 98.9% | 95.3% | 12,520 | 49.8% | 54.7% | 29.5% |
| Ray County | 5,966 | 99.9% | 100.0% | 99.9% | 17,141 | 55.1% | 83.1% | 50.5% |
| Reynolds County | | | | | 6,006 | 100.0% | 25.0% | 25.0% |
| Ripley County | | | | | 10,703 | 30.0% | 42.6% | 17.8% |
| Saline County | 13,097 | 100.0% | 99.8% | 99.8% | 9,910 | 56.7% | 67.2% | 46.7% |
| Schuyler County | | | | | 4,002 | 72.1% | 54.4% | 31.3% |
| Scotland County | | | | | 4,643 | 93.2% | 47.2% | 47.2% |
| Scott County | 20,445 | 96.5% | 91.6% | 88.4% | 17,395 | 95.5% | 77.6% | 74.1% |
| Shannon County | | | | | 7,193 | 100.0% | 51.5% | 51.5% |
| Shelby County | | | | | 5,982 | 44.8% | 70.1% | 38.9% |
| St. Charles County | 390,160 | 98.4% | 99.8% | 98.3% | 23,643 | 48.9% | 91.1% | 46.0% |
| St. Clair County | | | | | 9,576 | 29.3% | 38.6% | 11.8% |
| St. Francois County | 39,037 | 96.5% | 98.8% | 95.3% | 27,932 | 70.6% | 71.7% | 58.5% |
| St. Louis County | 976,861 | 98.4% | 99.9% | 98.4% | 13,553 | 57.8% | 84.0% | 54.2% |
| St. Louis city | 286,578 | 97.4% | 100.0% | 97.4% | | | | |
| Ste. Genevieve County | 5,006 | 95.2% | 98.5% | 93.7% | 13,638 | 59.9% | 59.2% | 41.2% |
| Stoddard County | 9,466 | 99.6% | 97.4% | 97.0% | 18,911 | 72.1% | 68.3% | 51.2% |
| Stone County | 5,603 | 58.8% | 79.8% | 53.0% | 26,533 | 17.7% | 63.7% | 15.3% |
| Sullivan County | | | | | 5,840 | 80.9% | 58.9% | 52.1% |
| Taney County | 35,431 | 94.9% | 86.0% | 81.7% | 21,390 | 62.7% | 61.6% | 43.7% |
| Texas County | 161 | 100.0% | 100.0% | 100.0% | 25,175 | 99.9% | 43.8% | 43.8% |
| Vernon County | 8,588 | 99.8% | 92.7% | 92.6% | 11,063 | 53.5% | 55.1% | 35.7% |
| Warren County | 9,801 | 99.6% | 96.9% | 96.7% | 27,459 | 45.7% | 77.2% | 42.0% |
| Washington County | | | | | 23,441 | 100.0% | 63.1% | 63.1% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Wayne County | | | | | 10,792 | 25.4% | 30.0% | 16.9% |
| Webster County | 7,809 | 99.7% | 93.5% | 93.3% | 32,526 | 42.4% | 56.2% | 35.4% |
| Worth County | | | | | 1,955 | 74.2% | 56.8% | 47.0% |
| Wright County | 4,321 | 100.0% | 95.9% | 95.9% | 14,835 | 99.9% | 39.4% | 39.4% |
| Montana | 596,115 | 94.8% | 95.2% | 90.4% | 526,752 | 52.8% | 66.9% | 39.2% |
| Beaverhead County | 4,523 | 88.7% | 95.6% | 84.4% | 5,196 | 52.8% | 44.0% | 20.9% |
| Big Horn County | | | | | 12,851 | 55.5% | 69.8% | 44.9% |
| Blaine County | | | | | 6,936 | 76.4% | 48.1% | 32.1% |
| Broadwater County | | | | | 7,793 | 29.2% | 56.4% | 20.8% |
| Carbon County | | | | | 11,179 | 31.9% | 75.7% | 29.2% |
| Carter County | | | | | 1,382 | 42.9% | 1.8% | 0.3% |
| Cascade County | 66,983 | 93.0% | 90.9% | 84.1% | 17,881 | 47.6% | 52.2% | 25.1% |
| Chouteau County | | | | | 5,898 | 87.4% | 39.6% | 39.0% |
| Custer County | 9,376 | 79.7% | 99.3% | 79.2% | 2,656 | 51.5% | 64.0% | 40.6% |
| Daniels County | | | | | 1,628 | 92.9% | 0.0% | 0.0% |
| Dawson County | 6,580 | 77.8% | 37.5% | 29.7% | 2,250 | 53.8% | 45.2% | 29.6% |
| Deer Lodge County | 6,753 | 96.2% | 100.0% | 96.2% | 2,757 | 44.9% | 69.7% | 32.7% |
| Fallon County | | | | | 3,011 | 68.4% | 26.5% | 19.1% |
| Fergus County | 6,196 | 84.2% | 100.0% | 84.2% | 5,467 | 56.6% | 49.4% | 25.6% |
| Flathead County | 53,672 | 93.7% | 92.2% | 86.3% | 58,142 | 41.2% | 79.4% | 35.3% |
| Gallatin County | 80,473 | 99.3% | 97.8% | 97.2% | 44,384 | 76.1% | 87.7% | 71.7% |
| Garfield County | | | | | 1,218 | 45.3% | 46.3% | 38.6% |
| Glacier County | | | | | 13,681 | 31.9% | 58.1% | 28.5% |
| Golden Valley County | | | | | 835 | 74.2% | 36.1% | 30.8% |
| Granite County | | | | | 3,502 | 5.8% | 69.1% | 4.1% |
| Hill County | 10,114 | 97.1% | 93.7% | 91.0% | 5,954 | 78.5% | 42.3% | 37.9% |
| Jefferson County | | | | | 12,826 | 37.6% | 75.2% | 29.7% |
| Judith Basin County | | | | | 2,105 | 88.0% | 48.2% | 44.0% |
| Lake County | 6,016 | 99.0% | 99.4% | 98.4% | 26,837 | 53.0% | 63.2% | 39.9% |
| Lewis and Clark County | 54,220 | 94.5% | 99.0% | 93.7% | 19,612 | 36.3% | 74.8% | 26.9% |
| Liberty County | | | | | 1,972 | 76.4% | 41.5% | 38.4% |
| Lincoln County | 4,743 | 100.0% | 100.0% | 100.0% | 16,782 | 45.7% | 54.5% | 33.1% |
| Madison County | | | | | 9,265 | 74.6% | 71.5% | 56.3% |
| McCone County | | | | | 1,709 | 48.8% | 46.4% | 37.2% |
| Meagher County | | | | | 2,013 | 84.5% | 74.7% | 70.9% |
| Mineral County | | | | | 5,058 | 10.5% | 78.7% | 10.5% |
| Missoula County | 90,195 | 96.1% | 92.5% | 88.8% | 30,846 | 47.5% | 70.2% | 36.0% |
| Musselshell County | | | | | 5,197 | 55.1% | 23.8% | 16.1% |
| Park County | 9,551 | 91.9% | 100.0% | 91.9% | 8,239 | 26.1% | 60.5% | 22.8% |
| Petroleum County | | | | | 524 | 45.8% | 44.4% | 36.0% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Phillips County | | | | | 4,240 | 81.5% | 63.2% | 61.6% |
| Pondera County | | | | | 6,078 | 37.7% | 53.4% | 23.4% |
| Powder River County | | | | | 1,725 | 17.1% | 7.8% | 1.7% |
| Powell County | | | | | 7,051 | 45.2% | 85.9% | 44.8% |
| Prairie County | | | | | 1,107 | 27.1% | 22.5% | 12.1% |
| Ravalli County | 7,464 | 99.5% | 100.0% | 99.5% | 39,834 | 88.6% | 69.8% | 64.4% |
| Richland County | 6,311 | 76.8% | 83.5% | 65.4% | 4,926 | 47.9% | 33.3% | 19.0% |
| Roosevelt County | | | | | 10,572 | 64.4% | 71.6% | 58.8% |
| Rosebud County | | | | | 8,088 | 11.2% | 63.2% | 8.3% |
| Sanders County | | | | | 13,442 | 47.4% | 63.4% | 35.9% |
| Sheridan County | | | | | 3,564 | 76.6% | 59.5% | 51.8% |
| Silver Bow County | 31,174 | 95.1% | 99.8% | 94.9% | 4,894 | 16.0% | 79.2% | 14.2% |
| Stillwater County | | | | | 9,177 | 45.1% | 67.0% | 35.8% |
| Sweet Grass County | | | | | 3,715 | 80.1% | 74.1% | 69.0% |
| Teton County | | | | | 6,368 | 89.3% | 66.2% | 60.9% |
| Toole County | | | | | 5,082 | 2.4% | 74.3% | 0.5% |
| Treasure County | | | | | 758 | 9.3% | 46.5% | 6.2% |
| Valley County | | | | | 7,513 | 57.2% | 46.1% | 39.1% |
| Wheatland County | | | | | 2,032 | 94.3% | 72.5% | 71.3% |
| Wibaux County | | | | | 919 | 11.2% | 68.6% | 2.1% |
| Yellowstone County | 141,771 | 95.3% | 97.9% | 93.3% | 28,081 | 47.1% | 76.5% | 38.0% |
| N. Mariana Isl. | 38,402 | 32.1% | 0.2% | 0.2% | 13,073 | 31.0% | 0.1% | 0.1% |
| Rota Municipality | | | | | 2,194 | 100.0% | 0.0% | 0.0% |
| Saipan Municipality | 38,402 | 32.1% | 0.2% | 0.2% | 8,367 | 4.9% | 0.2% | 0.2% |
| Tinian Municipality | | | | | 2,512 | 57.9% | 0.0% | 0.0% |
| Nebraska | 1,435,718 | 99.7% | 87.9% | 87.7% | 532,205 | 80.0% | 33.0% | 27.8% |
| Adams County | 24,646 | 100.0% | 87.3% | 87.3% | 6,324 | 98.3% | 14.6% | 14.6% |
| Antelope County | | | | | 6,293 | 87.9% | 8.7% | 7.9% |
| Arthur County | | | | | 433 | 44.8% | 0.0% | 0.0% |
| Banner County | | | | | 660 | 66.5% | 0.3% | 0.1% |
| Blaine County | | | | | 453 | 43.0% | 0.0% | 0.0% |
| Boone County | | | | | 5,385 | 68.5% | 0.0% | 0.0% |
| Box Butte County | 8,039 | 99.9% | 0.0% | 0.0% | 2,633 | 85.0% | 1.7% | 1.7% |
| Boyd County | | | | | 1,741 | 99.9% | 7.3% | 7.3% |
| Brown County | | | | | 2,872 | 83.0% | 2.0% | 2.0% |
| Buffalo County | 34,525 | 97.2% | 99.7% | 97.0% | 16,061 | 78.5% | 36.0% | 26.5% |
| Burt County | | | | | 6,755 | 95.6% | 42.2% | 41.3% |
| Butler County | | | | | 8,427 | 96.6% | 0.2% | 0.2% |
| Cass County | 6,976 | 99.4% | 72.2% | 71.8% | 20,146 | 83.8% | 38.1% | 32.6% |
| Cedar County | | | | | 8,371 | 79.2% | 23.1% | 18.7% |
| Chase County | | | | | 3,772 | 88.0% | 50.7% | 50.5% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Cherry County | | | | | 5,464 | 68.5% | 52.4% | 45.3% |
| Cheyenne County | 6,164 | 99.3% | 99.6% | 99.1% | 3,347 | 64.3% | 12.9% | 10.0% |
| Clay County | | | | | 6,049 | 97.5% | 5.9% | 5.6% |
| Colfax County | 6,167 | 99.4% | 3.6% | 3.6% | 4,277 | 83.1% | 35.5% | 33.8% |
| Cuming County | | | | | 8,929 | 99.1% | 13.7% | 13.7% |
| Custer County | | | | | 10,476 | 58.1% | 66.9% | 47.7% |
| Dakota County | 16,603 | 99.7% | 99.1% | 98.9% | 4,439 | 80.4% | 61.7% | 51.0% |
| Dawes County | 4,638 | 99.4% | 0.0% | 0.0% | 3,603 | 38.3% | 8.9% | 6.4% |
| Dawson County | 10,337 | 98.2% | 96.4% | 94.7% | 13,547 | 78.2% | 71.6% | 64.2% |
| Deuel County | | | | | 1,902 | 73.7% | 52.8% | 50.0% |
| Dixon County | | | | | 5,464 | 95.3% | 25.9% | 24.0% |
| Dodge County | 27,800 | 99.0% | 97.6% | 97.5% | 9,197 | 87.3% | 43.2% | 35.4% |
| Douglas County | 571,741 | 99.9% | 99.9% | 99.9% | 14,586 | 87.9% | 95.2% | 84.9% |
| Dundy County | | | | | 1,590 | 94.9% | 0.0% | 0.0% |
| Fillmore County | | | | | 5,553 | 95.1% | 0.0% | 0.0% |
| Franklin County | | | | | 2,873 | 67.1% | 0.3% | 0.0% |
| Frontier County | | | | | 2,633 | 58.8% | 0.0% | 0.0% |
| Furnas County | | | | | 4,575 | 79.1% | 0.0% | 0.0% |
| Gage County | 12,258 | 99.6% | 2.4% | 2.4% | 9,325 | 84.4% | 11.7% | 11.5% |
| Garden County | | | | | 1,837 | 55.6% | 0.0% | 0.0% |
| Garfield County | | | | | 1,801 | 68.1% | 0.0% | 0.0% |
| Gosper County | | | | | 1,808 | 56.8% | 0.1% | 0.0% |
| Grant County | | | | | 576 | 13.8% | 0.0% | 0.0% |
| Greeley County | | | | | 2,227 | 48.5% | 46.9% | 38.0% |
| Hall County | 54,346 | 98.5% | 91.7% | 90.3% | 7,751 | 82.1% | 33.5% | 30.0% |
| Hamilton County | | | | | 9,429 | 98.8% | 10.7% | 10.2% |
| Harlan County | | | | | 3,054 | 71.3% | 0.2% | 0.0% |
| Hayes County | | | | | 849 | 26.9% | 0.0% | 0.0% |
| Hitchcock County | | | | | 2,598 | 26.9% | 0.0% | 0.0% |
| Holt County | | | | | 10,043 | 72.1% | 76.2% | 59.6% |
| Hooker County | | | | | 686 | 14.1% | 0.0% | 0.0% |
| Howard County | | | | | 6,515 | 57.2% | 56.2% | 35.4% |
| Jefferson County | 3,973 | 99.8% | 0.0% | 0.0% | 3,181 | 71.0% | 0.1% | 0.0% |
| Johnson County | | | | | 5,287 | 95.5% | 38.6% | 37.8% |
| Kearney County | | | | | 6,690 | 75.2% | 84.4% | 68.4% |
| Keith County | 4,754 | 99.8% | 98.6% | 98.4% | 3,515 | 70.9% | 11.6% | 7.7% |
| Keya Paha County | | | | | 787 | 94.1% | 8.5% | 8.5% |
| Kimball County | | | | | 3,315 | 88.2% | 4.9% | 4.3% |
| Knox County | | | | | 8,336 | 53.2% | 37.2% | 20.6% |
| Lancaster County | 292,325 | 99.9% | 99.9% | 99.9% | 32,431 | 87.6% | 77.1% | 68.2% |
| Lincoln County | 23,014 | 99.7% | 8.5% | 8.5% | 10,671 | 65.0% | 0.5% | 0.2% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Logan County | | | | | 675 | 38.0% | 0.5% | 0.4% |
| Loup County | | | | | 599 | 46.2% | 0.0% | 0.0% |
| Madison County | 25,608 | 100.0% | 0.0% | 0.0% | 9,760 | 83.9% | 30.5% | 28.8% |
| McPherson County | | | | | 372 | 19.6% | 30.6% | 1.0% |
| Merrick County | | | | | 7,721 | 83.4% | 51.7% | 48.1% |
| Morrill County | | | | | 4,527 | 84.9% | 0.0% | 0.0% |
| Nance County | | | | | 3,326 | 75.3% | 38.7% | 32.8% |
| Nemaha County | | | | | 7,035 | 96.0% | 50.8% | 50.8% |
| Nuckolls County | | | | | 4,041 | 86.2% | 0.0% | 0.0% |
| Otoe County | 7,444 | 99.9% | 97.9% | 97.9% | 8,754 | 92.1% | 31.2% | 29.8% |
| Pawnee County | | | | | 2,528 | 94.4% | 42.1% | 42.1% |
| Perkins County | | | | | 2,829 | 75.7% | 47.5% | 45.8% |
| Phelps County | 5,587 | 97.1% | 100.0% | 97.1% | 3,401 | 60.1% | 35.0% | 18.2% |
| Pierce County | | | | | 7,332 | 90.3% | 54.2% | 52.7% |
| Platte County | 24,569 | 100.0% | 0.9% | 0.9% | 9,727 | 80.3% | 12.3% | 10.8% |
| Polk County | | | | | 5,166 | 91.0% | 0.0% | 0.0% |
| Red Willow County | 7,398 | 99.4% | 0.0% | 0.0% | 3,175 | 32.7% | 1.1% | 0.2% |
| Richardson County | 3,465 | 100.0% | 16.9% | 16.9% | 4,240 | 90.0% | 9.7% | 9.6% |
| Rock County | | | | | 1,245 | 4.7% | 0.0% | 0.0% |
| Saline County | 6,723 | 98.8% | 0.0% | 0.0% | 7,393 | 79.6% | 1.0% | 0.6% |
| Sarpy County | 186,019 | 99.7% | 99.5% | 99.2% | 10,534 | 74.1% | 88.3% | 66.5% |
| Saunders County | 4,896 | 99.5% | 0.0% | 0.0% | 18,222 | 87.3% | 30.6% | 29.3% |
| Scotts Bluff County | 24,542 | 100.0% | 14.4% | 14.4% | 11,061 | 98.7% | 4.3% | 4.3% |
| Seward County | 7,447 | 99.7% | 0.0% | 0.0% | 10,245 | 86.4% | 13.6% | 10.1% |
| Sheridan County | | | | | 4,996 | 50.1% | 4.5% | 1.9% |
| Sherman County | | | | | 2,980 | 57.7% | 49.1% | 42.2% |
| Sioux County | | | | | 1,127 | 63.6% | 5.0% | 4.8% |
| Stanton County | 1,591 | 100.0% | 0.0% | 0.0% | 4,126 | 93.5% | 6.5% | 5.5% |
| Thayer County | | | | | 4,885 | 80.1% | 6.5% | 4.5% |
| Thomas County | | | | | 671 | 39.6% | 0.2% | 0.2% |
| Thurston County | | | | | 6,507 | 44.8% | 38.3% | 6.2% |
| Valley County | | | | | 4,073 | 59.7% | 60.2% | 49.5% |
| Washington County | 8,102 | 99.9% | 62.0% | 61.9% | 13,065 | 76.4% | 30.2% | 20.6% |
| Wayne County | 6,052 | 100.0% | 99.2% | 99.2% | 3,819 | 96.0% | 8.3% | 8.3% |
| Webster County | | | | | 3,336 | 86.5% | 29.8% | 27.9% |
| Wheeler County | | | | | 785 | 56.0% | 1.5% | 0.0% |
| York County | 7,969 | 99.8% | 93.3% | 93.2% | 6,385 | 99.2% | 10.3% | 10.3% |
| Nevada | 2,988,756 | 99.2% | 99.7% | 98.9% | 189,016 | 74.4% | 78.0% | 63.0% |
| Carson City | 54,573 | 99.9% | 99.8% | 99.7% | 3,557 | 99.6% | 98.5% | 98.3% |
| Churchill County | 17,139 | 99.0% | 98.1% | 97.1% | 8,704 | 64.4% | 72.9% | 51.6% |
| Clark County | 2,291,900 | 99.4% | 99.9% | 99.4% | 31,085 | 53.3% | 80.6% | 52.8% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Douglas County | 34,851 | 99.0% | 94.8% | 93.8% | 14,777 | 98.1% | 79.5% | 77.8% |
| Elko County | 25,965 | 99.9% | 100.0% | 99.9% | 28,081 | 89.3% | 78.4% | 73.7% |
| Esmeralda County | | | | | 744 | 0.1% | 61.9% | 0.1% |
| Eureka County | | | | | 1,863 | 83.2% | 85.7% | 72.6% |
| Humboldt County | 10,607 | 99.8% | 83.8% | 83.7% | 6,665 | 69.7% | 53.1% | 41.8% |
| Lander County | | | | | 5,766 | 93.8% | 55.6% | 52.6% |
| Lincoln County | | | | | 4,482 | 39.5% | 21.9% | 7.4% |
| Lyon County | 34,069 | 99.9% | 97.6% | 97.6% | 27,516 | 98.6% | 91.9% | 90.8% |
| Mineral County | | | | | 4,525 | 68.9% | 76.9% | 68.9% |
| Nye County | 39,498 | 86.7% | 100.0% | 86.7% | 15,240 | 44.1% | 79.7% | 43.3% |
| Pershing County | | | | | 6,462 | 19.6% | 72.2% | 13.1% |
| Storey County | 454 | 100.0% | 100.0% | 100.0% | 3,716 | 97.1% | 75.2% | 73.1% |
| Washoe County | 475,131 | 99.8% | 99.5% | 99.3% | 21,614 | 92.9% | 83.1% | 77.7% |
| White Pine County | 4,569 | 0.0% | 100.0% | 0.0% | 4,219 | 0.2% | 61.7% | 0.0% |
| New Hampshire | 805,748 | 99.0% | 83.0% | 82.2% | 589,483 | 89.7% | 43.8% | 40.7% |
| Belknap County | 29,234 | 98.0% | 83.9% | 82.4% | 35,547 | 85.1% | 47.9% | 42.3% |
| Carroll County | 5,107 | 91.8% | 83.9% | 76.9% | 47,092 | 87.9% | 41.5% | 37.4% |
| Cheshire County | 24,024 | 94.6% | 87.3% | 83.3% | 53,326 | 86.2% | 39.3% | 34.0% |
| Coos County | 10,255 | 96.4% | 83.3% | 80.8% | 21,249 | 52.2% | 27.2% | 17.6% |
| Grafton County | 28,952 | 97.8% | 87.2% | 85.2% | 62,174 | 78.8% | 37.5% | 32.2% |
| Hillsborough County | 321,876 | 99.3% | 87.3% | 86.8% | 104,718 | 97.0% | 46.2% | 45.1% |
| Merrimack County | 69,543 | 99.0% | 53.2% | 52.5% | 86,477 | 92.8% | 36.8% | 34.9% |
| Rockingham County | 226,186 | 99.3% | 82.3% | 81.8% | 93,238 | 98.2% | 50.8% | 50.0% |
| Strafford County | 81,041 | 99.6% | 88.3% | 87.9% | 51,234 | 92.4% | 57.2% | 54.3% |
| Sullivan County | 9,530 | 99.8% | 97.7% | 97.6% | 34,428 | 87.7% | 42.1% | 38.7% |
| New Jersey | 8,667,895 | 96.8% | 98.5% | 95.4% | 593,804 | 90.9% | 72.5% | 67.3% |
| Atlantic County | 235,020 | 99.6% | 98.7% | 98.4% | 40,618 | 94.6% | 68.4% | 65.4% |
| Bergen County | 950,345 | 97.4% | 99.2% | 96.6% | 2,652 | 88.7% | 74.1% | 67.5% |
| Burlington County | 414,308 | 99.4% | 97.9% | 97.4% | 51,795 | 87.5% | 71.0% | 68.2% |
| Camden County | 518,170 | 99.8% | 99.2% | 99.0% | 6,737 | 89.6% | 80.6% | 71.1% |
| Cape May County | 77,503 | 99.2% | 96.5% | 95.9% | 18,131 | 95.7% | 81.6% | 78.5% |
| Cumberland County | 114,979 | 97.8% | 95.8% | 93.6% | 36,377 | 83.2% | 58.3% | 55.5% |
| Essex County | 849,353 | 93.8% | 99.7% | 93.5% | 124 | 98.3% | 100.0% | 98.3% |
| Gloucester County | 272,085 | 99.7% | 97.9% | 97.6% | 34,516 | 96.5% | 77.1% | 74.2% |
| Hudson County | 703,366 | 99.3% | 99.8% | 99.2% | | | | |
| Hunterdon County | 53,252 | 99.5% | 90.0% | 89.6% | 76,525 | 94.7% | 60.3% | 57.3% |
| Mercer County | 360,795 | 98.8% | 99.6% | 98.4% | 19,893 | 96.5% | 80.5% | 77.6% |
| Middlesex County | 852,885 | 95.5% | 99.0% | 94.6% | 8,533 | 96.5% | 85.7% | 82.6% |
| Monmouth County | 611,213 | 98.1% | 97.3% | 95.5% | 32,885 | 92.6% | 75.2% | 70.0% |
| Morris County | 466,800 | 96.2% | 95.5% | 91.8% | 44,351 | 94.9% | 71.1% | 67.7% |
| Ocean County | 631,220 | 98.0% | 98.7% | 96.7% | 24,515 | 93.7% | 90.6% | 85.1% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Passaic County | 499,082 | 88.1% | 99.0% | 87.3% | 14,854 | 96.3% | 79.6% | 76.8% |
| Salem County | 30,569 | 99.8% | 98.5% | 98.3% | 34,548 | 89.4% | 72.5% | 65.0% |
| Somerset County | 320,185 | 97.6% | 96.6% | 94.3% | 26,690 | 96.6% | 86.8% | 84.1% |
| Sussex County | 74,468 | 89.7% | 93.2% | 84.2% | 71,616 | 82.5% | 67.8% | 57.1% |
| Union County | 569,815 | 96.0% | 99.5% | 95.5% | | | | |
| Warren County | 62,482 | 97.0% | 98.2% | 95.4% | 48,444 | 84.5% | 80.8% | 69.9% |
| New Mexico | 1,581,331 | 96.5% | 96.7% | 93.6% | 532,013 | 44.7% | 65.9% | 34.1% |
| Bernalillo County | 642,053 | 99.5% | 99.9% | 99.5% | 30,455 | 48.2% | 63.2% | 35.1% |
| Catron County | | | | | 3,827 | 0.0% | 14.1% | 0.0% |
| Chaves County | 47,569 | 99.6% | 78.8% | 78.5% | 16,325 | 55.9% | 65.3% | 42.7% |
| Cibola County | 10,126 | 99.0% | 93.8% | 92.9% | 16,824 | 32.1% | 66.5% | 26.6% |
| Colfax County | 5,629 | 18.4% | 99.7% | 18.4% | 6,617 | 23.7% | 65.9% | 13.9% |
| Curry County | 38,457 | 97.5% | 98.3% | 96.0% | 9,075 | 79.5% | 78.5% | 65.0% |
| De Baca County | | | | | 1,693 | 86.5% | 43.0% | 40.1% |
| Doña Ana County | 173,808 | 98.6% | 93.6% | 92.3% | 49,529 | 38.9% | 78.2% | 37.2% |
| Eddy County | 46,817 | 99.4% | 94.4% | 93.8% | 13,583 | 54.5% | 63.2% | 39.7% |
| Grant County | 16,522 | 95.0% | 98.7% | 93.7% | 11,164 | 35.1% | 74.6% | 31.9% |
| Guadalupe County | | | | | 4,310 | 84.0% | 84.6% | 71.6% |
| Harding County | | | | | 628 | 71.8% | 47.6% | 38.2% |
| Hidalgo County | | | | | 4,003 | 3.9% | 67.9% | 0.2% |
| Lea County | 54,268 | 99.9% | 88.4% | 88.4% | 18,184 | 90.1% | 65.2% | 61.7% |
| Lincoln County | 11,313 | 99.6% | 97.2% | 97.0% | 9,098 | 60.8% | 46.2% | 33.3% |
| Los Alamos County | 18,151 | 99.3% | 98.1% | 97.5% | 1,036 | 81.1% | 95.9% | 77.1% |
| Luna County | 14,945 | 0.0% | 92.5% | 0.0% | 10,804 | 1.0% | 63.3% | 0.5% |
| McKinley County | 24,175 | 97.5% | 100.0% | 97.5% | 45,655 | 5.9% | 53.1% | 5.4% |
| Mora County | | | | | 4,169 | 76.7% | 34.7% | 29.7% |
| Otero County | 32,856 | 99.0% | 72.1% | 71.6% | 35,967 | 45.9% | 63.4% | 23.5% |
| Quay County | 4,832 | 98.9% | 100.0% | 98.9% | 3,714 | 69.1% | 70.5% | 47.1% |
| Rio Arriba County | 17,249 | 80.1% | 99.8% | 80.1% | 22,799 | 40.8% | 58.8% | 26.4% |
| Roosevelt County | 11,782 | 95.9% | 100.0% | 95.9% | 7,152 | 67.6% | 64.7% | 45.8% |
| San Juan County | 84,762 | 98.1% | 96.8% | 95.0% | 35,656 | 60.1% | 80.5% | 51.6% |
| San Miguel County | 14,563 | 99.9% | 99.9% | 99.8% | 12,390 | 44.6% | 55.3% | 28.9% |
| Sandoval County | 125,106 | 98.7% | 100.0% | 98.7% | 28,395 | 37.1% | 64.0% | 28.5% |
| Santa Fe County | 99,970 | 97.8% | 99.5% | 97.6% | 55,694 | 74.2% | 76.2% | 61.8% |
| Sierra County | 7,702 | 99.0% | 99.6% | 98.7% | 3,734 | 17.8% | 59.4% | 11.8% |
| Socorro County | 8,197 | 99.1% | 99.8% | 99.0% | 7,918 | 9.4% | 42.8% | 9.1% |
| Taos County | 16,215 | 31.6% | 66.0% | 21.3% | 18,365 | 20.9% | 27.5% | 5.7% |
| Torrance County | | | | | 15,454 | 25.3% | 69.7% | 21.3% |
| Union County | | | | | 3,980 | 69.2% | 76.8% | 60.4% |
| Valencia County | 54,264 | 89.2% | 98.0% | 87.4% | 23,816 | 45.9% | 88.0% | 42.6% |
| New York | 7,114,427 | 97.2% | 98.5% | 95.8% | 2,562,724 | 88.2% | 62.3% | 56.4% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Albany County | 284,896 | 98.0% | 97.7% | 95.8% | 30,915 | 86.7% | 74.1% | 68.4% |
| Allegany County | 5,512 | 93.4% | 99.4% | 92.9% | 41,182 | 87.9% | 55.1% | 49.1% |
| Bronx County | 1,379,939 | 97.0% | 99.9% | 97.0% | 7 | 100.0% | 100.0% | 100.0% |
| Broome County | 142,079 | 97.8% | 99.2% | 97.0% | 55,038 | 94.0% | 67.2% | 64.2% |
| Cattaraugus County | 29,165 | 91.6% | 97.0% | 88.7% | 47,274 | 76.2% | 45.2% | 37.8% |
| Cayuga County | 30,911 | 99.5% | 99.5% | 99.0% | 44,087 | 88.1% | 60.4% | 54.0% |
| Chautauqua County | 70,513 | 97.6% | 92.0% | 89.8% | 55,514 | 79.1% | 57.6% | 47.8% |
| Chemung County | 60,374 | 95.1% | 98.2% | 93.4% | 21,052 | 90.6% | 51.1% | 45.7% |
| Chenango County | 7,803 | 91.0% | 98.6% | 89.7% | 38,655 | 78.3% | 48.5% | 40.3% |
| Clinton County | 27,269 | 95.5% | 78.9% | 74.9% | 51,484 | 91.4% | 26.7% | 24.8% |
| Columbia County | 10,397 | 99.1% | 96.7% | 95.8% | 50,889 | 89.8% | 54.1% | 48.7% |
| Cortland County | 24,312 | 94.9% | 97.3% | 92.4% | 21,814 | 87.9% | 60.3% | 53.2% |
| Delaware County | 4,182 | 89.9% | 97.0% | 87.0% | 40,558 | 93.1% | 46.8% | 44.4% |
| Dutchess County | 202,104 | 95.4% | 87.3% | 83.2% | 95,441 | 87.8% | 70.2% | 63.0% |
| Erie County | 850,999 | 97.4% | 98.7% | 96.4% | 99,313 | 92.3% | 85.6% | 80.9% |
| Essex County | 5,002 | 91.6% | 98.5% | 90.3% | 31,908 | 82.4% | 15.8% | 13.8% |
| Franklin County | 13,865 | 86.9% | 81.2% | 69.4% | 32,508 | 69.5% | 17.7% | 10.8% |
| Fulton County | 25,856 | 93.1% | 97.8% | 91.2% | 26,813 | 84.6% | 59.0% | 53.1% |
| Genesee County | 21,853 | 97.4% | 99.8% | 97.3% | 35,682 | 88.5% | 71.4% | 63.3% |
| Greene County | 12,414 | 95.5% | 84.5% | 80.4% | 35,647 | 92.1% | 47.0% | 44.0% |
| Hamilton County | | | | | 5,118 | 67.2% | 32.7% | 26.2% |
| Herkimer County | 28,256 | 96.6% | 100.0% | 96.6% | 31,566 | 84.2% | 63.8% | 55.1% |
| Jefferson County | 51,854 | 95.7% | 97.4% | 93.4% | 64,783 | 89.9% | 67.2% | 60.8% |
| Kings County | 2,590,516 | 97.9% | 99.9% | 97.8% | | | | |
| Lewis County | | | | | 26,699 | 78.4% | 37.9% | 32.3% |
| Livingston County | 17,413 | 80.7% | 69.2% | 66.8% | 44,103 | 81.3% | 73.9% | 62.3% |
| Madison County | 20,839 | 95.8% | 98.4% | 94.4% | 46,258 | 88.3% | 75.9% | 69.4% |
| Monroe County | 690,379 | 97.3% | 99.2% | 96.5% | 61,656 | 95.3% | 91.1% | 86.9% |
| Montgomery County | 27,071 | 95.2% | 94.9% | 90.3% | 22,552 | 70.2% | 63.4% | 47.3% |
| Nassau County | 1,377,449 | 98.2% | 99.4% | 97.6% | 6,277 | 92.8% | 71.7% | 66.1% |
| New York County | 1,596,273 | 99.3% | 99.9% | 99.3% | | | | |
| Niagara County | 147,321 | 95.3% | 98.9% | 94.4% | 63,559 | 94.0% | 86.7% | 81.4% |
| Oneida County | 149,985 | 95.1% | 99.4% | 94.5% | 78,861 | 87.1% | 72.4% | 64.8% |
| Onondaga County | 398,920 | 98.4% | 99.9% | 98.3% | 69,329 | 93.2% | 92.2% | 86.2% |
| Ontario County | 61,432 | 98.0% | 97.9% | 95.9% | 51,275 | 92.1% | 79.4% | 73.8% |
| Orange County | 290,865 | 87.8% | 94.4% | 82.4% | 115,076 | 90.6% | 58.0% | 52.3% |
| Orleans County | 13,011 | 93.3% | 95.8% | 89.3% | 26,307 | 90.4% | 66.2% | 59.7% |
| Oswego County | 41,796 | 97.7% | 96.8% | 94.5% | 76,491 | 92.3% | 72.3% | 67.9% |
| Otsego County | 16,229 | 89.1% | 99.7% | 88.8% | 44,407 | 80.4% | 54.7% | 46.6% |
| Putnam County | 63,802 | 98.5% | 92.8% | 91.4% | 34,243 | 96.2% | 83.9% | 81.0% |
| Queens County | 2,277,973 | 99.1% | 99.9% | 99.1% | 56 | 76.7% | 100.0% | 76.7% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Rensselaer County | 106,428 | 97.7% | 97.6% | 95.5% | 53,425 | 94.2% | 71.3% | 67.6% |
| Richmond County | 491,128 | 99.2% | 98.1% | 97.3% | 5 | 0.0% | 100.0% | 0.0% |
| Rockland County | 337,696 | 95.9% | 97.0% | 93.0% | 1,326 | 84.4% | 93.7% | 81.3% |
| Saratoga County | 170,582 | 97.2% | 97.5% | 94.8% | 68,215 | 93.3% | 68.4% | 64.0% |
| Schenectady County | 145,798 | 97.5% | 97.3% | 94.9% | 14,295 | 94.7% | 73.7% | 69.7% |
| Schoharie County | 4,911 | 79.5% | 98.5% | 78.2% | 25,152 | 92.7% | 42.6% | 39.3% |
| Schuyler County | | | | | 17,650 | 89.4% | 62.1% | 58.3% |
| Seneca County | 13,877 | 99.0% | 99.5% | 98.6% | 19,005 | 90.6% | 62.0% | 58.9% |
| St. Lawrence County | 32,994 | 91.1% | 88.5% | 81.5% | 74,739 | 83.9% | 32.8% | 29.3% |
| Steuben County | 37,199 | 99.5% | 97.0% | 96.7% | 55,400 | 82.3% | 45.3% | 39.5% |
| Suffolk County | 1,494,620 | 96.4% | 95.7% | 92.4% | 30,845 | 79.5% | 83.0% | 65.8% |
| Sullivan County | 18,901 | 93.1% | 95.5% | 88.9% | 60,757 | 90.2% | 52.6% | 48.3% |
| Tioga County | 16,085 | 98.7% | 98.3% | 97.1% | 31,687 | 87.3% | 56.3% | 50.1% |
| Tompkins County | 55,854 | 91.1% | 98.9% | 90.1% | 48,923 | 91.2% | 73.1% | 67.7% |
| Ulster County | 79,485 | 94.1% | 90.0% | 84.4% | 102,834 | 90.0% | 49.3% | 42.8% |
| Warren County | 44,232 | 96.0% | 91.0% | 87.3% | 21,367 | 86.4% | 37.9% | 34.5% |
| Washington County | 14,810 | 97.4% | 99.0% | 96.5% | 46,031 | 84.4% | 55.2% | 47.4% |
| Wayne County | 22,758 | 96.6% | 83.8% | 81.3% | 68,367 | 90.5% | 69.0% | 63.3% |
| Westchester County | 944,629 | 92.1% | 97.4% | 89.6% | 45,798 | 95.0% | 64.0% | 60.3% |
| Wyoming County | 4,008 | 96.2% | 55.2% | 53.8% | 35,658 | 79.3% | 57.4% | 50.2% |
| Yates County | 7,603 | 99.2% | 92.3% | 91.7% | 16,848 | 79.0% | 63.8% | 50.9% |
| North Carolina | 7,110,087 | 96.7% | 96.5% | 93.3% | 3,588,886 | 73.9% | 65.7% | 52.3% |
| Alamance County | 128,183 | 96.7% | 99.4% | 96.2% | 48,170 | 82.6% | 85.5% | 72.0% |
| Alexander County | 3,992 | 97.5% | 94.4% | 92.5% | 32,520 | 62.3% | 69.6% | 49.2% |
| Alleghany County | | | | | 11,185 | 98.5% | 17.4% | 17.3% |
| Anson County | 5,283 | 95.4% | 89.7% | 85.2% | 16,919 | 46.5% | 44.3% | 23.1% |
| Ashe County | | | | | 27,110 | 99.5% | 21.1% | 20.8% |
| Avery County | | | | | 17,571 | 70.1% | 66.9% | 53.5% |
| Beaufort County | 16,380 | 91.1% | 85.1% | 78.8% | 27,892 | 35.3% | 40.4% | 17.2% |
| Bertie County | | | | | 17,240 | 62.5% | 45.2% | 33.2% |
| Bladen County | | | | | 29,446 | 66.1% | 58.3% | 42.5% |
| Brunswick County | 98,643 | 99.4% | 85.3% | 84.8% | 54,421 | 97.0% | 72.4% | 71.1% |
| Buncombe County | 211,740 | 95.9% | 95.9% | 91.9% | 61,849 | 84.5% | 61.5% | 53.6% |
| Burke County | 47,490 | 82.7% | 94.4% | 77.6% | 40,391 | 75.9% | 62.1% | 50.8% |
| Cabarrus County | 194,672 | 98.9% | 99.6% | 98.6% | 41,125 | 81.6% | 92.1% | 76.4% |
| Caldwell County | 45,847 | 95.5% | 96.1% | 91.7% | 34,645 | 82.8% | 63.1% | 56.4% |
| Camden County | 518 | 99.2% | 86.4% | 85.7% | 10,570 | 72.2% | 40.9% | 33.1% |
| Carteret County | 48,006 | 96.5% | 93.7% | 90.5% | 21,374 | 92.5% | 63.7% | 58.2% |
| Caswell County | 43 | 100.0% | 97.6% | 97.6% | 22,571 | 52.0% | 32.1% | 24.1% |
| Catawba County | 105,065 | 95.0% | 90.5% | 85.7% | 58,397 | 85.2% | 74.3% | 64.3% |
| Chatham County | 28,215 | 96.9% | 83.9% | 81.5% | 51,649 | 57.8% | 51.5% | 33.0% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Cherokee County | | | | | 29,512 | 58.7% | 33.2% | 23.5% |
| Chowan County | 4,342 | 99.5% | 82.0% | 81.8% | 9,598 | 47.2% | 26.6% | 8.0% |
| Clay County | | | | | 11,614 | 58.9% | 21.3% | 15.7% |
| Cleveland County | 37,888 | 95.3% | 98.0% | 93.4% | 62,782 | 79.0% | 77.0% | 65.2% |
| Columbus County | 5,307 | 92.1% | 38.5% | 34.5% | 44,578 | 86.9% | 44.7% | 39.2% |
| Craven County | 65,535 | 87.9% | 99.1% | 87.1% | 35,339 | 64.5% | 63.1% | 45.7% |
| Cumberland County | 287,110 | 96.7% | 99.3% | 96.1% | 49,589 | 85.4% | 82.0% | 72.4% |
| Currituck County | 1,908 | 96.1% | 95.2% | 91.5% | 29,107 | 87.1% | 76.5% | 67.0% |
| Dare County | 29,475 | 97.2% | 70.0% | 67.6% | 8,481 | 92.8% | 64.5% | 60.7% |
| Davidson County | 89,915 | 97.6% | 98.2% | 95.9% | 82,671 | 95.2% | 89.5% | 86.4% |
| Davie County | 12,695 | 99.9% | 99.8% | 99.7% | 31,395 | 95.4% | 86.2% | 83.0% |
| Duplin County | | | | | 48,990 | 53.3% | 77.7% | 45.2% |
| Durham County | 314,819 | 96.1% | 99.5% | 95.7% | 17,861 | 59.6% | 85.4% | 55.5% |
| Edgecombe County | 26,647 | 87.6% | 98.6% | 86.9% | 21,654 | 42.1% | 51.8% | 28.4% |
| Forsyth County | 359,038 | 97.9% | 99.7% | 97.6% | 30,119 | 94.5% | 95.9% | 91.2% |
| Franklin County | 15,729 | 96.6% | 85.0% | 82.0% | 58,810 | 67.2% | 61.7% | 47.0% |
| Gaston County | 189,534 | 97.0% | 99.6% | 96.7% | 44,681 | 88.1% | 94.6% | 84.2% |
| Gates County | | | | | 10,383 | 51.1% | 32.7% | 16.9% |
| Graham County | | | | | 7,980 | 43.0% | 28.0% | 23.5% |
| Granville County | 17,771 | 94.7% | 78.5% | 73.5% | 44,132 | 55.2% | 60.4% | 41.3% |
| Greene County | | | | | 20,211 | 36.2% | 80.7% | 30.8% |
| Guilford County | 466,670 | 97.2% | 99.6% | 96.9% | 79,431 | 90.2% | 95.8% | 87.3% |
| Halifax County | 20,954 | 95.9% | 97.5% | 93.6% | 26,894 | 30.5% | 50.9% | 19.3% |
| Harnett County | 49,423 | 95.5% | 87.5% | 83.3% | 89,409 | 74.7% | 61.3% | 48.0% |
| Haywood County | 33,106 | 94.6% | 89.6% | 84.5% | 29,503 | 73.7% | 50.7% | 41.4% |
| Henderson County | 77,201 | 92.3% | 96.7% | 89.5% | 40,905 | 58.2% | 71.1% | 47.4% |
| Hertford County | 4,729 | 91.1% | 93.7% | 84.9% | 16,146 | 66.8% | 61.3% | 44.2% |
| Hoke County | 30,733 | 96.4% | 99.1% | 95.6% | 23,054 | 62.8% | 76.6% | 55.3% |
| Hyde County | | | | | 4,576 | 1.2% | 26.0% | 0.0% |
| Iredell County | 132,821 | 98.2% | 99.2% | 97.5% | 63,076 | 84.3% | 83.6% | 70.7% |
| Jackson County | 13,010 | 54.7% | 97.3% | 53.7% | 29,945 | 26.6% | 39.5% | 12.9% |
| Johnston County | 109,577 | 96.5% | 83.6% | 80.4% | 125,201 | 79.1% | 65.0% | 52.2% |
| Jones County | | | | | 9,233 | 83.6% | 57.7% | 45.9% |
| Lee County | 37,861 | 97.9% | 69.6% | 68.3% | 27,615 | 63.5% | 56.0% | 39.5% |
| Lenoir County | 20,832 | 91.2% | 94.4% | 86.2% | 33,801 | 63.9% | 78.4% | 51.4% |
| Lincoln County | 24,260 | 94.1% | 87.0% | 82.2% | 68,835 | 86.8% | 75.6% | 67.6% |
| Macon County | 9,531 | 88.7% | 74.7% | 67.1% | 28,534 | 33.8% | 23.7% | 13.4% |
| Madison County | | | | | 21,768 | 91.2% | 37.3% | 35.0% |
| Martin County | 5,325 | 88.5% | 95.1% | 84.4% | 16,183 | 38.9% | 36.8% | 21.1% |
| McDowell County | 12,143 | 91.0% | 91.1% | 83.2% | 32,610 | 51.9% | 65.9% | 37.9% |
| Mecklenburg County | 1,134,449 | 98.0% | 99.9% | 97.9% | 10,943 | 89.0% | 97.5% | 86.9% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Mitchell County | | | | | 15,094 | 91.8% | 56.0% | 52.6% |
| Montgomery County | | | | | 25,894 | 50.8% | 53.4% | 34.3% |
| Moore County | 53,240 | 97.2% | 46.8% | 45.1% | 52,291 | 59.7% | 28.2% | 19.1% |
| Nash County | 48,205 | 87.9% | 94.7% | 83.9% | 47,584 | 49.7% | 60.1% | 30.8% |
| New Hanover County | 230,767 | 97.1% | 96.4% | 93.6% | 4,154 | 87.9% | 87.9% | 76.4% |
| Northampton County | 1,966 | 96.3% | 73.9% | 72.1% | 14,813 | 66.5% | 32.5% | 25.3% |
| Onslow County | 121,871 | 94.5% | 86.8% | 81.9% | 85,427 | 87.0% | 77.2% | 67.1% |
| Orange County | 102,990 | 95.7% | 96.7% | 92.5% | 47,487 | 59.4% | 72.9% | 47.7% |
| Pamlico County | | | | | 12,381 | 68.6% | 39.2% | 29.1% |
| Pasquotank County | 22,301 | 93.9% | 93.8% | 88.0% | 18,637 | 82.1% | 54.9% | 45.1% |
| Pender County | 26,064 | 97.4% | 77.9% | 75.5% | 39,673 | 64.5% | 77.3% | 57.6% |
| Perquimans County | | | | | 13,210 | 56.9% | 36.5% | 28.3% |
| Person County | 8,954 | 92.8% | 79.9% | 73.3% | 30,432 | 64.6% | 36.7% | 28.6% |
| Pitt County | 126,137 | 91.8% | 97.9% | 90.0% | 47,405 | 63.8% | 70.4% | 47.3% |
| Polk County | 1,748 | 98.7% | 24.1% | 24.1% | 18,238 | 46.0% | 58.7% | 31.7% |
| Randolph County | 57,458 | 94.5% | 97.9% | 92.5% | 88,585 | 87.4% | 76.2% | 66.7% |
| Richmond County | 23,721 | 95.4% | 49.0% | 46.3% | 19,057 | 69.6% | 47.2% | 33.3% |
| Robeson County | 26,002 | 95.2% | 87.3% | 83.4% | 90,661 | 78.2% | 55.5% | 43.8% |
| Rockingham County | 35,248 | 94.3% | 85.7% | 80.7% | 56,709 | 77.7% | 53.5% | 44.9% |
| Rowan County | 86,128 | 97.6% | 98.5% | 96.2% | 63,517 | 85.1% | 90.6% | 78.9% |
| Rutherford County | 20,925 | 97.5% | 95.8% | 93.4% | 44,038 | 46.9% | 73.6% | 40.9% |
| Sampson County | 8,962 | 99.9% | 99.6% | 99.6% | 50,158 | 63.7% | 64.5% | 41.3% |
| Scotland County | 16,189 | 96.2% | 95.4% | 91.7% | 17,973 | 56.0% | 64.2% | 35.5% |
| Stanly County | 17,319 | 99.3% | 97.8% | 97.2% | 46,834 | 76.3% | 78.0% | 61.1% |
| Stokes County | 8,780 | 98.6% | 99.7% | 98.4% | 36,395 | 79.4% | 74.5% | 61.0% |
| Surry County | 17,442 | 98.3% | 90.2% | 88.8% | 53,961 | 94.0% | 61.3% | 58.6% |
| Swain County | | | | | 13,967 | 36.9% | 45.9% | 28.2% |
| Transylvania County | 13,107 | 98.8% | 71.5% | 71.1% | 20,248 | 73.0% | 21.3% | 17.4% |
| Tyrrell County | | | | | 3,365 | 33.9% | 29.1% | 19.9% |
| Union County | 179,205 | 98.0% | 99.8% | 97.8% | 69,865 | 78.7% | 85.6% | 70.5% |
| Vance County | 19,793 | 94.2% | 92.5% | 86.9% | 22,345 | 66.1% | 46.4% | 34.8% |
| Wake County | 1,112,030 | 98.1% | 99.8% | 97.9% | 62,991 | 90.0% | 95.5% | 86.0% |
| Warren County | | | | | 18,713 | 31.6% | 36.0% | 14.4% |
| Washington County | | | | | 10,828 | 67.6% | 28.9% | 24.3% |
| Watauga County | 27,197 | 94.1% | 92.9% | 87.3% | 27,892 | 91.9% | 46.7% | 44.1% |
| Wayne County | 53,724 | 94.6% | 98.0% | 92.7% | 63,562 | 82.1% | 79.0% | 65.7% |
| Wilkes County | 19,753 | 95.9% | 77.0% | 73.4% | 46,031 | 94.7% | 31.3% | 29.9% |
| Wilson County | 48,446 | 99.4% | 93.9% | 93.3% | 30,003 | 88.2% | 73.7% | 65.1% |
| Yadkin County | | | | | 37,463 | 92.0% | 83.3% | 77.7% |
| Yancey County | | | | | 18,811 | 94.4% | 56.1% | 54.1% |
| North Dakota | 476,825 | 99.6% | 93.9% | 93.6% | 302,436 | 95.8% | 55.8% | 54.0% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Adams County | | | | | 2,115 | 100.0% | 7.1% | 7.1% |
| Barnes County | 6,743 | 100.0% | 100.0% | 100.0% | 4,015 | 93.4% | 49.5% | 46.2% |
| Benson County | | | | | 5,770 | 75.5% | 59.5% | 44.2% |
| Billings County | | | | | 1,018 | 49.3% | 47.9% | 27.5% |
| Bottineau County | | | | | 6,376 | 98.1% | 55.4% | 55.0% |
| Bowman County | | | | | 2,894 | 100.0% | 63.2% | 63.2% |
| Burke County | | | | | 2,155 | 96.4% | 56.7% | 55.8% |
| Burleigh County | 75,752 | 98.9% | 93.0% | 92.0% | 23,528 | 99.4% | 21.9% | 21.7% |
| Cass County | 173,268 | 100.0% | 99.0% | 99.0% | 19,466 | 96.1% | 77.7% | 75.8% |
| Cavalier County | | | | | 3,597 | 99.7% | 72.5% | 72.5% |
| Dickey County | | | | | 4,923 | 99.3% | 75.4% | 74.8% |
| Divide County | | | | | 2,187 | 95.3% | 72.1% | 70.8% |
| Dunn County | | | | | 4,015 | 97.9% | 45.5% | 45.3% |
| Eddy County | | | | | 2,314 | 90.6% | 82.5% | 76.6% |
| Emmons County | | | | | 3,250 | 100.0% | 55.9% | 55.9% |
| Foster County | | | | | 3,378 | 100.0% | 67.3% | 67.3% |
| Golden Valley County | | | | | 1,744 | 81.2% | 64.3% | 56.0% |
| Grand Forks County | 58,498 | 100.0% | 99.3% | 99.3% | 13,915 | 99.4% | 67.8% | 67.5% |
| Grant County | | | | | 2,243 | 96.5% | 51.0% | 50.4% |
| Griggs County | | | | | 2,252 | 99.7% | 73.5% | 73.3% |
| Hettinger County | | | | | 2,406 | 100.0% | 52.9% | 52.9% |
| Kidder County | | | | | 2,393 | 100.0% | 58.2% | 58.2% |
| LaMoure County | | | | | 4,098 | 100.0% | 55.5% | 55.5% |
| Logan County | | | | | 1,855 | 100.0% | 37.6% | 37.6% |
| McHenry County | | | | | 5,189 | 95.1% | 61.0% | 59.1% |
| McIntosh County | | | | | 2,475 | 100.0% | 37.8% | 37.8% |
| McKenzie County | 6,012 | 99.4% | 94.8% | 94.4% | 7,896 | 82.4% | 41.1% | 37.3% |
| McLean County | | | | | 9,824 | 95.5% | 61.7% | 60.4% |
| Mercer County | | | | | 8,333 | 100.0% | 68.2% | 68.2% |
| Morton County | 23,609 | 99.7% | 79.4% | 79.2% | 10,101 | 99.5% | 47.5% | 47.1% |
| Mountrail County | | | | | 9,290 | 93.6% | 79.7% | 76.8% |
| Nelson County | | | | | 2,995 | 86.9% | 30.0% | 25.7% |
| Oliver County | | | | | 1,856 | 100.0% | 39.8% | 39.8% |
| Pembina County | | | | | 6,763 | 100.0% | 42.8% | 42.8% |
| Pierce County | | | | | 3,942 | 79.8% | 74.7% | 66.5% |
| Ramsey County | 7,274 | 99.9% | 99.8% | 99.7% | 4,241 | 77.9% | 60.9% | 47.0% |
| Ransom County | | | | | 5,640 | 99.3% | 59.7% | 59.6% |
| Renville County | | | | | 2,220 | 95.5% | 57.8% | 56.2% |
| Richland County | 7,744 | 100.0% | 96.8% | 96.8% | 8,836 | 96.2% | 46.5% | 45.2% |
| Rolette County | | | | | 11,933 | 99.6% | 52.7% | 52.5% |
| Sargent County | | | | | 3,795 | 99.8% | 35.1% | 35.0% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Sheridan County | | | | | 1,295 | 95.9% | 57.8% | 56.2% |
| Sioux County | | | | | 3,711 | 98.1% | 12.2% | 12.0% |
| Slope County | | | | | 672 | 99.7% | 38.0% | 38.0% |
| Stark County | 24,910 | 100.0% | 96.5% | 96.5% | 7,893 | 95.6% | 50.2% | 48.1% |
| Steele County | | | | | 1,788 | 100.0% | 17.2% | 17.2% |
| Stutsman County | 15,040 | 100.0% | 89.0% | 89.0% | 6,447 | 100.0% | 46.5% | 46.5% |
| Towner County | | | | | 2,064 | 94.7% | 63.1% | 61.3% |
| Traill County | | | | | 7,958 | 98.9% | 73.0% | 72.6% |
| Walsh County | | | | | 10,438 | 99.9% | 82.5% | 82.4% |
| Ward County | 51,246 | 98.9% | 88.8% | 87.8% | 17,624 | 97.7% | 62.1% | 60.9% |
| Wells County | | | | | 3,930 | 88.9% | 32.3% | 29.3% |
| Williams County | 26,729 | 98.9% | 70.9% | 70.3% | 11,380 | 86.8% | 58.1% | 53.5% |
| Ohio | 8,944,217 | 97.9% | 98.6% | 96.6% | 2,811,841 | 73.1% | 70.0% | 55.0% |
| Adams County | | | | | 27,420 | 41.3% | 47.2% | 26.7% |
| Allen County | 69,632 | 96.3% | 76.1% | 73.9% | 31,483 | 84.6% | 57.5% | 51.5% |
| Ashland County | 19,016 | 99.9% | 100.0% | 99.9% | 33,165 | 74.6% | 86.1% | 66.1% |
| Ashtabula County | 46,108 | 98.9% | 86.5% | 85.5% | 50,906 | 72.5% | 73.4% | 56.4% |
| Athens County | 30,042 | 87.6% | 96.3% | 83.9% | 28,937 | 59.8% | 45.6% | 34.6% |
| Auglaize County | 28,170 | 99.8% | 65.6% | 65.5% | 17,778 | 67.6% | 26.6% | 18.3% |
| Belmont County | 25,281 | 98.8% | 91.6% | 90.6% | 40,228 | 62.1% | 59.0% | 41.6% |
| Brown County | 1,796 | 96.6% | 96.6% | 93.3% | 41,884 | 64.2% | 62.2% | 44.5% |
| Butler County | 350,832 | 98.1% | 99.9% | 98.1% | 37,588 | 91.9% | 90.3% | 83.9% |
| Carroll County | | | | | 26,659 | 51.9% | 67.4% | 40.3% |
| Champaign County | 11,213 | 100.0% | 81.5% | 81.5% | 27,496 | 74.2% | 65.4% | 52.0% |
| Clark County | 100,627 | 97.9% | 100.0% | 97.9% | 34,204 | 88.6% | 93.0% | 82.9% |
| Clermont County | 155,081 | 98.2% | 99.4% | 97.6% | 55,724 | 92.6% | 85.3% | 79.4% |
| Clinton County | 12,254 | 94.8% | 99.4% | 94.4% | 29,710 | 68.9% | 81.8% | 58.0% |
| Columbiana County | 45,218 | 98.5% | 98.5% | 97.0% | 55,293 | 58.8% | 79.0% | 50.8% |
| Coshocton County | 12,263 | 94.1% | 99.7% | 93.9% | 24,308 | 41.2% | 47.8% | 28.1% |
| Crawford County | 27,008 | 95.0% | 84.6% | 80.5% | 14,514 | 52.2% | 49.8% | 26.5% |
| Cuyahoga County | 1,228,946 | 99.1% | 99.8% | 98.9% | 7,095 | 97.7% | 100.0% | 97.7% |
| Darke County | 14,737 | 95.8% | 71.6% | 68.5% | 36,792 | 64.8% | 50.2% | 36.3% |
| Defiance County | 17,537 | 100.0% | 76.5% | 76.5% | 20,650 | 97.1% | 34.5% | 33.6% |
| Delaware County | 179,294 | 98.3% | 100.0% | 98.3% | 47,002 | 90.4% | 97.2% | 87.9% |
| Erie County | 53,368 | 99.2% | 94.0% | 93.4% | 21,133 | 84.1% | 90.8% | 76.4% |
| Fairfield County | 104,966 | 98.1% | 99.9% | 98.1% | 57,932 | 79.2% | 85.1% | 69.9% |
| Fayette County | 14,655 | 96.1% | 95.0% | 91.8% | 14,184 | 51.1% | 56.0% | 28.2% |
| Franklin County | 1,303,134 | 99.0% | 100.0% | 99.0% | 18,686 | 93.0% | 99.4% | 92.5% |
| Fulton County | 7,473 | 100.0% | 100.0% | 100.0% | 34,698 | 99.6% | 78.3% | 78.1% |
| Gallia County | 5,778 | 61.0% | 98.1% | 61.0% | 23,290 | 15.6% | 49.1% | 11.4% |
| Geauga County | 20,621 | 98.6% | 100.0% | 98.6% | 74,848 | 82.1% | 97.1% | 80.7% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Greene County | 130,585 | 97.9% | 99.9% | 97.9% | 37,871 | 69.2% | 91.6% | 64.1% |
| Guernsey County | 14,290 | 93.7% | 88.9% | 83.2% | 23,808 | 57.9% | 38.4% | 23.8% |
| Hamilton County | 805,046 | 98.9% | 99.3% | 98.2% | 19,991 | 95.8% | 88.2% | 84.6% |
| Hancock County | 51,836 | 99.8% | 95.0% | 94.9% | 23,025 | 99.3% | 35.8% | 35.6% |
| Hardin County | 13,060 | 99.7% | 99.2% | 99.0% | 17,356 | 95.2% | 39.5% | 37.9% |
| Harrison County | | | | | 14,378 | 50.8% | 17.8% | 12.6% |
| Henry County | 8,675 | 100.0% | 88.3% | 88.3% | 18,837 | 99.1% | 39.0% | 38.7% |
| Highland County | 11,331 | 92.5% | 99.7% | 92.3% | 32,060 | 46.2% | 55.6% | 32.2% |
| Hocking County | 8,050 | 94.5% | 95.0% | 90.3% | 19,808 | 44.1% | 31.1% | 22.0% |
| Holmes County | | | | | 44,390 | 34.5% | 69.5% | 25.7% |
| Huron County | 28,167 | 96.2% | 98.5% | 94.8% | 30,051 | 65.4% | 76.4% | 55.0% |
| Jackson County | 11,708 | 92.5% | 93.3% | 86.3% | 20,878 | 49.0% | 43.6% | 28.9% |
| Jefferson County | 38,809 | 99.1% | 90.8% | 90.2% | 25,521 | 65.9% | 39.1% | 29.2% |
| Knox County | 18,805 | 91.4% | 99.9% | 91.4% | 44,378 | 51.8% | 85.4% | 50.0% |
| Lake County | 214,280 | 98.0% | 99.7% | 97.7% | 17,562 | 95.3% | 99.6% | 95.0% |
| Lawrence County | 31,177 | 98.3% | 91.0% | 89.5% | 25,476 | 64.5% | 46.1% | 38.5% |
| Licking County | 117,938 | 98.1% | 100.0% | 98.1% | 63,421 | 73.3% | 79.5% | 64.6% |
| Logan County | 20,053 | 97.9% | 82.4% | 81.0% | 25,987 | 83.5% | 41.7% | 37.4% |
| Lorain County | 271,185 | 97.2% | 99.6% | 96.8% | 45,083 | 71.1% | 96.3% | 67.6% |
| Lucas County | 405,120 | 99.6% | 98.7% | 98.3% | 21,523 | 96.7% | 80.4% | 77.8% |
| Madison County | 14,719 | 96.1% | 100.0% | 96.1% | 28,821 | 60.3% | 96.9% | 58.3% |
| Mahoning County | 190,215 | 97.4% | 99.9% | 97.4% | 35,421 | 89.2% | 96.4% | 86.4% |
| Marion County | 41,971 | 99.9% | 91.9% | 91.9% | 22,671 | 85.9% | 51.0% | 43.9% |
| Medina County | 119,743 | 99.4% | 100.0% | 99.4% | 63,769 | 90.4% | 99.3% | 90.1% |
| Meigs County | 2,647 | 84.4% | 55.0% | 45.7% | 19,322 | 33.0% | 31.0% | 12.1% |
| Mercer County | 11,931 | 99.9% | 57.8% | 57.8% | 30,417 | 84.8% | 44.7% | 41.4% |
| Miami County | 76,475 | 99.3% | 99.9% | 99.3% | 33,772 | 71.7% | 92.2% | 67.5% |
| Monroe County | 179 | 99.4% | 100.0% | 99.4% | 13,055 | 20.2% | 34.3% | 5.7% |
| Montgomery County | 504,304 | 98.0% | 99.9% | 98.0% | 29,588 | 75.9% | 93.0% | 72.6% |
| Morgan County | | | | | 13,668 | 35.4% | 29.7% | 20.7% |
| Morrow County | 4 | 100.0% | 0.0% | 0.0% | 35,335 | 80.7% | 87.3% | 71.4% |
| Muskingum County | 42,030 | 94.8% | 91.4% | 86.4% | 44,083 | 67.4% | 54.1% | 42.2% |
| Noble County | | | | | 14,335 | 35.9% | 55.0% | 26.0% |
| Ottawa County | 15,187 | 96.5% | 91.8% | 88.4% | 24,791 | 75.0% | 73.4% | 56.4% |
| Paulding County | | | | | 18,757 | 95.2% | 41.7% | 41.6% |
| Perry County | 6,945 | 94.7% | 96.5% | 91.3% | 28,535 | 46.6% | 47.5% | 25.9% |
| Pickaway County | 23,628 | 97.2% | 98.2% | 95.4% | 36,395 | 65.2% | 81.0% | 51.7% |
| Pike County | 5,035 | 88.1% | 96.4% | 84.6% | 21,970 | 57.3% | 34.4% | 23.4% |
| Portage County | 99,231 | 98.2% | 100.0% | 98.2% | 62,514 | 90.3% | 95.2% | 86.1% |
| Preble County | 9,462 | 95.9% | 99.5% | 95.4% | 31,134 | 71.2% | 74.5% | 56.7% |
| Putnam County | 5,204 | 100.0% | 84.0% | 84.0% | 29,130 | 97.9% | 32.1% | 31.7% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Richland County | 83,088 | 92.1% | 99.9% | 92.0% | 42,231 | 81.1% | 80.8% | 65.7% |
| Ross County | 28,679 | 96.9% | 95.9% | 93.0% | 47,927 | 65.6% | 54.3% | 37.0% |
| Sandusky County | 33,142 | 96.1% | 95.8% | 92.1% | 25,525 | 72.7% | 73.9% | 53.1% |
| Scioto County | 32,037 | 92.8% | 92.1% | 85.2% | 40,157 | 69.8% | 42.2% | 32.6% |
| Seneca County | 29,333 | 98.1% | 96.6% | 94.8% | 25,299 | 83.0% | 40.3% | 35.9% |
| Shelby County | 20,304 | 99.9% | 95.5% | 95.5% | 27,367 | 64.2% | 45.7% | 32.8% |
| Stark County | 317,100 | 91.4% | 99.9% | 91.4% | 55,557 | 81.2% | 95.1% | 78.4% |
| Summit County | 515,651 | 98.6% | 100.0% | 98.6% | 20,231 | 95.6% | 99.9% | 95.6% |
| Trumbull County | 145,967 | 95.6% | 100.0% | 95.6% | 54,676 | 80.2% | 92.7% | 78.4% |
| Tuscarawas County | 46,211 | 98.6% | 97.1% | 95.8% | 45,726 | 59.5% | 65.9% | 45.3% |
| Union County | 36,011 | 97.9% | 98.8% | 96.7% | 30,887 | 91.7% | 67.0% | 60.9% |
| Van Wert County | 14,340 | 99.3% | 91.0% | 90.4% | 14,429 | 99.3% | 35.0% | 34.9% |
| Vinton County | 721 | 97.9% | 49.2% | 47.4% | 11,844 | 28.4% | 28.9% | 19.1% |
| Warren County | 205,222 | 97.2% | 98.7% | 96.0% | 44,556 | 85.5% | 90.0% | 77.1% |
| Washington County | 24,575 | 92.2% | 93.0% | 85.6% | 34,326 | 50.4% | 37.1% | 23.3% |
| Wayne County | 50,902 | 78.8% | 99.3% | 78.6% | 65,657 | 74.5% | 90.6% | 68.6% |
| Williams County | 9,132 | 99.6% | 92.0% | 91.7% | 27,520 | 98.8% | 25.8% | 25.5% |
| Wood County | 91,281 | 98.5% | 96.2% | 94.8% | 40,311 | 94.9% | 69.0% | 64.5% |
| Wyandot County | 6,446 | 99.4% | 89.8% | 89.3% | 15,121 | 98.6% | 50.8% | 50.7% |
| Oklahoma | 2,587,917 | 98.3% | 99.4% | 97.8% | 1,431,883 | 71.7% | 72.3% | 55.4% |
| Adair County | | | | | 19,576 | 99.8% | 56.6% | 56.6% |
| Alfalfa County | | | | | 5,637 | 55.0% | 61.9% | 27.7% |
| Atoka County | | | | | 14,262 | 79.6% | 63.8% | 54.6% |
| Beaver County | | | | | 5,016 | 88.0% | 42.4% | 41.4% |
| Beckham County | 10,810 | 99.6% | 99.8% | 99.5% | 11,199 | 98.3% | 76.6% | 76.2% |
| Blaine County | | | | | 8,409 | 88.3% | 49.2% | 46.8% |
| Bryan County | 19,240 | 100.0% | 97.0% | 97.0% | 28,942 | 86.0% | 57.2% | 53.2% |
| Caddo County | 5,076 | 97.4% | 99.3% | 96.7% | 21,122 | 64.8% | 73.4% | 46.1% |
| Canadian County | 136,667 | 99.9% | 100.0% | 99.9% | 32,482 | 92.9% | 90.8% | 86.8% |
| Carter County | 21,725 | 99.9% | 97.2% | 97.2% | 26,785 | 92.6% | 62.2% | 58.9% |
| Cherokee County | 17,357 | 99.6% | 98.5% | 98.2% | 30,741 | 91.0% | 58.4% | 53.4% |
| Choctaw County | 4,998 | 91.2% | 54.3% | 48.0% | 9,360 | 20.1% | 29.4% | 5.8% |
| Cimarron County | | | | | 2,252 | 80.6% | 61.1% | 57.6% |
| Cleveland County | 252,601 | 99.6% | 100.0% | 99.6% | 46,986 | 91.4% | 87.6% | 81.8% |
| Coal County | | | | | 5,313 | 63.0% | 63.6% | 49.1% |
| Comanche County | 86,819 | 99.7% | 100.0% | 99.7% | 36,227 | 87.7% | 88.7% | 78.2% |
| Cotton County | | | | | 5,477 | 93.1% | 84.3% | 81.4% |
| Craig County | 4,682 | 100.0% | 98.5% | 98.5% | 9,441 | 52.8% | 59.2% | 41.4% |
| Creek County | 27,272 | 99.3% | 99.7% | 99.1% | 45,427 | 54.6% | 75.2% | 46.5% |
| Custer County | 19,706 | 99.9% | 99.5% | 99.5% | 8,180 | 95.0% | 51.9% | 51.6% |
| Delaware County | 8,372 | 99.9% | 94.1% | 94.1% | 33,041 | 66.4% | 55.2% | 41.8% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Dewey County | | | | | 4,401 | 77.1% | 65.0% | 58.2% |
| Ellis County | | | | | 3,657 | 25.1% | 49.2% | 14.6% |
| Garfield County | 48,152 | 99.9% | 99.7% | 99.7% | 13,768 | 96.1% | 53.5% | 52.6% |
| Garvin County | 5,479 | 85.1% | 98.9% | 84.6% | 20,234 | 49.0% | 73.4% | 39.4% |
| Grady County | 15,256 | 54.0% | 100.0% | 54.0% | 41,402 | 86.3% | 84.7% | 74.4% |
| Grant County | | | | | 4,124 | 75.9% | 53.4% | 46.8% |
| Greer County | | | | | 5,547 | 91.7% | 87.2% | 86.0% |
| Harmon County | | | | | 2,428 | 1.1% | 74.2% | 1.1% |
| Harper County | | | | | 3,129 | 51.9% | 74.4% | 38.7% |
| Haskell County | | | | | 11,641 | 56.1% | 54.3% | 42.5% |
| Hughes County | 4,269 | 95.5% | 65.4% | 61.1% | 9,138 | 6.0% | 58.4% | 4.1% |
| Jackson County | 17,723 | 100.0% | 100.0% | 100.0% | 6,833 | 97.7% | 28.9% | 28.8% |
| Jefferson County | | | | | 5,389 | 91.3% | 70.8% | 67.1% |
| Johnston County | | | | | 10,406 | 60.0% | 64.4% | 46.5% |
| Kay County | 29,910 | 100.0% | 100.0% | 100.0% | 13,758 | 95.2% | 82.9% | 81.9% |
| Kingfisher County | | | | | 15,293 | 87.7% | 80.7% | 77.0% |
| Kiowa County | | | | | 8,345 | 96.0% | 79.9% | 79.1% |
| Latimer County | | | | | 9,630 | 42.6% | 58.1% | 35.7% |
| Le Flore County | 9,802 | 86.7% | 100.0% | 86.7% | 39,105 | 43.0% | 78.8% | 38.9% |
| Lincoln County | 1 | 0.0% | 100.0% | 0.0% | 34,187 | 66.1% | 72.9% | 50.1% |
| Logan County | 19,814 | 96.4% | 99.9% | 96.3% | 32,119 | 77.8% | 86.8% | 67.4% |
| Love County | | | | | 10,218 | 90.6% | 76.5% | 74.0% |
| Major County | | | | | 7,502 | 89.6% | 48.5% | 45.7% |
| Marshall County | | | | | 15,882 | 81.1% | 70.3% | 64.5% |
| Mayer County | 9,583 | 99.9% | 99.9% | 99.8% | 30,006 | 64.4% | 74.0% | 52.5% |
| McClain County | 5,911 | 96.9% | 100.0% | 96.9% | 39,395 | 85.2% | 92.9% | 82.3% |
| McCurtain County | 5,606 | 100.0% | 86.2% | 86.2% | 25,325 | 75.2% | 29.6% | 27.6% |
| McIntosh County | | | | | 19,451 | 83.3% | 75.0% | 62.9% |
| Murray County | 4,775 | 100.0% | 98.7% | 98.7% | 8,897 | 85.1% | 71.3% | 66.1% |
| Muskogee County | 35,636 | 79.7% | 99.6% | 79.5% | 30,718 | 76.4% | 78.2% | 59.9% |
| Noble County | 4,471 | 100.0% | 100.0% | 100.0% | 6,425 | 94.9% | 59.3% | 57.2% |
| Nowata County | 687 | 98.8% | 12.0% | 11.2% | 8,796 | 65.5% | 65.4% | 54.3% |
| Okfuskee County | | | | | 11,134 | 54.6% | 60.5% | 37.9% |
| Oklahoma County | 739,493 | 99.6% | 99.9% | 99.6% | 63,066 | 87.7% | 97.7% | 85.8% |
| Okmulgee County | 17,327 | 79.7% | 95.0% | 75.6% | 19,663 | 78.1% | 61.4% | 43.9% |
| Osage County | 12,432 | 67.9% | 99.2% | 67.1% | 33,407 | 34.6% | 69.5% | 28.9% |
| Ottawa County | 15,383 | 99.9% | 97.4% | 97.4% | 14,955 | 72.2% | 58.0% | 38.7% |
| Pawnee County | | | | | 15,757 | 58.2% | 77.0% | 48.6% |
| Payne County | 54,313 | 88.6% | 99.9% | 88.5% | 28,481 | 74.7% | 91.7% | 69.7% |
| Pittsburg County | 20,908 | 100.0% | 97.8% | 97.8% | 22,705 | 45.1% | 61.4% | 35.4% |
| Pontotoc County | 17,199 | 99.5% | 98.8% | 98.3% | 20,942 | 57.2% | 56.3% | 36.1% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Pottawatomie County | 34,436 | 99.9% | 99.7% | 99.7% | 39,097 | 76.2% | 83.0% | 67.2% |
| Pushmataha County | | | | | 10,769 | 58.3% | 39.8% | 32.0% |
| Roger Mills County | | | | | 3,320 | 36.3% | 38.0% | 4.6% |
| Rogers County | 44,505 | 97.5% | 99.9% | 97.5% | 54,331 | 47.8% | 84.7% | 43.2% |
| Seminole County | 6,042 | 83.8% | 96.3% | 81.7% | 17,309 | 34.3% | 65.4% | 30.4% |
| Sequoyah County | 7,505 | 99.6% | 95.4% | 95.0% | 32,162 | 75.0% | 61.1% | 48.1% |
| Stephens County | 20,840 | 99.3% | 98.2% | 97.5% | 22,870 | 50.8% | 60.1% | 43.7% |
| Texas County | 11,606 | 99.9% | 95.8% | 95.8% | 8,889 | 92.8% | 44.8% | 43.4% |
| Tillman County | | | | | 6,977 | 89.4% | 73.1% | 71.4% |
| Tulsa County | 642,084 | 99.4% | 99.9% | 99.3% | 35,274 | 65.8% | 88.4% | 59.7% |
| Wagoner County | 54,610 | 98.6% | 99.9% | 98.6% | 32,034 | 78.6% | 79.8% | 62.3% |
| Washington County | 40,573 | 99.8% | 100.0% | 99.8% | 12,669 | 28.7% | 68.0% | 21.7% |
| Washita County | | | | | 10,732 | 94.5% | 70.7% | 67.5% |
| Woods County | 5,072 | 100.0% | 88.8% | 88.8% | 3,515 | 58.5% | 57.5% | 25.8% |
| Woodward County | 11,189 | 100.0% | 89.3% | 89.3% | 8,801 | 66.6% | 46.7% | 28.2% |
| Oregon | 3,397,493 | 98.9% | 97.5% | 96.5% | 842,644 | 62.5% | 62.0% | 43.1% |
| Baker County | 9,873 | 97.3% | 72.5% | 70.7% | 7,065 | 29.6% | 33.6% | 7.9% |
| Benton County | 78,129 | 98.9% | 94.7% | 94.1% | 19,501 | 68.1% | 62.2% | 48.8% |
| Clackamas County | 349,001 | 98.6% | 99.4% | 98.1% | 74,176 | 71.8% | 76.3% | 57.1% |
| Clatsop County | 25,432 | 94.3% | 75.2% | 70.2% | 16,263 | 62.0% | 56.9% | 38.3% |
| Columbia County | 31,362 | 98.3% | 94.7% | 93.3% | 22,226 | 46.9% | 54.6% | 34.0% |
| Coos County | 40,166 | 99.3% | 84.4% | 83.9% | 24,824 | 61.2% | 48.8% | 38.5% |
| Crook County | 13,020 | 99.9% | 99.0% | 98.9% | 13,355 | 25.7% | 75.8% | 18.4% |
| Curry County | 11,238 | 100.0% | 90.8% | 90.8% | 12,360 | 80.3% | 26.9% | 25.8% |
| Deschutes County | 144,569 | 99.8% | 91.0% | 90.9% | 61,980 | 74.0% | 52.7% | 40.8% |
| Douglas County | 66,794 | 99.6% | 91.7% | 91.3% | 45,503 | 85.2% | 53.4% | 48.4% |
| Gilliam County | | | | | 2,018 | 27.1% | 78.3% | 27.1% |
| Grant County | | | | | 7,218 | 29.1% | 0.0% | 0.0% |
| Harney County | 4,168 | 97.8% | 88.0% | 86.0% | 3,347 | 22.4% | 52.1% | 19.6% |
| Hood River County | 11,680 | 95.2% | 96.5% | 91.9% | 12,368 | 51.6% | 90.0% | 48.4% |
| Jackson County | 175,338 | 99.8% | 94.5% | 94.4% | 46,306 | 73.9% | 66.5% | 51.3% |
| Jefferson County | 8,106 | 100.0% | 100.0% | 100.0% | 17,224 | 50.4% | 81.4% | 45.8% |
| Josephine County | 49,780 | 95.6% | 99.1% | 94.9% | 37,950 | 34.4% | 67.4% | 28.1% |
| Klamath County | 43,579 | 100.0% | 100.0% | 100.0% | 26,633 | 70.9% | 64.5% | 52.4% |
| Lake County | | | | | 8,385 | 58.8% | 67.7% | 52.6% |
| Lane County | 310,885 | 99.0% | 96.1% | 95.1% | 71,468 | 58.9% | 43.5% | 30.4% |
| Lincoln County | 31,515 | 97.4% | 84.4% | 82.3% | 19,298 | 74.2% | 59.9% | 52.9% |
| Linn County | 84,477 | 99.6% | 97.7% | 97.5% | 45,990 | 70.2% | 65.1% | 51.2% |
| Malheur County | 13,010 | 100.0% | 97.5% | 97.5% | 18,869 | 71.3% | 69.5% | 59.2% |
| Marion County | 300,790 | 98.6% | 98.9% | 97.6% | 45,913 | 70.0% | 81.6% | 59.4% |
| Morrow County | | | | | 12,300 | 49.2% | 59.1% | 33.0% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Multnomah County | 784,431 | 99.4% | 99.7% | 99.1% | 10,652 | 70.5% | 73.7% | 53.0% |
| Polk County | 70,433 | 99.8% | 98.3% | 98.1% | 19,181 | 47.7% | 73.5% | 42.5% |
| Sherman County | | | | | 1,955 | 60.3% | 64.8% | 40.7% |
| Tillamook County | 10,833 | 96.7% | 90.3% | 87.2% | 16,741 | 80.0% | 45.3% | 39.6% |
| Umatilla County | 54,956 | 88.1% | 95.9% | 84.1% | 25,259 | 69.4% | 61.0% | 40.9% |
| Union County | 15,657 | 97.4% | 97.7% | 95.2% | 10,520 | 53.0% | 44.5% | 29.4% |
| Wallowa County | | | | | 7,659 | 49.6% | 16.2% | 9.7% |
| Wasco County | 17,023 | 95.4% | 99.3% | 94.8% | 9,538 | 38.3% | 53.9% | 27.1% |
| Washington County | 564,963 | 99.5% | 99.7% | 99.3% | 35,213 | 51.9% | 78.2% | 48.4% |
| Wheeler County | | | | | 1,445 | 44.4% | 34.1% | 28.5% |
| Yamhill County | 76,285 | 99.2% | 99.8% | 99.1% | 31,941 | 43.7% | 74.2% | 40.9% |
| Pennsylvania | 9,886,696 | 99.3% | 98.2% | 97.6% | 3,085,312 | 81.3% | 71.2% | 61.5% |
| Adams County | 38,444 | 98.8% | 99.6% | 98.4% | 67,583 | 81.6% | 91.3% | 78.0% |
| Allegheny County | 1,202,611 | 99.8% | 97.4% | 97.2% | 30,642 | 95.9% | 84.4% | 81.2% |
| Armstrong County | 22,769 | 99.6% | 95.4% | 95.0% | 41,978 | 78.0% | 49.9% | 42.0% |
| Beaver County | 117,542 | 99.4% | 97.8% | 97.3% | 48,135 | 87.8% | 80.4% | 72.8% |
| Bedford County | 4,532 | 99.4% | 98.6% | 98.1% | 42,886 | 70.6% | 43.6% | 37.4% |
| Berks County | 316,496 | 100.0% | 99.9% | 99.9% | 113,953 | 99.9% | 90.8% | 90.8% |
| Blair County | 89,811 | 99.5% | 97.7% | 97.4% | 31,221 | 83.5% | 57.3% | 52.0% |
| Bradford County | 16,056 | 99.3% | 93.1% | 92.4% | 43,810 | 48.9% | 36.5% | 23.0% |
| Bucks County | 577,183 | 99.4% | 98.3% | 97.7% | 67,871 | 97.8% | 81.7% | 80.1% |
| Butler County | 111,247 | 99.7% | 95.5% | 95.2% | 86,053 | 92.2% | 68.1% | 64.4% |
| Cambria County | 70,762 | 97.9% | 96.6% | 94.6% | 60,679 | 81.1% | 63.0% | 54.6% |
| Cameron County | | | | | 4,418 | 88.2% | 65.3% | 63.3% |
| Carbon County | 26,583 | 99.6% | 89.2% | 88.9% | 38,877 | 96.6% | 68.3% | 66.8% |
| Centre County | 95,558 | 96.9% | 99.6% | 96.6% | 62,867 | 80.5% | 79.3% | 68.4% |
| Chester County | 438,805 | 99.4% | 95.2% | 94.7% | 107,018 | 93.7% | 84.6% | 79.6% |
| Clarion County | 5,444 | 99.0% | 100.0% | 99.0% | 31,902 | 65.3% | 44.1% | 33.8% |
| Clearfield County | 30,072 | 93.5% | 85.6% | 79.2% | 47,832 | 69.8% | 58.8% | 47.4% |
| Clinton County | 19,422 | 99.8% | 89.4% | 89.4% | 18,509 | 79.1% | 42.2% | 35.1% |
| Columbia County | 35,765 | 98.8% | 99.8% | 98.7% | 29,161 | 55.6% | 67.4% | 42.1% |
| Crawford County | 27,930 | 99.9% | 93.5% | 93.5% | 54,740 | 60.1% | 56.6% | 37.3% |
| Cumberland County | 210,853 | 99.2% | 99.8% | 99.0% | 57,726 | 86.0% | 91.6% | 78.9% |
| Dauphin County | 245,175 | 99.8% | 99.8% | 99.6% | 43,625 | 87.9% | 90.7% | 80.8% |
| Delaware County | 570,605 | 99.8% | 98.5% | 98.3% | 4,577 | 98.6% | 70.9% | 69.8% |
| Elk County | 13,447 | 97.8% | 90.7% | 88.7% | 17,030 | 82.3% | 70.5% | 64.0% |
| Erie County | 202,325 | 96.6% | 96.2% | 93.0% | 65,364 | 80.8% | 73.5% | 60.7% |
| Fayette County | 56,537 | 96.6% | 94.5% | 91.6% | 69,218 | 77.6% | 57.6% | 45.1% |
| Forest County | | | | | 6,626 | 37.6% | 64.4% | 27.3% |
| Franklin County | 87,280 | 99.2% | 98.5% | 97.7% | 69,622 | 80.8% | 87.0% | 72.2% |
| Fulton County | | | | | 14,533 | 40.6% | 63.9% | 33.5% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Greene County | 8,483 | 99.7% | 99.1% | 98.8% | 26,180 | 64.7% | 30.5% | 21.7% |
| Huntingdon County | 10,800 | 99.9% | 96.4% | 96.3% | 32,481 | 73.8% | 45.3% | 39.9% |
| Indiana County | 33,118 | 99.2% | 95.1% | 94.5% | 49,839 | 56.0% | 51.3% | 31.7% |
| Jefferson County | 11,616 | 99.7% | 98.2% | 98.0% | 32,178 | 72.4% | 56.4% | 45.7% |
| Juniata County | | | | | 23,339 | 56.2% | 60.7% | 42.2% |
| Lackawanna County | 177,056 | 99.7% | 99.4% | 99.2% | 38,559 | 89.8% | 80.3% | 73.9% |
| Lancaster County | 402,902 | 99.6% | 99.8% | 99.5% | 153,727 | 87.8% | 93.8% | 83.3% |
| Lawrence County | 48,985 | 99.7% | 95.5% | 95.3% | 35,864 | 85.4% | 82.3% | 70.8% |
| Lebanon County | 106,637 | 99.7% | 100.0% | 99.7% | 37,374 | 88.1% | 96.1% | 84.8% |
| Lehigh County | 338,178 | 99.4% | 99.9% | 99.4% | 38,139 | 95.4% | 92.4% | 88.9% |
| Luzerne County | 252,720 | 98.7% | 99.5% | 98.3% | 73,649 | 80.2% | 74.2% | 61.1% |
| Lycoming County | 67,473 | 99.9% | 99.8% | 99.7% | 45,631 | 76.7% | 63.6% | 55.1% |
| McKean County | 10,760 | 99.6% | 93.2% | 92.9% | 29,106 | 79.6% | 56.2% | 51.5% |
| Mercer County | 56,103 | 96.7% | 99.4% | 96.2% | 53,117 | 73.2% | 70.7% | 53.8% |
| Mifflin County | 20,827 | 99.8% | 88.7% | 88.6% | 25,161 | 76.4% | 44.1% | 36.8% |
| Monroe County | 72,247 | 99.5% | 91.7% | 91.2% | 94,951 | 94.5% | 69.4% | 65.7% |
| Montgomery County | 835,528 | 99.1% | 98.2% | 97.5% | 29,155 | 96.1% | 91.9% | 88.6% |
| Montour County | 8,252 | 95.9% | 100.0% | 95.9% | 9,839 | 70.6% | 86.4% | 63.6% |
| Northampton County | 264,026 | 99.7% | 99.8% | 99.6% | 54,500 | 97.4% | 92.0% | 89.6% |
| Northumberland County | 57,496 | 99.3% | 97.6% | 97.0% | 32,637 | 74.2% | 66.7% | 51.8% |
| Perry County | 2,963 | 99.9% | 96.9% | 96.8% | 43,151 | 71.8% | 72.4% | 56.9% |
| Philadelphia County | 1,567,258 | 99.7% | 99.9% | 99.6% | | | | |
| Pike County | 7,714 | 97.0% | 86.6% | 83.7% | 52,844 | 94.7% | 47.8% | 45.8% |
| Potter County | | | | | 16,220 | 93.6% | 32.3% | 31.3% |
| Schuylkill County | 75,615 | 96.4% | 95.0% | 91.8% | 67,489 | 77.6% | 68.5% | 55.1% |
| Snyder County | 11,781 | 99.6% | 94.3% | 93.9% | 27,871 | 66.7% | 62.6% | 48.4% |
| Somerset County | 16,384 | 98.5% | 93.4% | 92.0% | 56,326 | 71.3% | 55.8% | 42.7% |
| Sullivan County | | | | | 5,855 | 46.7% | 20.9% | 12.5% |
| Susquehanna County | | | | | 38,074 | 67.5% | 58.3% | 42.9% |
| Tioga County | | | | | 41,106 | 80.6% | 38.2% | 36.0% |
| Union County | 14,230 | 99.7% | 87.9% | 87.8% | 28,514 | 77.3% | 65.6% | 54.4% |
| Venango County | 21,728 | 97.7% | 97.8% | 95.7% | 28,049 | 67.6% | 45.6% | 35.4% |
| Warren County | 15,065 | 95.8% | 90.6% | 87.4% | 22,743 | 52.4% | 55.1% | 39.3% |
| Washington County | 141,292 | 99.5% | 96.7% | 96.3% | 69,091 | 77.0% | 71.1% | 58.1% |
| Wayne County | 7,091 | 98.9% | 94.6% | 93.6% | 44,082 | 81.6% | 48.0% | 40.5% |
| Westmoreland County | 259,097 | 99.4% | 94.8% | 94.3% | 92,960 | 89.4% | 79.3% | 71.9% |
| Wyoming County | 1,219 | 96.7% | 100.0% | 96.7% | 24,795 | 73.0% | 56.5% | 45.1% |
| York County | 328,798 | 99.5% | 99.8% | 99.3% | 132,260 | 83.6% | 94.6% | 80.5% |
| Puerto Rico | 2,966,395 | 98.7% | 98.9% | 97.7% | 255,394 | 77.0% | 86.3% | 68.8% |
| Adjuntas Municipio | 7,642 | 97.9% | 97.3% | 96.0% | 9,558 | 96.2% | 88.3% | 84.9% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Aguada Municipio | 36,358 | 97.6% | 89.1% | 87.4% | 220 | 99.5% | 100.0% | 99.5% |
| Aguadilla Municipio | 53,970 | 99.9% | 99.5% | 99.5% | 120 | 98.3% | 100.0% | 98.3% |
| Aguas Buenas Municipio | 20,347 | 94.6% | 99.0% | 93.8% | 2,745 | 76.3% | 95.3% | 72.2% |
| Aibonito Municipio | 19,513 | 100.0% | 98.4% | 98.4% | 4,229 | 100.0% | 86.1% | 86.1% |
| Arecibo Municipio | 77,213 | 99.4% | 98.7% | 98.3% | 8,627 | 52.2% | 66.0% | 40.6% |
| Arroyo Municipio | 15,575 | 99.9% | 98.3% | 98.2% | 519 | 91.5% | 75.7% | 67.8% |
| Añasco Municipio | 21,093 | 97.0% | 98.6% | 96.0% | 3,528 | 31.4% | 88.5% | 30.4% |
| Barceloneta Municipio | 21,419 | 98.5% | 96.8% | 95.5% | 1,208 | 91.0% | 90.8% | 83.6% |
| Barranquitas Municipio | 26,483 | 99.0% | 96.8% | 95.8% | 1,383 | 99.8% | 84.9% | 84.8% |
| Bayamón Municipio | 181,072 | 99.9% | 99.8% | 99.7% | | | | |
| Cabo Rojo Municipio | 45,509 | 98.7% | 98.5% | 97.3% | 1,949 | 77.7% | 99.5% | 77.4% |
| Caguas Municipio | 122,435 | 99.4% | 99.8% | 99.2% | 1,424 | 99.8% | 95.8% | 95.7% |
| Camuy Municipio | 26,007 | 96.6% | 99.8% | 96.5% | 5,725 | 45.4% | 79.2% | 40.9% |
| Canóvanas Municipio | 39,884 | 99.9% | 99.3% | 99.2% | 1,439 | 98.6% | 87.4% | 87.0% |
| Carolina Municipio | 152,771 | 99.7% | 99.7% | 99.4% | 369 | 97.5% | 100.0% | 97.5% |
| Cataño Municipio | 22,319 | 100.0% | 98.6% | 98.6% | | | | |
| Cayey Municipio | 36,264 | 100.0% | 99.9% | 99.9% | 4,669 | 100.0% | 88.7% | 88.7% |
| Ceiba Municipio | 10,535 | 98.6% | 99.8% | 98.5% | 951 | 33.4% | 96.0% | 31.9% |
| Ciales Municipio | 10,034 | 82.6% | 99.6% | 82.5% | 6,245 | 29.3% | 93.4% | 28.0% |
| Cidra Municipio | 37,089 | 98.0% | 99.8% | 97.9% | 760 | 99.0% | 79.7% | 78.8% |
| Coamo Municipio | 23,946 | 100.0% | 99.0% | 99.0% | 10,381 | 100.0% | 90.6% | 90.6% |
| Comerío Municipio | 15,229 | 88.7% | 98.4% | 87.9% | 2,799 | 85.4% | 97.0% | 84.2% |
| Corozal Municipio | 30,714 | 93.3% | 99.9% | 93.3% | 1,836 | 94.8% | 94.5% | 89.4% |
| Culebra Municipio | | | | | 1,858 | 95.9% | 95.5% | 92.3% |
| Dorado Municipio | 34,556 | 98.9% | 99.8% | 98.9% | 570 | 80.3% | 100.0% | 80.3% |
| Fajardo Municipio | 30,597 | 99.4% | 99.7% | 99.1% | 1,883 | 83.4% | 94.7% | 81.3% |
| Florida Municipio | 9,148 | 95.4% | 99.8% | 95.2% | 2,296 | 60.9% | 89.5% | 51.3% |
| Guayama Municipio | 31,320 | 100.0% | 99.8% | 99.8% | 5,666 | 92.5% | 87.2% | 80.3% |
| Guayanilla Municipio | 13,784 | 98.2% | 93.5% | 92.3% | 3,539 | 71.4% | 81.0% | 66.9% |
| Guaynabo Municipio | 89,274 | 99.7% | 99.9% | 99.7% | | | | |
| Gurabo Municipio | 38,555 | 99.2% | 99.7% | 98.9% | 1,432 | 89.0% | 100.0% | 89.0% |
| Guánica Municipio | 12,170 | 100.0% | 93.9% | 93.9% | 2,029 | 100.0% | 93.3% | 93.3% |
| Hatillo Municipio | 32,904 | 99.5% | 99.8% | 99.3% | 3,898 | 95.5% | 88.8% | 85.8% |
| Hormigueros Municipio | 15,112 | 98.8% | 100.0% | 98.8% | 214 | 94.3% | 100.0% | 94.3% |
| Humacao Municipio | 50,093 | 99.6% | 99.0% | 98.7% | 318 | 93.3% | 100.0% | 93.3% |
| Isabela Municipio | 40,080 | 98.4% | 97.6% | 96.3% | 2,160 | 84.7% | 87.7% | 77.5% |
| Jayuya Municipio | 9,553 | 79.6% | 80.0% | 66.8% | 4,547 | 37.0% | 53.1% | 26.2% |
| Juana Díaz Municipio | 41,765 | 99.9% | 98.1% | 98.1% | 4,102 | 100.0% | 76.6% | 76.6% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Juncos Municipio | 35,811 | 97.8% | 100.0% | 97.8% | 702 | 76.7% | 99.2% | 76.6% |
| Lajas Municipio | 14,522 | 99.9% | 99.9% | 99.9% | 8,228 | 100.0% | 97.0% | 97.0% |
| Lares Municipio | 20,811 | 95.4% | 98.0% | 94.3% | 5,965 | 63.1% | 82.3% | 61.0% |
| Las Marías Municipio | 99 | 100.0% | 100.0% | 100.0% | 8,352 | 54.8% | 97.3% | 54.6% |
| Las Piedras Municipio | 33,525 | 98.0% | 98.8% | 96.9% | 559 | 47.5% | 100.0% | 47.5% |
| Loíza Municipio | 22,342 | 98.5% | 99.8% | 98.4% | 1,009 | 25.4% | 95.8% | 25.4% |
| Luquillo Municipio | 16,399 | 98.7% | 98.1% | 97.1% | 1,611 | 76.0% | 90.0% | 68.2% |
| Manatí Municipio | 34,443 | 98.0% | 97.6% | 95.7% | 4,078 | 52.1% | 97.6% | 50.8% |
| Maricao Municipio | | | | | 4,527 | 60.3% | 87.5% | 59.5% |
| Maunabo Municipio | 7,051 | 99.9% | 100.0% | 99.9% | 3,374 | 99.0% | 98.8% | 98.1% |
| Mayagüez Municipio | 69,501 | 95.7% | 98.6% | 94.5% | 2,961 | 66.0% | 97.4% | 65.8% |
| Moca Municipio | 31,706 | 96.2% | 97.4% | 94.3% | 3,926 | 80.6% | 95.0% | 78.5% |
| Morovis Municipio | 23,817 | 92.5% | 98.0% | 91.2% | 3,508 | 72.2% | 92.5% | 67.6% |
| Naguabo Municipio | 17,510 | 93.0% | 99.4% | 92.4% | 5,611 | 81.9% | 95.8% | 77.9% |
| Naranjito Municipio | 27,464 | 97.3% | 99.5% | 96.9% | | | | |
| Orocovis Municipio | 12,356 | 98.8% | 98.4% | 97.3% | 8,029 | 68.4% | 87.2% | 59.5% |
| Patillas Municipio | 11,484 | 99.9% | 92.6% | 92.6% | 4,154 | 98.7% | 50.0% | 49.6% |
| Peñuelas Municipio | 15,206 | 99.8% | 99.1% | 99.0% | 4,761 | 99.6% | 87.5% | 87.1% |
| Ponce Municipio | 129,315 | 100.0% | 98.7% | 98.7% | 8,484 | 91.2% | 51.7% | 49.1% |
| Quebradillas Municipio | 20,414 | 99.8% | 99.4% | 99.2% | 2,268 | 47.3% | 88.2% | 38.4% |
| Rincón Municipio | 14,959 | 96.4% | 94.5% | 91.6% | 8 | 62.5% | 62.5% | 25.0% |
| Río Grande Municipio | 43,873 | 98.6% | 99.8% | 98.4% | 2,503 | 83.6% | 95.8% | 80.9% |
| Sabana Grande Municipio | 19,297 | 99.2% | 93.9% | 93.4% | 2,806 | 72.9% | 91.4% | 69.8% |
| Salinas Municipio | 20,959 | 99.8% | 99.7% | 99.6% | 5,340 | 99.9% | 72.9% | 72.9% |
| San Germán Municipio | 25,016 | 98.1% | 95.2% | 94.0% | 5,797 | 67.7% | 71.5% | 56.0% |
| San Juan Municipio | 343,257 | 99.9% | 99.7% | 99.7% | 7 | 100.0% | 100.0% | 100.0% |
| San Lorenzo Municipio | 31,319 | 97.4% | 100.0% | 97.4% | 4,431 | 84.3% | 99.4% | 83.8% |
| San Sebastián Municipio | 31,718 | 96.5% | 99.7% | 96.3% | 6,638 | 64.8% | 95.8% | 63.4% |
| Santa Isabel Municipio | 16,480 | 100.0% | 98.8% | 98.8% | 3,767 | 99.8% | 98.3% | 98.3% |
| Toa Alta Municipio | 64,186 | 99.4% | 99.8% | 99.2% | 685 | 92.7% | 96.0% | 89.6% |
| Toa Baja Municipio | 72,337 | 99.9% | 99.9% | 99.8% | 603 | 93.0% | 99.8% | 92.8% |
| Trujillo Alto Municipio | 66,009 | 99.5% | 100.0% | 99.5% | 18 | 100.0% | 100.0% | 100.0% |
| Utua Municipio | 12,482 | 97.5% | 97.9% | 95.8% | 14,749 | 71.9% | 80.2% | 67.6% |
| Vega Alta Municipio | 32,612 | 95.0% | 99.2% | 94.4% | 1,279 | 28.8% | 99.1% | 28.8% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Vega Baja Municipio | 49,747 | 98.6% | 99.7% | 98.3% | 3,167 | 78.2% | 96.1% | 75.2% |
| Vieques Municipio | 6,580 | 90.6% | 91.8% | 83.1% | 1,661 | 92.7% | 90.6% | 85.7% |
| Villalba Municipio | 17,593 | 100.0% | 99.0% | 99.0% | 3,682 | 100.0% | 90.1% | 90.1% |
| Yabucoa Municipio | 24,289 | 97.1% | 97.9% | 95.6% | 5,187 | 99.9% | 98.9% | 98.9% |
| Yauco Municipio | 27,574 | 98.5% | 99.2% | 98.5% | 5,763 | 36.4% | 81.1% | 33.7% |
| Rhode Island | 992,744 | 99.7% | 94.1% | 93.9% | 100,990 | 96.6% | 66.6% | 64.7% |
| Bristol County | 49,821 | 99.9% | 79.9% | 79.9% | 539 | 98.5% | 93.8% | 92.3% |
| Kent County | 158,751 | 99.9% | 88.9% | 88.9% | 12,524 | 99.4% | 61.0% | 60.9% |
| Newport County | 76,788 | 99.9% | 87.8% | 87.7% | 7,693 | 92.9% | 57.9% | 54.3% |
| Providence County | 622,963 | 99.6% | 98.9% | 98.5% | 34,325 | 97.5% | 59.2% | 58.5% |
| Washington County | 84,421 | 99.9% | 82.6% | 82.6% | 45,909 | 95.8% | 74.9% | 71.8% |
| South Carolina | 3,589,048 | 97.1% | 96.9% | 94.2% | 1,693,586 | 76.1% | 66.6% | 53.1% |
| Abbeville County | 5,410 | 100.0% | 68.5% | 68.5% | 18,946 | 95.2% | 46.4% | 44.0% |
| Aiken County | 109,268 | 99.1% | 99.8% | 98.9% | 64,882 | 75.9% | 86.5% | 67.8% |
| Allendale County | | | | | 7,579 | 63.2% | 69.3% | 57.2% |
| Anderson County | 120,997 | 96.6% | 98.9% | 95.6% | 88,584 | 85.0% | 87.8% | 74.9% |
| Bamberg County | | | | | 12,908 | 70.8% | 39.4% | 30.3% |
| Barnwell County | | | | | 20,414 | 61.6% | 47.4% | 32.7% |
| Beaufort County | 158,991 | 99.9% | 92.6% | 92.5% | 37,380 | 95.0% | 55.4% | 53.4% |
| Berkeley County | 188,666 | 94.7% | 98.0% | 93.2% | 56,451 | 36.8% | 69.1% | 25.0% |
| Calhoun County | | | | | 14,179 | 89.2% | 57.9% | 53.5% |
| Charleston County | 380,123 | 99.0% | 97.9% | 97.0% | 39,156 | 71.5% | 74.8% | 57.7% |
| Cherokee County | 18,945 | 94.8% | 98.6% | 93.4% | 37,176 | 66.2% | 71.3% | 50.2% |
| Chester County | 8,672 | 91.5% | 93.4% | 85.7% | 23,259 | 42.9% | 37.5% | 18.2% |
| Chesterfield County | 7,350 | 94.1% | 62.7% | 58.5% | 36,333 | 73.3% | 39.2% | 31.1% |
| Clarendon County | 4,707 | 95.6% | 98.2% | 93.9% | 26,206 | 75.3% | 38.9% | 29.9% |
| Colleton County | 9,129 | 100.0% | 96.5% | 96.5% | 29,470 | 99.7% | 46.1% | 45.9% |
| Darlington County | 26,602 | 96.1% | 88.8% | 85.0% | 35,796 | 71.1% | 45.6% | 36.4% |
| Dillon County | 8,371 | 96.4% | 93.7% | 90.6% | 19,367 | 70.6% | 43.1% | 30.0% |
| Dorchester County | 141,425 | 98.8% | 99.8% | 98.6% | 24,708 | 54.4% | 73.2% | 42.2% |
| Edgefield County | 3,209 | 99.7% | 100.0% | 99.7% | 23,723 | 69.8% | 57.4% | 44.0% |
| Fairfield County | 4,599 | 80.3% | 70.2% | 55.8% | 15,856 | 56.3% | 44.2% | 30.1% |
| Florence County | 83,376 | 97.1% | 94.1% | 91.5% | 53,345 | 82.9% | 66.4% | 55.7% |
| Georgetown County | 37,383 | 96.5% | 90.2% | 87.0% | 27,339 | 92.6% | 53.4% | 50.1% |
| Greenville County | 479,714 | 96.5% | 99.8% | 96.3% | 68,236 | 73.3% | 84.7% | 65.9% |
| Greenwood County | 41,379 | 99.9% | 89.0% | 89.0% | 27,888 | 72.0% | 64.0% | 54.2% |
| Hampton County | | | | | 18,113 | 65.1% | 32.8% | 27.5% |
| Horry County | 291,937 | 96.9% | 92.8% | 89.8% | 91,164 | 93.3% | 63.1% | 59.4% |
| Jasper County | 3,523 | 100.0% | 100.0% | 100.0% | 28,516 | 89.6% | 73.3% | 68.9% |
| Kershaw County | 31,889 | 96.2% | 96.4% | 93.1% | 35,862 | 68.5% | 55.9% | 39.8% |
| Lancaster County | 64,424 | 99.4% | 86.5% | 86.0% | 40,153 | 87.1% | 56.5% | 50.4% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Laurens County | 24,291 | 95.8% | 86.0% | 82.8% | 43,674 | 81.1% | 70.9% | 59.2% |
| Lee County | | | | | 16,153 | 50.1% | 48.8% | 31.0% |
| Lexington County | 227,157 | 98.1% | 99.9% | 98.0% | 77,640 | 90.7% | 89.8% | 82.4% |
| Marion County | 11,561 | 95.9% | 93.2% | 89.7% | 16,889 | 86.7% | 42.6% | 36.4% |
| Marlboro County | 9,232 | 44.6% | 72.1% | 32.1% | 16,807 | 35.5% | 40.3% | 14.3% |
| McCormick County | | | | | 9,764 | 87.6% | 22.9% | 22.5% |
| Newberry County | 11,797 | 100.0% | 86.9% | 86.9% | 26,450 | 87.6% | 62.6% | 53.8% |
| Oconee County | 28,662 | 94.2% | 97.9% | 92.4% | 51,518 | 53.6% | 72.5% | 44.4% |
| Orangeburg County | 28,046 | 94.5% | 97.6% | 92.2% | 55,048 | 70.4% | 52.9% | 37.9% |
| Pickens County | 79,888 | 97.1% | 99.3% | 96.5% | 53,574 | 84.0% | 83.5% | 72.4% |
| Richland County | 387,035 | 95.8% | 99.5% | 95.4% | 34,531 | 88.2% | 85.8% | 75.7% |
| Saluda County | 281 | 99.6% | 100.0% | 99.6% | 18,657 | 74.4% | 57.3% | 44.1% |
| Spartanburg County | 242,595 | 94.9% | 99.6% | 94.6% | 103,236 | 70.2% | 90.6% | 67.3% |
| Sumter County | 67,425 | 97.5% | 98.0% | 95.6% | 36,587 | 78.4% | 72.4% | 60.0% |
| Union County | 9,440 | 92.8% | 99.7% | 92.7% | 17,312 | 57.8% | 65.3% | 47.2% |
| Williamsburg County | 5,262 | 94.7% | 84.5% | 79.9% | 24,796 | 75.9% | 53.4% | 42.4% |
| York County | 226,287 | 99.5% | 94.4% | 94.0% | 67,961 | 89.0% | 62.0% | 56.5% |
| South Dakota | 517,050 | 99.5% | 97.3% | 96.9% | 392,774 | 83.4% | 68.0% | 59.4% |
| Aurora County | | | | | 2,755 | 95.5% | 54.3% | 52.7% |
| Beadle County | 14,288 | 100.0% | 99.4% | 99.4% | 5,088 | 96.8% | 60.2% | 59.0% |
| Bennett County | | | | | 3,336 | 81.3% | 51.9% | 45.4% |
| Bon Homme County | | | | | 7,062 | 89.5% | 75.7% | 65.6% |
| Brookings County | 23,754 | 99.7% | 98.6% | 98.3% | 11,730 | 96.2% | 70.9% | 68.3% |
| Brown County | 27,354 | 99.8% | 89.7% | 89.5% | 10,618 | 64.7% | 32.6% | 26.1% |
| Brule County | | | | | 5,321 | 93.1% | 73.0% | 70.9% |
| Buffalo County | | | | | 1,861 | 92.3% | 71.3% | 66.7% |
| Butte County | 5,455 | 100.0% | 100.0% | 100.0% | 5,319 | 80.7% | 64.8% | 56.1% |
| Campbell County | | | | | 1,349 | 60.7% | 22.0% | 12.6% |
| Charles Mix County | | | | | 9,213 | 83.5% | 66.5% | 58.7% |
| Clark County | | | | | 3,912 | 96.1% | 67.4% | 65.3% |
| Clay County | 11,724 | 100.0% | 99.6% | 99.6% | 3,556 | 62.5% | 55.9% | 44.4% |
| Codington County | 20,975 | 100.0% | 95.7% | 95.7% | 7,746 | 97.4% | 73.2% | 72.5% |
| Corson County | | | | | 3,826 | 87.7% | 48.9% | 44.2% |
| Custer County | | | | | 9,006 | 69.9% | 63.4% | 47.8% |
| Davison County | 15,477 | 100.0% | 98.1% | 98.1% | 4,496 | 98.1% | 75.1% | 74.3% |
| Day County | | | | | 5,479 | 91.3% | 68.5% | 66.4% |
| Deuel County | | | | | 4,352 | 98.8% | 61.6% | 61.0% |
| Dewey County | | | | | 5,140 | 88.7% | 72.2% | 66.7% |
| Douglas County | | | | | 2,776 | 95.1% | 57.5% | 56.4% |
| Edmunds County | | | | | 4,065 | 75.2% | 34.1% | 32.8% |
| Fall River County | | | | | 7,370 | 78.9% | 77.2% | 69.3% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Faulk County | | | | | 2,126 | 97.4% | 46.0% | 46.0% |
| Grant County | | | | | 7,463 | 98.1% | 71.6% | 70.5% |
| Gregory County | | | | | 3,962 | 97.4% | 50.1% | 49.6% |
| Haakon County | | | | | 1,826 | 96.8% | 77.5% | 76.3% |
| Hamlin County | | | | | 6,352 | 98.6% | 65.7% | 65.1% |
| Hand County | | | | | 3,140 | 99.4% | 56.1% | 56.1% |
| Hanson County | | | | | 3,461 | 96.4% | 55.1% | 52.5% |
| Harding County | | | | | 1,330 | 99.3% | 31.1% | 30.5% |
| Hughes County | 12,538 | 99.5% | 98.1% | 97.6% | 5,154 | 90.1% | 83.3% | 73.4% |
| Hutchinson County | | | | | 7,368 | 93.2% | 80.8% | 77.0% |
| Hyde County | | | | | 1,184 | 100.0% | 84.7% | 84.7% |
| Jackson County | | | | | 2,821 | 74.2% | 47.8% | 40.9% |
| Jerauld County | | | | | 1,650 | 98.2% | 82.7% | 81.4% |
| Jones County | | | | | 884 | 69.6% | 62.4% | 49.3% |
| Kingsbury County | | | | | 5,294 | 93.2% | 74.0% | 71.0% |
| Lake County | 5,972 | 99.9% | 100.0% | 99.9% | 5,000 | 87.3% | 80.4% | 70.0% |
| Lawrence County | 18,025 | 99.6% | 87.5% | 87.1% | 9,189 | 54.7% | 51.1% | 35.0% |
| Lincoln County | 51,648 | 99.7% | 99.4% | 99.1% | 19,339 | 79.1% | 86.7% | 71.1% |
| Lyman County | | | | | 3,692 | 98.1% | 60.5% | 59.8% |
| Marshall County | | | | | 4,374 | 99.2% | 64.7% | 64.7% |
| McCook County | | | | | 5,778 | 86.4% | 70.9% | 61.4% |
| McPherson County | | | | | 2,395 | 67.0% | 23.6% | 17.6% |
| Meade County | 17,839 | 98.4% | 76.7% | 75.7% | 12,859 | 54.3% | 59.7% | 32.7% |
| Mellette County | | | | | 1,892 | 60.0% | 29.8% | 17.3% |
| Miner County | | | | | 2,304 | 94.4% | 75.0% | 71.4% |
| Minnehaha County | 173,681 | 99.2% | 99.7% | 99.0% | 30,290 | 95.2% | 89.2% | 84.8% |
| Moody County | | | | | 6,349 | 99.9% | 77.7% | 77.6% |
| Oglala Lakota County | | | | | 13,519 | 69.9% | 78.1% | 61.9% |
| Pennington County | 93,213 | 99.5% | 99.1% | 98.6% | 21,248 | 54.1% | 64.8% | 40.6% |
| Perkins County | | | | | 2,804 | 97.2% | 60.4% | 60.1% |
| Potter County | | | | | 2,438 | 100.0% | 55.3% | 55.3% |
| Roberts County | | | | | 10,163 | 97.6% | 56.6% | 54.7% |
| Sanborn County | | | | | 2,415 | 94.2% | 71.1% | 67.8% |
| Spink County | | | | | 6,235 | 91.2% | 12.3% | 11.6% |
| Stanley County | 2,146 | 97.4% | 99.2% | 96.6% | 853 | 56.5% | 66.1% | 35.7% |
| Sully County | | | | | 1,471 | 100.0% | 77.5% | 77.5% |
| Todd County | | | | | 9,220 | 44.1% | 78.9% | 41.2% |
| Tripp County | | | | | 5,565 | 90.6% | 71.5% | 66.2% |
| Turner County | | | | | 8,856 | 92.5% | 74.7% | 70.4% |
| Union County | 6,937 | 99.4% | 99.9% | 99.3% | 10,126 | 94.5% | 87.8% | 83.5% |
| Walworth County | | | | | 5,265 | 93.5% | 85.1% | 80.5% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Yankton County | 16,024 | 99.8% | 93.6% | 93.5% | 7,349 | 61.6% | 67.7% | 44.1% |
| Ziebach County | | | | | 2,395 | 93.9% | 57.9% | 55.6% |
| Tennessee | 4,643,858 | 98.7% | 97.3% | 96.1% | 2,407,481 | 79.3% | 60.0% | 51.0% |
| Anderson County | 50,325 | 99.3% | 99.6% | 99.0% | 28,588 | 86.9% | 77.3% | 69.1% |
| Bedford County | 22,783 | 94.9% | 93.0% | 88.3% | 29,167 | 62.1% | 55.1% | 38.5% |
| Benton County | | | | | 16,002 | 55.8% | 44.7% | 32.1% |
| Bledsoe County | | | | | 14,798 | 72.3% | 41.5% | 39.2% |
| Blount County | 87,960 | 97.2% | 98.7% | 96.0% | 51,998 | 86.3% | 81.4% | 72.8% |
| Bradley County | 75,453 | 96.5% | 99.0% | 95.6% | 35,163 | 76.7% | 67.3% | 56.4% |
| Campbell County | 20,399 | 98.9% | 87.0% | 86.2% | 19,185 | 49.1% | 51.4% | 30.5% |
| Cannon County | | | | | 14,788 | 66.6% | 72.4% | 52.5% |
| Carroll County | 5,089 | 91.5% | 96.2% | 88.3% | 23,369 | 56.5% | 51.9% | 37.7% |
| Carter County | 33,304 | 95.6% | 93.5% | 89.4% | 23,106 | 78.8% | 48.5% | 41.9% |
| Cheatham County | | | | | 41,830 | 86.5% | 78.6% | 70.8% |
| Chester County | 5,979 | 99.5% | 99.3% | 98.9% | 11,630 | 78.4% | 34.7% | 27.3% |
| Claiborne County | 9,464 | 100.0% | 89.7% | 89.7% | 22,967 | 93.3% | 53.0% | 50.6% |
| Clay County | | | | | 7,620 | 99.9% | 37.8% | 37.8% |
| Cocke County | 11,972 | 97.0% | 95.1% | 92.2% | 24,907 | 47.4% | 48.4% | 31.1% |
| Coffee County | 32,037 | 98.0% | 72.1% | 70.6% | 27,691 | 85.1% | 36.7% | 32.6% |
| Crockett County | | | | | 13,888 | 99.9% | 58.9% | 58.9% |
| Cumberland County | 29,335 | 93.8% | 76.5% | 71.4% | 34,187 | 56.3% | 51.2% | 33.1% |
| Davidson County | 684,748 | 99.6% | 99.8% | 99.4% | 23,396 | 91.5% | 89.2% | 82.2% |
| DeKalb County | 4,985 | 100.0% | 81.6% | 81.6% | 16,018 | 89.4% | 49.9% | 44.3% |
| Decatur County | | | | | 11,564 | 46.3% | 35.4% | 25.5% |
| Dickson County | 16,953 | 98.8% | 97.1% | 95.9% | 38,808 | 55.2% | 75.5% | 45.2% |
| Dyer County | 16,427 | 100.0% | 98.2% | 98.2% | 19,983 | 99.0% | 61.8% | 61.4% |
| Fayette County | 11,226 | 99.5% | 91.0% | 90.6% | 32,404 | 70.0% | 55.8% | 46.6% |
| Fentress County | | | | | 19,332 | 100.0% | 29.1% | 29.1% |
| Franklin County | 14,271 | 96.9% | 81.5% | 78.6% | 29,671 | 64.3% | 39.9% | 25.9% |
| Gibson County | 14,881 | 95.9% | 99.7% | 95.7% | 35,956 | 92.9% | 56.8% | 53.7% |
| Giles County | 8,062 | 93.5% | 99.8% | 93.3% | 22,492 | 32.3% | 52.3% | 25.2% |
| Grainger County | 3,805 | 95.2% | 88.3% | 83.9% | 20,472 | 76.5% | 42.1% | 35.0% |
| Greene County | 22,678 | 99.5% | 94.0% | 93.6% | 48,727 | 83.6% | 49.4% | 42.8% |
| Grundy County | | | | | 13,783 | 90.7% | 42.7% | 39.9% |
| Hamblen County | 50,348 | 99.7% | 79.2% | 79.0% | 14,820 | 93.9% | 69.2% | 66.7% |
| Hamilton County | 326,275 | 99.9% | 99.5% | 99.5% | 48,407 | 96.9% | 82.4% | 80.5% |
| Hancock County | | | | | 6,845 | 99.7% | 1.6% | 1.6% |
| Hardeman County | 5,391 | 100.0% | 77.1% | 77.1% | 20,138 | 70.5% | 47.5% | 38.3% |
| Hardin County | 8,842 | 92.8% | 79.2% | 72.3% | 18,235 | 44.0% | 37.8% | 19.3% |
| Hawkins County | 21,803 | 96.2% | 90.3% | 86.5% | 36,240 | 97.7% | 70.4% | 69.4% |
| Haywood County | 9,420 | 98.7% | 96.2% | 95.2% | 8,130 | 51.9% | 38.7% | 22.2% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Henderson County | 6,409 | 92.2% | 75.9% | 69.4% | 21,520 | 49.2% | 46.7% | 28.7% |
| Henry County | 10,317 | 93.2% | 84.2% | 78.2% | 22,062 | 78.2% | 38.8% | 30.6% |
| Hickman County | | | | | 25,455 | 86.2% | 29.6% | 26.6% |
| Houston County | | | | | 8,219 | 95.8% | 24.4% | 23.8% |
| Humphreys County | | | | | 19,106 | 100.0% | 44.9% | 44.9% |
| Jackson County | | | | | 11,989 | 99.8% | 22.4% | 22.3% |
| Jefferson County | 13,552 | 99.8% | 98.5% | 98.4% | 43,175 | 81.0% | 69.8% | 57.1% |
| Johnson County | | | | | 18,086 | 81.7% | 41.8% | 37.5% |
| Knox County | 448,465 | 99.3% | 99.6% | 98.9% | 46,109 | 90.6% | 89.4% | 81.1% |
| Lake County | | | | | 6,507 | 100.0% | 23.4% | 23.4% |
| Lauderdale County | 6,693 | 95.4% | 69.2% | 66.2% | 18,100 | 97.2% | 43.8% | 42.2% |
| Lawrence County | 12,105 | 94.5% | 91.1% | 85.8% | 33,310 | 68.4% | 54.9% | 41.2% |
| Lewis County | | | | | 12,957 | 97.9% | 51.2% | 50.7% |
| Lincoln County | 10,384 | 94.3% | 84.2% | 79.1% | 25,620 | 63.4% | 56.6% | 40.2% |
| Loudon County | 37,131 | 97.3% | 97.6% | 95.0% | 21,050 | 68.3% | 78.7% | 60.4% |
| Macon County | 6,463 | 100.0% | 10.3% | 10.3% | 19,766 | 99.9% | 21.0% | 21.0% |
| Madison County | 73,108 | 99.9% | 96.9% | 96.8% | 26,137 | 89.0% | 50.9% | 47.9% |
| Marion County | 2,554 | 100.0% | 75.4% | 75.4% | 26,540 | 99.2% | 64.8% | 64.4% |
| Marshall County | 12,397 | 94.9% | 87.6% | 82.9% | 23,481 | 68.1% | 35.3% | 25.2% |
| Maury County | 67,108 | 97.0% | 99.5% | 96.5% | 41,051 | 70.8% | 67.1% | 54.3% |
| McMinn County | 20,976 | 96.5% | 83.4% | 81.8% | 33,743 | 47.2% | 38.1% | 22.2% |
| McNairy County | | | | | 25,988 | 47.3% | 44.9% | 27.0% |
| Meigs County | | | | | 13,272 | 58.1% | 47.5% | 31.7% |
| Monroe County | 12,908 | 94.2% | 49.7% | 46.6% | 34,832 | 52.5% | 34.7% | 24.3% |
| Montgomery County | 192,019 | 99.7% | 99.3% | 99.0% | 43,182 | 91.2% | 84.1% | 77.5% |
| Moore County | 7 | 100.0% | 0.0% | 0.0% | 6,735 | 46.9% | 34.0% | 17.4% |
| Morgan County | | | | | 21,224 | 99.8% | 42.6% | 42.6% |
| Obion County | 12,273 | 94.7% | 95.9% | 90.8% | 18,121 | 99.3% | 53.7% | 53.0% |
| Overton County | | | | | 23,044 | 99.8% | 53.5% | 53.4% |
| Perry County | | | | | 8,685 | 99.8% | 35.6% | 35.6% |
| Pickett County | | | | | 5,107 | 99.9% | 34.6% | 34.6% |
| Polk County | | | | | 17,863 | 69.9% | 25.7% | 19.8% |
| Putnam County | 50,115 | 94.0% | 95.7% | 89.8% | 32,267 | 85.6% | 62.4% | 53.1% |
| Rhea County | 9,917 | 95.4% | 98.8% | 94.3% | 23,813 | 76.5% | 57.4% | 49.5% |
| Roane County | 26,422 | 98.7% | 91.9% | 90.8% | 28,660 | 74.3% | 47.0% | 40.4% |
| Robertson County | 34,723 | 99.6% | 99.8% | 99.4% | 40,747 | 74.9% | 85.9% | 67.8% |
| Rutherford County | 299,938 | 99.4% | 99.8% | 99.3% | 60,681 | 89.9% | 92.1% | 84.6% |
| Scott County | | | | | 22,035 | 100.0% | 61.1% | 61.1% |
| Sequatchie County | | | | | 16,909 | 87.1% | 75.2% | 68.1% |
| Sevier County | 45,548 | 96.5% | 99.1% | 95.8% | 53,241 | 75.3% | 78.2% | 63.0% |
| Shelby County | 884,674 | 99.1% | 99.1% | 98.2% | 31,697 | 73.2% | 76.5% | 63.1% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Smith County | | | | | 20,489 | 96.4% | 55.8% | 53.1% |
| Stewart County | | | | | 14,035 | 86.1% | 36.5% | 32.7% |
| Sullivan County | 118,242 | 97.1% | 95.3% | 92.5% | 42,578 | 94.4% | 78.1% | 74.4% |
| Sumner County | 151,135 | 99.2% | 99.7% | 99.0% | 52,723 | 89.3% | 80.8% | 73.6% |
| Tipton County | 20,580 | 99.8% | 60.4% | 60.3% | 41,076 | 88.2% | 46.2% | 42.6% |
| Trousdale County | | | | | 12,111 | 96.5% | 31.9% | 31.8% |
| Unicoi County | 8,654 | 99.8% | 98.5% | 98.4% | 9,020 | 94.7% | 57.5% | 56.1% |
| Union County | | | | | 20,452 | 70.9% | 65.9% | 49.6% |
| Van Buren County | | | | | 6,429 | 78.5% | 38.2% | 33.3% |
| Warren County | 15,934 | 95.0% | 87.4% | 83.0% | 26,092 | 82.8% | 45.5% | 36.8% |
| Washington County | 100,364 | 98.6% | 94.6% | 93.3% | 35,808 | 81.7% | 74.7% | 61.4% |
| Wayne County | | | | | 16,308 | 38.7% | 36.0% | 28.8% |
| Weakley County | 10,318 | 99.9% | 86.3% | 86.2% | 22,745 | 74.8% | 50.7% | 44.5% |
| White County | 5,895 | 93.3% | 98.7% | 92.0% | 22,169 | 91.2% | 58.8% | 54.8% |
| Williamson County | 210,560 | 99.4% | 99.0% | 98.4% | 50,255 | 76.3% | 91.4% | 72.3% |
| Wilson County | 101,755 | 97.3% | 98.9% | 96.2% | 56,800 | 87.0% | 87.3% | 76.3% |
| Texas | 5,000,804 | 96.8% | 99.2% | 96.1% | 5,028,768 | 72.5% | 74.4% | 57.8% |
| Anderson County | 19,419 | 97.8% | 62.4% | 61.8% | 38,645 | 14.2% | 19.3% | 8.4% |
| Andrews County | 15,058 | 100.0% | 78.3% | 78.3% | 3,276 | 75.0% | 41.5% | 39.6% |
| Angelina County | 41,615 | 85.9% | 92.2% | 79.1% | 45,486 | 47.4% | 55.8% | 32.1% |
| Aransas County | 19,088 | 99.9% | 98.3% | 98.2% | 5,856 | 99.2% | 96.2% | 95.7% |
| Archer County | 1,131 | 100.0% | 100.0% | 100.0% | 7,704 | 87.1% | 58.0% | 51.3% |
| Armstrong County | | | | | 1,850 | 99.0% | 27.5% | 27.2% |
| Atascosa County | 14,555 | 91.9% | 97.9% | 90.0% | 36,309 | 40.1% | 80.2% | 37.9% |
| Austin County | 6,262 | 100.0% | 99.1% | 99.1% | 24,835 | 93.1% | 78.4% | 74.5% |
| Bailey County | 4,994 | 100.0% | 99.4% | 99.4% | 1,785 | 99.4% | 32.8% | 32.6% |
| Bandera County | | | | | 22,115 | 89.7% | 65.1% | 59.8% |
| Bastrop County | 30,178 | 88.9% | 96.5% | 86.1% | 76,010 | 72.0% | 74.1% | 57.7% |
| Baylor County | | | | | 3,466 | 92.6% | 72.1% | 72.1% |
| Bee County | 14,225 | 99.9% | 95.8% | 95.7% | 16,169 | 93.8% | 49.5% | 46.4% |
| Bell County | 331,132 | 99.1% | 98.7% | 97.9% | 57,254 | 83.5% | 76.1% | 64.7% |
| Bexar County | 1,954,489 | 96.8% | 99.9% | 96.7% | 105,041 | 51.8% | 98.7% | 51.1% |
| Blanco County | | | | | 12,418 | 91.0% | 77.5% | 73.2% |
| Borden County | | | | | 585 | 54.8% | 37.6% | 32.9% |
| Bosque County | | | | | 18,697 | 61.8% | 59.2% | 37.4% |
| Bowie County | 56,828 | 99.7% | 95.7% | 95.5% | 35,207 | 58.5% | 59.2% | 39.4% |
| Brazoria County | 300,034 | 97.4% | 99.6% | 97.0% | 88,147 | 56.1% | 93.7% | 54.4% |
| Brazos County | 211,543 | 98.2% | 99.9% | 98.2% | 30,471 | 82.2% | 86.1% | 74.3% |
| Brewster County | 6,175 | 94.1% | 100.0% | 94.1% | 3,168 | 48.0% | 53.0% | 29.5% |
| Briscoe County | | | | | 1,431 | 96.4% | 81.8% | 81.6% |
| Brooks County | 4,462 | 100.0% | 100.0% | 100.0% | 2,444 | 81.2% | 65.0% | 59.7% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Brown County | 21,367 | 100.0% | 99.0% | 99.0% | 17,006 | 97.8% | 64.6% | 64.1% |
| Burleson County | | | | | 18,657 | 55.3% | 69.1% | 40.3% |
| Burnet County | 17,148 | 98.8% | 98.0% | 96.9% | 35,354 | 81.5% | 72.9% | 63.9% |
| Caldwell County | 21,316 | 97.1% | 90.3% | 87.6% | 26,532 | 72.3% | 60.5% | 46.2% |
| Calhoun County | 11,732 | 99.8% | 99.3% | 99.2% | 7,974 | 69.8% | 84.0% | 60.8% |
| Callahan County | | | | | 14,210 | 95.0% | 67.8% | 66.5% |
| Cameron County | 349,423 | 99.7% | 99.8% | 99.5% | 75,785 | 86.9% | 97.6% | 85.4% |
| Camp County | | | | | 12,716 | 94.1% | 45.9% | 45.7% |
| Carson County | | | | | 5,784 | 83.1% | 76.6% | 67.5% |
| Cass County | 5,537 | 96.1% | 98.3% | 94.6% | 23,002 | 28.0% | 50.7% | 22.9% |
| Castro County | | | | | 7,298 | 82.8% | 80.2% | 71.3% |
| Chambers County | 23,346 | 97.6% | 100.0% | 97.6% | 27,942 | 75.5% | 92.4% | 70.7% |
| Cherokee County | 14,071 | 90.4% | 77.7% | 71.9% | 37,574 | 24.0% | 46.5% | 17.7% |
| Childress County | 4,938 | 100.0% | 86.8% | 86.8% | 1,871 | 41.7% | 24.6% | 21.0% |
| Clay County | | | | | 10,486 | 94.4% | 61.1% | 60.1% |
| Cochran County | | | | | 2,526 | 83.3% | 16.3% | 8.9% |
| Coke County | | | | | 3,333 | 80.9% | 71.2% | 67.8% |
| Coleman County | 3,478 | 100.0% | 100.0% | 100.0% | 4,372 | 83.1% | 52.0% | 51.1% |
| Collin County | 1,085,403 | 96.6% | 99.9% | 96.6% | 73,293 | 86.9% | 95.0% | 83.1% |
| Collingsworth County | | | | | 2,568 | 85.7% | 77.9% | 75.6% |
| Colorado County | | | | | 20,754 | 70.5% | 80.1% | 65.3% |
| Comal County | 96,653 | 93.4% | 99.1% | 92.7% | 87,989 | 94.6% | 93.7% | 88.7% |
| Comanche County | | | | | 13,878 | 75.1% | 74.0% | 62.8% |
| Concho County | | | | | 3,340 | 95.1% | 58.2% | 57.6% |
| Cooke County | 16,555 | 99.7% | 100.0% | 99.7% | 26,495 | 82.8% | 56.9% | 50.6% |
| Coryell County | 64,267 | 99.6% | 99.5% | 99.1% | 20,790 | 54.9% | 67.9% | 41.4% |
| Cottle County | | | | | 1,307 | 96.4% | 83.0% | 82.4% |
| Crane County | | | | | 4,546 | 18.9% | 98.6% | 18.9% |
| Crockett County | | | | | 2,943 | 0.9% | 89.0% | 0.9% |
| Crosby County | | | | | 4,998 | 96.4% | 88.3% | 86.4% |
| Culberson County | | | | | 2,155 | 68.1% | 94.8% | 67.8% |
| Dallam County | 5,559 | 99.9% | 72.4% | 72.4% | 1,682 | 83.9% | 52.2% | 46.3% |
| Dallas County | 2,585,848 | 96.5% | 99.9% | 96.5% | 14,992 | 88.6% | 100.0% | 88.6% |
| Dawson County | 9,189 | 100.0% | 97.0% | 97.0% | 2,941 | 96.1% | 78.0% | 75.9% |
| DeWitt County | 9,598 | 93.7% | 99.6% | 93.4% | 10,174 | 10.8% | 70.9% | 8.8% |
| Deaf Smith County | 15,255 | 99.9% | 90.8% | 90.8% | 3,122 | 90.9% | 40.7% | 37.1% |
| Delta County | | | | | 5,406 | 93.6% | 78.9% | 76.2% |
| Denton County | 901,254 | 96.0% | 100.0% | 96.0% | 76,027 | 92.3% | 96.8% | 89.3% |
| Dickens County | | | | | 1,726 | 94.0% | 81.8% | 78.3% |
| Dimmit County | 5,457 | 95.2% | 94.4% | 90.0% | 2,930 | 46.5% | 57.6% | 25.4% |
| Donley County | | | | | 3,339 | 17.4% | 84.1% | 15.4% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Duval County | | | | | 9,888 | 93.5% | 90.7% | 88.1% |
| Eastland County | | | | | 17,944 | 89.5% | 78.3% | 73.9% |
| Ector County | 146,058 | 100.0% | 99.4% | 99.4% | 14,811 | 79.8% | 97.7% | 79.6% |
| Edwards County | | | | | 1,422 | 7.2% | 78.3% | 4.2% |
| El Paso County | 834,862 | 99.4% | 99.9% | 99.4% | 33,901 | 97.9% | 98.7% | 96.8% |
| Ellis County | 145,813 | 99.0% | 99.9% | 98.9% | 66,369 | 90.7% | 93.5% | 85.8% |
| Erath County | 20,742 | 99.9% | 95.4% | 95.4% | 23,153 | 70.3% | 55.9% | 44.5% |
| Falls County | 5,538 | 0.0% | 99.9% | 0.0% | 11,511 | 67.1% | 46.4% | 24.0% |
| Fannin County | 8,071 | 99.9% | 98.9% | 98.9% | 29,054 | 71.7% | 58.1% | 44.6% |
| Fayette County | 5,072 | 99.9% | 96.7% | 96.6% | 19,841 | 49.6% | 76.7% | 41.9% |
| Fisher County | | | | | 3,622 | 81.5% | 64.9% | 60.7% |
| Floyd County | | | | | 5,235 | 78.6% | 73.5% | 63.8% |
| Foard County | | | | | 1,057 | 92.3% | 75.5% | 75.5% |
| Fort Bend County | 844,502 | 98.3% | 99.9% | 98.3% | 44,644 | 73.2% | 98.3% | 72.5% |
| Franklin County | | | | | 10,618 | 88.1% | 67.2% | 60.5% |
| Freestone County | | | | | 19,950 | 87.1% | 43.8% | 41.4% |
| Frio County | 8,016 | 91.6% | 92.7% | 84.9% | 9,799 | 63.1% | 53.5% | 37.9% |
| Gaines County | 7,251 | 100.0% | 100.0% | 100.0% | 14,930 | 98.2% | 64.9% | 64.7% |
| Galveston County | 341,251 | 98.0% | 99.7% | 97.7% | 15,866 | 63.8% | 98.9% | 63.6% |
| Garza County | | | | | 6,262 | 86.5% | 89.9% | 81.7% |
| Gillespie County | 11,530 | 100.0% | 99.9% | 99.9% | 15,947 | 93.7% | 49.8% | 49.2% |
| Glasscock County | | | | | 1,164 | 81.8% | 33.5% | 30.6% |
| Goliad County | | | | | 7,131 | 63.8% | 69.9% | 50.9% |
| Gonzales County | 6,926 | 99.7% | 65.3% | 65.1% | 12,906 | 28.8% | 61.6% | 12.2% |
| Gray County | 16,666 | 100.0% | 99.9% | 99.9% | 4,349 | 94.5% | 71.9% | 70.1% |
| Grayson County | 72,754 | 99.9% | 99.9% | 99.8% | 70,377 | 91.6% | 79.8% | 74.9% |
| Gregg County | 108,763 | 98.2% | 96.5% | 95.1% | 16,680 | 63.9% | 62.5% | 43.5% |
| Grimes County | 7,764 | 100.0% | 98.0% | 98.0% | 22,990 | 68.6% | 68.3% | 47.9% |
| Guadalupe County | 136,485 | 97.2% | 99.9% | 97.1% | 46,275 | 80.5% | 92.0% | 74.9% |
| Hale County | 22,168 | 93.6% | 93.3% | 93.2% | 9,659 | 90.2% | 68.0% | 64.7% |
| Hall County | | | | | 2,810 | 87.2% | 80.8% | 72.8% |
| Hamilton County | | | | | 8,298 | 79.4% | 70.8% | 67.1% |
| Hansford County | | | | | 5,151 | 84.0% | 58.1% | 55.1% |
| Hardeman County | | | | | 3,516 | 97.5% | 90.3% | 89.7% |
| Hardin County | 28,333 | 96.6% | 98.5% | 95.3% | 29,478 | 66.6% | 70.4% | 51.4% |
| Harris County | 4,722,337 | 96.6% | 99.9% | 96.6% | 58,576 | 77.0% | 99.8% | 76.9% |
| Harrison County | 31,362 | 98.2% | 92.4% | 90.7% | 38,593 | 49.2% | 47.7% | 30.0% |
| Hartley County | 2,745 | 100.0% | 100.0% | 100.0% | 2,463 | 67.4% | 52.0% | 40.4% |
| Haskell County | | | | | 5,403 | 88.8% | 70.6% | 68.3% |
| Hays County | 184,244 | 99.0% | 99.7% | 98.7% | 84,981 | 91.4% | 95.6% | 88.2% |
| Hemphill County | | | | | 3,217 | 82.9% | 38.9% | 31.8% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Henderson County | 28,645 | 93.8% | 78.4% | 74.2% | 55,866 | 43.4% | 41.3% | 22.2% |
| Hidalgo County | 808,957 | 96.9% | 99.9% | 96.9% | 79,410 | 76.3% | 99.0% | 75.8% |
| Hill County | 8,266 | 99.5% | 87.9% | 87.6% | 29,063 | 73.0% | 45.0% | 37.0% |
| Hockley County | 12,383 | 100.0% | 100.0% | 100.0% | 8,778 | 91.2% | 78.5% | 75.5% |
| Hood County | 39,046 | 97.8% | 96.9% | 94.7% | 27,327 | 79.8% | 86.6% | 72.5% |
| Hopkins County | 15,011 | 99.0% | 100.0% | 99.0% | 22,793 | 93.1% | 56.3% | 54.7% |
| Houston County | 6,011 | 99.4% | 98.8% | 98.2% | 15,939 | 22.1% | 45.4% | 18.1% |
| Howard County | 27,182 | 99.9% | 97.1% | 97.1% | 6,490 | 82.8% | 84.8% | 73.5% |
| Hudspeth County | | | | | 3,432 | 7.1% | 82.6% | 7.1% |
| Hunt County | 39,350 | 99.9% | 99.4% | 99.3% | 68,932 | 92.1% | 64.7% | 61.1% |
| Hutchinson County | 12,764 | 99.5% | 96.3% | 95.8% | 7,451 | 82.1% | 81.9% | 72.0% |
| Irion County | | | | | 1,530 | 82.4% | 74.5% | 67.7% |
| Jack County | | | | | 8,922 | 82.4% | 25.1% | 19.3% |
| Jackson County | 5,894 | 100.0% | 82.0% | 82.0% | 9,248 | 79.9% | 71.9% | 62.4% |
| Jasper County | 7,473 | 95.8% | 93.4% | 89.2% | 25,011 | 18.0% | 68.1% | 13.8% |
| Jeff Davis County | | | | | 1,903 | 29.7% | 51.9% | 21.0% |
| Jefferson County | 227,531 | 94.1% | 99.9% | 94.0% | 23,299 | 74.8% | 83.6% | 60.5% |
| Jim Hogg County | | | | | 4,763 | 24.8% | 97.7% | 24.7% |
| Jim Wells County | 19,214 | 98.6% | 100.0% | 98.6% | 19,612 | 96.8% | 73.8% | 72.2% |
| Johnson County | 104,364 | 97.6% | 99.7% | 97.4% | 91,142 | 96.6% | 94.1% | 92.1% |
| Jones County | | | | | 19,935 | 91.1% | 60.0% | 57.9% |
| Karnes County | | | | | 14,836 | 52.0% | 82.1% | 47.8% |
| Kaufman County | 98,454 | 97.6% | 99.9% | 97.6% | 73,912 | 97.3% | 77.2% | 74.6% |
| Kendall County | 19,866 | 98.5% | 100.0% | 98.5% | 29,107 | 91.0% | 70.7% | 66.0% |
| Kenedy County | | | | | 358 | 22.9% | 42.1% | 10.8% |
| Kent County | | | | | 740 | 92.7% | 75.4% | 73.6% |
| Kerr County | 32,124 | 98.3% | 83.8% | 82.2% | 21,617 | 80.6% | 58.9% | 49.8% |
| Kimble County | | | | | 4,422 | 63.2% | 74.3% | 57.8% |
| King County | | | | | 233 | 84.5% | 54.5% | 53.6% |
| Kinney County | | | | | 3,128 | 0.0% | 95.4% | 0.0% |
| Kleberg County | 24,004 | 100.0% | 99.6% | 99.6% | 6,358 | 91.4% | 89.2% | 83.0% |
| Knox County | | | | | 3,273 | 95.2% | 0.3% | 0.0% |
| La Salle County | | | | | 6,604 | 67.5% | 65.5% | 51.6% |
| Lamar County | 26,209 | 99.1% | 99.4% | 98.5% | 24,275 | 62.1% | 50.6% | 34.8% |
| Lamb County | 5,575 | 100.0% | 100.0% | 100.0% | 7,149 | 90.5% | 76.1% | 72.8% |
| Lampasas County | 7,766 | 99.9% | 98.8% | 98.7% | 15,019 | 89.6% | 61.5% | 56.1% |
| Lavaca County | 3,645 | 97.2% | 99.6% | 96.8% | 16,944 | 49.8% | 75.5% | 44.6% |
| Lee County | | | | | 17,954 | 72.1% | 69.0% | 57.4% |
| Leon County | | | | | 16,209 | 35.4% | 47.6% | 24.3% |
| Liberty County | 22,118 | 98.6% | 99.8% | 98.5% | 79,874 | 41.6% | 82.1% | 35.0% |
| Limestone County | 6,709 | 100.0% | 51.1% | 51.1% | 15,544 | 86.2% | 33.7% | 30.8% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Lipscomb County | | | | | 2,854 | 62.3% | 1.8% | 0.5% |
| Live Oak County | | | | | 11,428 | 74.5% | 62.2% | 56.7% |
| Llano County | 11,068 | 94.9% | 91.3% | 86.7% | 11,472 | 81.1% | 65.2% | 56.1% |
| Loving County | | | | | 51 | 35.2% | 64.7% | 35.2% |
| Lubbock County | 282,328 | 98.8% | 99.7% | 98.6% | 35,233 | 86.7% | 81.0% | 70.9% |
| Lynn County | | | | | 5,724 | 94.9% | 79.9% | 76.1% |
| Madison County | | | | | 13,661 | 74.2% | 65.5% | 60.6% |
| Marion County | | | | | 9,560 | 29.0% | 35.4% | 25.5% |
| Martin County | | | | | 5,217 | 93.8% | 83.2% | 80.0% |
| Mason County | | | | | 3,982 | 82.4% | 61.3% | 57.5% |
| Matagorda County | 18,713 | 99.8% | 99.1% | 98.9% | 17,412 | 69.8% | 79.1% | 56.5% |
| Maverick County | 54,071 | 95.8% | 96.7% | 92.6% | 3,772 | 73.6% | 82.1% | 62.6% |
| McCulloch County | 4,831 | 100.0% | 98.4% | 98.4% | 2,666 | 92.4% | 56.4% | 54.6% |
| McLennan County | 200,174 | 97.9% | 92.9% | 90.9% | 66,662 | 82.0% | 63.5% | 55.0% |
| McMullen County | | | | | 576 | 74.8% | 50.5% | 43.9% |
| Medina County | 8,927 | 81.2% | 97.4% | 79.1% | 44,796 | 42.0% | 76.7% | 36.6% |
| Menard County | | | | | 1,968 | 91.4% | 74.2% | 73.1% |
| Midland County | 147,391 | 95.9% | 99.2% | 95.2% | 24,608 | 66.6% | 87.7% | 56.8% |
| Milam County | 10,819 | 100.0% | 73.3% | 73.3% | 14,809 | 84.1% | 60.3% | 54.7% |
| Mills County | | | | | 4,500 | 91.3% | 67.9% | 61.9% |
| Mitchell County | 5,683 | 99.9% | 98.5% | 98.5% | 3,260 | 33.7% | 50.5% | 20.7% |
| Montague County | 5,705 | 99.7% | 90.1% | 89.9% | 15,358 | 84.5% | 64.9% | 59.5% |
| Montgomery County | 518,900 | 92.2% | 99.9% | 92.2% | 159,590 | 60.6% | 98.7% | 59.6% |
| Moore County | 14,464 | 100.0% | 99.0% | 99.0% | 6,532 | 94.8% | 86.3% | 83.5% |
| Morris County | | | | | 12,083 | 53.0% | 31.1% | 16.0% |
| Motley County | | | | | 1,032 | 91.4% | 84.8% | 83.9% |
| Nacogdoches County | 32,832 | 92.9% | 98.8% | 91.9% | 32,030 | 25.1% | 45.7% | 14.4% |
| Navarro County | 24,856 | 99.9% | 74.1% | 74.1% | 29,780 | 91.3% | 51.5% | 49.9% |
| Newton County | | | | | 12,052 | 11.7% | 47.7% | 9.5% |
| Nolan County | 10,141 | 99.9% | 98.4% | 98.3% | 4,332 | 44.8% | 45.1% | 28.6% |
| Nueces County | 328,314 | 98.3% | 99.8% | 98.1% | 23,360 | 98.0% | 90.9% | 89.9% |
| Ochiltree County | 8,073 | 98.9% | 30.5% | 29.7% | 1,533 | 25.6% | 20.0% | 12.0% |
| Oldham County | | | | | 1,752 | 88.1% | 69.2% | 64.4% |
| Orange County | 53,979 | 95.8% | 98.6% | 94.5% | 30,955 | 70.7% | 85.2% | 65.8% |
| Palo Pinto County | 14,142 | 100.0% | 98.2% | 98.2% | 15,097 | 61.4% | 58.0% | 34.8% |
| Panola County | 6,408 | 98.5% | 97.6% | 96.2% | 16,269 | 22.0% | 24.0% | 8.2% |
| Parker County | 59,806 | 99.1% | 99.6% | 98.7% | 106,028 | 94.7% | 87.0% | 83.1% |
| Parmer County | | | | | 9,620 | 86.6% | 86.0% | 73.1% |
| Pecos County | 8,402 | 99.7% | 99.8% | 99.5% | 6,333 | 52.8% | 60.0% | 36.0% |
| Polk County | 5,978 | 86.9% | 100.0% | 86.9% | 47,277 | 52.8% | 60.3% | 34.4% |
| Potter County | 102,370 | 95.0% | 98.4% | 94.3% | 13,275 | 80.7% | 65.1% | 53.4% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluat ed | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Presidio County | | | | | 5,939 | 70.4% | 71.5% | 60.1% |
| Rains County | | | | | 12,823 | 99.6% | 44.0% | 44.0% |
| Randall County | 121,191 | 96.3% | 98.3% | 94.9% | 24,949 | 86.5% | 74.3% | 64.7% |
| Reagan County | | | | | 3,135 | 94.4% | 96.3% | 93.3% |
| Real County | | | | | 2,840 | 53.9% | 47.1% | 37.0% |
| Red River County | | | | | 11,542 | 49.5% | 46.0% | 35.2% |
| Reeves County | 10,479 | 97.8% | 94.5% | 94.3% | 2,426 | 38.7% | 67.6% | 31.8% |
| Refugio County | | | | | 6,632 | 87.1% | 87.4% | 77.4% |
| Roberts County | | | | | 803 | 37.7% | 8.7% | 1.4% |
| Robertson County | | | | | 17,153 | 86.6% | 51.7% | 47.9% |
| Rockwall County | 106,049 | 99.7% | 99.8% | 99.6% | 17,159 | 98.2% | 98.4% | 96.6% |
| Runnels County | | | | | 9,859 | 93.9% | 69.3% | 68.3% |
| Rusk County | 19,320 | 94.6% | 93.9% | 89.6% | 34,013 | 35.5% | 33.4% | 13.1% |
| Sabine County | | | | | 10,048 | 21.3% | 25.5% | 4.2% |
| San Augustine County | | | | | 7,857 | 22.0% | 46.3% | 18.1% |
| San Jacinto County | | | | | 28,348 | 36.9% | 56.9% | 21.8% |
| San Patricio County | 50,039 | 99.7% | 98.3% | 98.1% | 19,915 | 98.9% | 86.7% | 86.2% |
| San Saba County | | | | | 5,824 | 79.4% | 74.4% | 63.1% |
| Schleicher County | | | | | 2,357 | 90.4% | 85.4% | 83.6% |
| Scurry County | 11,331 | 100.0% | 93.8% | 93.8% | 5,355 | 54.5% | 43.3% | 31.7% |
| Shackelford County | | | | | 3,186 | 89.7% | 84.0% | 83.6% |
| Shelby County | 5,071 | 67.8% | 74.3% | 51.3% | 18,937 | 13.8% | 39.5% | 7.7% |
| Sherman County | | | | | 2,799 | 94.4% | 86.6% | 84.0% |
| Smith County | 155,432 | 81.2% | 96.5% | 79.7% | 86,490 | 36.3% | 62.8% | 25.8% |
| Somervell County | | | | | 9,757 | 54.4% | 68.3% | 43.1% |
| Starr County | 46,889 | 97.6% | 98.5% | 96.1% | 18,839 | 86.5% | 85.8% | 75.4% |
| Stephens County | 5,861 | 100.0% | 96.1% | 96.1% | 3,529 | 84.4% | 48.2% | 46.7% |
| Sterling County | | | | | 1,417 | 87.0% | 2.6% | 0.9% |
| Stonewall County | | | | | 1,182 | 86.8% | 83.6% | 79.1% |
| Sutton County | | | | | 3,217 | 86.2% | 86.9% | 83.8% |
| Swisher County | | | | | 6,881 | 98.9% | 82.3% | 82.0% |
| Tarrant County | 2,127,286 | 96.8% | 99.9% | 96.8% | 27,309 | 82.8% | 99.7% | 82.6% |
| Taylor County | 121,295 | 99.6% | 91.3% | 90.9% | 23,868 | 96.5% | 74.6% | 73.3% |
| Terrell County | | | | | 693 | 88.8% | 0.0% | 0.0% |
| Terry County | 8,151 | 100.0% | 100.0% | 100.0% | 3,416 | 95.0% | 74.2% | 71.2% |
| Throckmorton County | | | | | 1,550 | 81.3% | 48.1% | 47.9% |
| Titus County | 15,305 | 99.8% | 95.7% | 95.6% | 15,903 | 66.0% | 56.9% | 45.9% |
| Tom Green County | 98,647 | 99.6% | 99.2% | 98.9% | 20,245 | 95.2% | 64.2% | 62.4% |
| Travis County | 1,254,347 | 96.2% | 98.6% | 94.9% | 72,089 | 84.2% | 87.4% | 75.0% |
| Trinity County | | | | | 13,996 | 18.5% | 52.7% | 12.9% |
| Tyler County | | | | | 20,030 | 33.0% | 64.8% | 20.6% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Upshur County | 8,191 | 91.8% | 71.8% | 65.7% | 34,297 | 55.4% | 46.2% | 26.3% |
| Upton County | | | | | 3,152 | 4.5% | 24.8% | 0.0% |
| Uvalde County | 15,878 | 94.6% | 100.0% | 94.6% | 9,062 | 65.9% | 52.1% | 38.5% |
| Val Verde County | 41,957 | 93.5% | 94.6% | 90.4% | 5,649 | 68.0% | 72.2% | 56.9% |
| Van Zandt County | | | | | 62,859 | 90.3% | 52.5% | 51.0% |
| Victoria County | 64,796 | 99.8% | 99.5% | 99.4% | 26,269 | 72.5% | 78.6% | 59.0% |
| Walker County | 44,107 | 62.6% | 94.2% | 60.4% | 34,763 | 56.4% | 73.7% | 42.0% |
| Waller County | 13,942 | 99.5% | 99.9% | 99.5% | 47,952 | 81.5% | 95.4% | 78.2% |
| Ward County | 8,643 | 100.0% | 100.0% | 100.0% | 2,321 | 83.0% | 86.9% | 71.9% |
| Washington County | 17,281 | 100.0% | 98.0% | 98.0% | 18,878 | 96.1% | 68.3% | 66.7% |
| Webb County | 251,256 | 95.9% | 99.0% | 94.9% | 16,524 | 85.6% | 87.9% | 75.5% |
| Wharton County | 21,724 | 99.7% | 97.7% | 97.5% | 20,100 | 61.0% | 78.3% | 55.4% |
| Wheeler County | | | | | 4,807 | 79.6% | 42.8% | 36.3% |
| Wichita County | 113,133 | 95.3% | 98.8% | 94.1% | 16,845 | 62.2% | 83.8% | 50.5% |
| Wilbarger County | 9,119 | 99.0% | 22.5% | 21.9% | 3,372 | 70.1% | 16.0% | 11.5% |
| Willacy County | 13,059 | 81.8% | 99.7% | 81.6% | 7,084 | 78.6% | 86.3% | 66.2% |
| Williamson County | 604,861 | 97.8% | 98.5% | 96.4% | 66,557 | 90.3% | 78.4% | 72.7% |
| Wilson County | 6,367 | 95.5% | 99.6% | 95.1% | 46,368 | 61.7% | 76.9% | 49.9% |
| Winkler County | 6,030 | 100.0% | 100.0% | 100.0% | 1,276 | 26.8% | 27.6% | 26.0% |
| Wise County | 7,213 | 100.0% | 100.0% | 100.0% | 67,682 | 99.7% | 80.1% | 79.9% |
| Wood County | 5,850 | 96.8% | 88.8% | 86.3% | 41,007 | 83.0% | 46.5% | 42.3% |
| Yoakum County | | | | | 7,451 | 89.2% | 92.1% | 85.5% |
| Young County | 8,694 | 100.0% | 92.1% | 92.1% | 9,268 | 91.0% | 58.8% | 58.6% |
| Zapata County | 10,852 | 97.4% | 79.7% | 77.4% | 2,997 | 74.5% | 64.0% | 49.7% |
| Zavala County | 6,387 | 97.5% | 99.7% | 97.3% | 2,990 | 39.0% | 83.8% | 38.3% |
| U.S. Virgin Isl. | 99,088 | 99.6% | 92.1% | 91.8% | 6,325 | 96.0% | 54.8% | 52.3% |
| St. Croix Island | 47,201 | 99.8% | 88.6% | 88.5% | 3,965 | 98.7% | 63.2% | 62.5% |
| St. John Island | 3,599 | 100.0% | 84.9% | 84.9% | 1,452 | 96.0% | 13.2% | 12.1% |
| St. Thomas Island | 48,288 | 99.4% | 96.0% | 95.5% | 908 | 84.6% | 84.6% | 72.3% |
| Utah | 3,018,430 | 99.0% | 99.7% | 98.7% | 362,370 | 81.4% | 87.6% | 75.0% |
| Beaver County | | | | | 7,327 | 94.2% | 95.3% | 90.9% |
| Box Elder County | 41,660 | 99.8% | 100.0% | 99.8% | 19,838 | 70.7% | 87.6% | 60.2% |
| Cache County | 118,911 | 99.8% | 100.0% | 99.8% | 21,262 | 91.3% | 97.4% | 90.4% |
| Carbon County | 13,459 | 100.0% | 100.0% | 100.0% | 7,112 | 97.2% | 77.3% | 75.8% |
| Daggett County | | | | | 1,014 | 42.6% | 93.3% | 42.6% |
| Davis County | 366,836 | 99.5% | 99.9% | 99.5% | 3,112 | 92.8% | 99.7% | 92.8% |
| Duchesne County | 6,384 | 99.7% | 100.0% | 99.7% | 13,777 | 37.2% | 67.6% | 30.5% |
| Emery County | | | | | 10,099 | 98.4% | 93.9% | 93.0% |
| Garfield County | | | | | 5,281 | 72.2% | 83.2% | 65.6% |
| Grand County | 8,101 | 100.0% | 94.9% | 94.9% | 1,668 | 90.2% | 59.1% | 55.2% |
| Iron County | 43,810 | 99.9% | 100.0% | 99.9% | 18,619 | 93.8% | 93.2% | 89.8% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Juab County | 6,773 | 99.8% | 100.0% | 99.8% | 5,794 | 75.0% | 97.8% | 73.2% |
| Kane County | | | | | 8,227 | 70.1% | 83.1% | 63.9% |
| Millard County | | | | | 13,330 | 78.3% | 82.4% | 70.4% |
| Morgan County | | | | | 12,832 | 94.3% | 89.9% | 86.6% |
| Piute County | | | | | 1,487 | 58.8% | 90.7% | 58.7% |
| Rich County | | | | | 2,628 | 64.4% | 62.0% | 43.5% |
| Salt Lake County | 1,175,333 | 98.9% | 100.0% | 98.9% | 10,924 | 70.2% | 94.8% | 68.8% |
| San Juan County | | | | | 14,359 | 49.6% | 42.4% | 33.1% |
| Sanpete County | 5,097 | 99.6% | 100.0% | 99.6% | 24,627 | 90.2% | 86.0% | 78.4% |
| Sevier County | 8,867 | 100.0% | 35.7% | 35.7% | 13,202 | 92.8% | 79.5% | 75.5% |
| Summit County | 23,868 | 98.9% | 100.0% | 98.9% | 19,168 | 76.8% | 94.7% | 75.2% |
| Tooele County | 63,805 | 99.8% | 100.0% | 99.8% | 16,129 | 94.3% | 99.2% | 93.9% |
| Uintah County | 20,392 | 97.7% | 99.9% | 97.6% | 16,749 | 55.9% | 80.4% | 50.8% |
| Utah County | 668,312 | 98.1% | 100.0% | 98.1% | 34,122 | 85.3% | 97.7% | 85.0% |
| Wasatch County | 25,979 | 98.1% | 99.4% | 97.6% | 10,640 | 78.0% | 90.9% | 74.2% |
| Washington County | 167,052 | 99.9% | 99.3% | 99.3% | 30,628 | 93.6% | 87.5% | 83.3% |
| Wayne County | | | | | 2,645 | 68.4% | 88.8% | 66.0% |
| Weber County | 253,791 | 99.5% | 100.0% | 99.5% | 15,770 | 94.6% | 98.0% | 94.5% |
| Vermont | 228,285 | 98.4% | 79.2% | 77.8% | 418,779 | 73.4% | 38.6% | 31.7% |
| Addison County | 6,224 | 99.3% | 93.9% | 93.2% | 31,354 | 59.5% | 40.9% | 33.0% |
| Bennington County | 14,056 | 99.7% | 33.2% | 33.1% | 23,336 | 81.8% | 47.1% | 42.9% |
| Caledonia County | 5,183 | 89.3% | 95.5% | 85.1% | 25,396 | 57.7% | 47.9% | 35.3% |
| Chittenden County | 124,390 | 98.2% | 79.0% | 77.4% | 44,911 | 86.0% | 38.3% | 34.0% |
| Essex County | | | | | 5,994 | 40.0% | 40.4% | 25.9% |
| Franklin County | 11,688 | 99.5% | 96.2% | 95.8% | 39,043 | 69.9% | 24.9% | 19.6% |
| Grand Isle County | | | | | 7,489 | 59.7% | 13.1% | 10.6% |
| Lamoille County | | | | | 26,090 | 65.0% | 45.0% | 37.4% |
| Orange County | | | | | 29,846 | 76.0% | 26.2% | 19.5% |
| Orleans County | | | | | 27,666 | 63.9% | 30.7% | 23.4% |
| Rutland County | 19,851 | 99.7% | 97.3% | 97.0% | 40,515 | 88.0% | 48.9% | 45.9% |
| Washington County | 20,608 | 96.7% | 88.8% | 86.2% | 39,440 | 57.4% | 57.3% | 36.3% |
| Windham County | 13,914 | 99.5% | 53.8% | 53.5% | 31,928 | 72.8% | 22.8% | 19.6% |
| Windsor County | 12,371 | 99.9% | 87.3% | 87.3% | 45,771 | 94.8% | 38.7% | 37.4% |
| Virginia | 6,525,894 | 98.5% | 96.7% | 95.3% | 2,157,725 | 73.7% | 53.5% | 42.1% |
| Accomack County | 3,338 | 98.4% | 83.6% | 82.3% | 29,853 | 78.6% | 43.8% | 36.5% |
| Albemarle County | 66,890 | 99.9% | 90.3% | 90.3% | 47,644 | 92.4% | 37.6% | 36.0% |
| Alexandria city | 155,525 | 99.7% | 100.0% | 99.7% | | | | |
| Alleghany County | 6,891 | 98.3% | 87.9% | 86.5% | 7,944 | 63.7% | 31.0% | 25.2% |
| Amelia County | | | | | 13,455 | 71.6% | 28.3% | 23.2% |
| Amherst County | 11,761 | 99.9% | 57.6% | 57.6% | 19,828 | 97.7% | 25.2% | 25.1% |
| Appomattox County | | | | | 16,748 | 98.8% | 31.1% | 31.0% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Arlington County | 234,000 | 99.9% | 99.7% | 99.7% | | | | |
| Augusta County | 12,382 | 97.8% | 97.9% | 95.7% | 65,682 | 66.3% | 68.8% | 53.3% |
| Bath County | | | | | 4,049 | 45.0% | 12.3% | 6.2% |
| Bedford County | 23,538 | 100.0% | 73.1% | 73.1% | 57,310 | 98.3% | 39.3% | 39.2% |
| Bland County | | | | | 6,148 | 49.0% | 34.0% | 21.5% |
| Botetourt County | 13,666 | 99.3% | 86.2% | 85.6% | 20,469 | 69.1% | 60.3% | 41.3% |
| Bristol city | 16,782 | 99.9% | 97.8% | 97.8% | 193 | 100.0% | 64.2% | 64.2% |
| Brunswick County | | | | | 15,921 | 38.5% | 32.5% | 8.3% |
| Buchanan County | | | | | 19,352 | 91.0% | 1.7% | 1.7% |
| Buckingham County | | | | | 16,982 | 70.2% | 22.6% | 16.9% |
| Buena Vista city | 6,417 | 98.8% | 99.7% | 98.7% | 174 | 84.4% | 54.5% | 50.5% |
| Campbell County | 23,847 | 99.9% | 83.0% | 83.0% | 31,294 | 99.0% | 52.8% | 52.6% |
| Caroline County | | | | | 31,957 | 53.3% | 41.4% | 22.0% |
| Carroll County | 693 | 97.8% | 74.0% | 73.5% | 28,454 | 44.3% | 32.2% | 16.1% |
| Charles City County | | | | | 6,605 | 66.9% | 50.3% | 33.8% |
| Charlotte County | | | | | 11,475 | 83.5% | 34.8% | 29.9% |
| Charlottesville city | 45,373 | 99.1% | 97.8% | 96.9% | | | | |
| Chesapeake city | 232,776 | 99.6% | 100.0% | 99.6% | 19,712 | 76.6% | 92.2% | 71.6% |
| Chesterfield County | 347,328 | 98.6% | 99.1% | 97.8% | 31,080 | 94.3% | 87.3% | 83.0% |
| Clarke County | | | | | 15,266 | 57.3% | 69.1% | 42.9% |
| Colonial Heights city | 18,294 | 99.7% | 100.0% | 99.7% | | | | |
| Covington city | 5,644 | 98.1% | 98.8% | 97.0% | 35 | 82.8% | 82.8% | 82.8% |
| Craig County | | | | | 4,847 | 24.1% | 40.5% | 21.7% |
| Culpeper County | 22,903 | 99.7% | 94.6% | 94.4% | 31,478 | 75.0% | 45.1% | 34.9% |
| Cumberland County | 674 | 100.0% | 98.0% | 98.0% | 9,072 | 88.2% | 44.0% | 41.4% |
| Danville city | 40,885 | 98.9% | 97.1% | 96.1% | 1,344 | 90.4% | 90.6% | 82.5% |
| Dickenson County | | | | | 13,725 | 71.7% | 21.9% | 20.7% |
| Dinwiddie County | 8,009 | 94.4% | 99.7% | 94.2% | 20,152 | 32.8% | 41.7% | 23.4% |
| Emporia city | 5,204 | 99.2% | 91.9% | 91.2% | 277 | 90.2% | 55.2% | 50.5% |
| Essex County | | | | | 10,630 | 57.8% | 53.8% | 39.4% |
| Fairfax County | 1,119,903 | 99.6% | 96.2% | 95.9% | 18,428 | 97.7% | 57.8% | 56.5% |
| Fairfax city | 24,835 | 99.9% | 98.9% | 98.9% | | | | |
| Falls Church city | 14,586 | 100.0% | 100.0% | 100.0% | | | | |
| Fauquier County | 31,583 | 98.1% | 89.0% | 87.5% | 43,081 | 49.4% | 45.4% | 28.4% |
| Floyd County | | | | | 15,619 | 63.8% | 39.2% | 28.1% |
| Fluvanna County | 10,299 | 99.9% | 89.4% | 89.4% | 17,860 | 98.8% | 32.7% | 32.4% |
| Franklin County | 5,486 | 99.9% | 96.1% | 96.0% | 49,588 | 93.5% | 47.2% | 46.3% |
| Franklin city | 7,898 | 93.2% | 100.0% | 93.2% | 349 | 90.8% | 98.5% | 89.6% |
| Frederick County | 56,146 | 98.8% | 73.1% | 72.1% | 38,905 | 53.4% | 65.4% | 42.0% |
| Fredericksburg city | 28,757 | 99.1% | 99.7% | 98.8% | | | | |
| Galax city | 6,032 | 97.0% | 94.2% | 91.4% | 698 | 91.4% | 87.9% | 81.2% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Giles County | | | | | 16,453 | 73.5% | 71.7% | 58.1% |
| Gloucester County | 10,941 | 99.4% | 99.3% | 98.8% | 28,552 | 78.5% | 80.8% | 67.5% |
| Goochland County | 1,825 | 81.6% | 96.3% | 78.0% | 24,284 | 65.2% | 60.0% | 42.1% |
| Grayson County | 17 | 100.0% | 100.0% | 100.0% | 15,326 | 45.1% | 34.2% | 20.4% |
| Greene County | | | | | 21,107 | 83.9% | 49.4% | 41.9% |
| Greensville County | 1,304 | 98.3% | 53.6% | 52.3% | 9,922 | 25.2% | 44.3% | 5.8% |
| Halifax County | 7,373 | 99.9% | 94.9% | 94.9% | 26,271 | 89.2% | 37.4% | 35.0% |
| Hampton city | 137,590 | 98.5% | 99.8% | 98.4% | 447 | 91.9% | 100.0% | 91.9% |
| Hanover County | 70,769 | 98.9% | 99.8% | 98.8% | 42,169 | 44.9% | 82.0% | 38.1% |
| Harrisonburg city | 50,813 | 94.0% | 97.1% | 91.6% | 345 | 90.7% | 98.8% | 89.5% |
| Henrico County | 321,084 | 99.3% | 99.6% | 99.0% | 12,878 | 90.4% | 81.1% | 74.1% |
| Henry County | 17,468 | 97.3% | 86.6% | 84.6% | 32,438 | 85.6% | 46.0% | 41.5% |
| Highland County | | | | | 2,301 | 71.3% | 24.7% | 22.6% |
| Hopewell city | 22,962 | 99.6% | 99.9% | 99.6% | | | | |
| Isle of Wight County | 16,440 | 95.9% | 95.6% | 91.9% | 23,711 | 64.5% | 74.7% | 52.9% |
| James City County | 69,608 | 98.7% | 98.0% | 96.8% | 11,591 | 92.6% | 93.3% | 86.8% |
| King George County | | | | | 27,856 | 69.2% | 69.4% | 53.1% |
| King William County | | | | | 18,492 | 54.7% | 52.7% | 31.8% |
| King and Queen County | | | | | 6,718 | 45.6% | 46.1% | 24.5% |
| Lancaster County | | | | | 10,750 | 74.4% | 19.1% | 14.7% |
| Lee County | | | | | 21,982 | 96.7% | 48.4% | 47.6% |
| Lexington city | 7,457 | 99.5% | 100.0% | 99.5% | | | | |
| Loudoun County | 376,094 | 94.1% | 97.2% | 91.6% | 55,991 | 67.9% | 78.7% | 54.8% |
| Louisa County | | | | | 40,116 | 45.3% | 41.3% | 25.3% |
| Lunenburg County | | | | | 12,031 | 60.9% | 26.1% | 22.3% |
| Lynchburg city | 77,645 | 94.6% | 82.2% | 78.2% | 1,642 | 75.9% | 59.2% | 39.0% |
| Madison County | | | | | 14,000 | 55.5% | 50.7% | 34.7% |
| Manassas Park city | 16,703 | 99.9% | 100.0% | 99.9% | | | | |
| Manassas city | 42,642 | 99.7% | 99.9% | 99.7% | | | | |
| Martinsville city | 13,714 | 99.1% | 86.1% | 85.6% | 11 | 100.0% | 100.0% | 100.0% |
| Mathews County | | | | | 8,490 | 80.0% | 68.2% | 55.1% |
| Mecklenburg County | 5,165 | 98.5% | 92.1% | 90.7% | 25,343 | 47.1% | 33.7% | 21.1% |
| Middlesex County | | | | | 10,943 | 65.1% | 41.5% | 24.2% |
| Montgomery County | 68,909 | 98.8% | 94.0% | 92.9% | 30,006 | 76.9% | 54.3% | 47.3% |
| Nelson County | | | | | 14,652 | 96.3% | 33.4% | 33.1% |
| New Kent County | | | | | 24,986 | 69.6% | 84.5% | 64.4% |
| Newport News city | 184,069 | 99.7% | 99.8% | 99.5% | 237 | 93.2% | 100.0% | 93.2% |
| Norfolk city | 232,995 | 92.1% | 99.7% | 91.9% | | | | |
| Northampton County | | | | | 11,900 | 80.2% | 56.6% | 49.2% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Northumberland County | | | | | 12,302 | 70.4% | 27.2% | 18.9% |
| Norton city | 3,250 | 100.0% | 98.9% | 98.9% | 359 | 100.0% | 56.5% | 56.5% |
| Nottoway County | | | | | 15,559 | 78.7% | 67.3% | 57.0% |
| Orange County | 16,544 | 99.1% | 98.0% | 97.3% | 21,447 | 84.9% | 46.2% | 39.3% |
| Page County | 4,774 | 97.3% | 100.0% | 97.3% | 18,976 | 52.7% | 59.5% | 38.4% |
| Patrick County | | | | | 17,643 | 25.8% | 38.1% | 14.9% |
| Petersburg city | 32,413 | 96.4% | 99.3% | 95.8% | 981 | 94.8% | 100.0% | 94.8% |
| Pittsylvania County | 6,528 | 99.9% | 77.2% | 77.2% | 53,424 | 96.5% | 58.7% | 57.7% |
| Poquoson city | 11,462 | 99.8% | 99.7% | 99.6% | 1,120 | 99.7% | 100.0% | 99.7% |
| Portsmouth city | 97,029 | 98.3% | 100.0% | 98.3% | | | | |
| Powhatan County | 624 | 100.0% | 97.4% | 97.4% | 30,865 | 90.2% | 69.4% | 63.0% |
| Prince Edward County | 6,628 | 100.0% | 96.1% | 96.1% | 15,299 | 99.1% | 32.8% | 32.5% |
| Prince George County | 18,466 | 93.7% | 99.7% | 93.5% | 24,668 | 91.9% | 70.1% | 64.3% |
| Prince William County | 460,771 | 98.8% | 95.7% | 94.6% | 26,172 | 79.4% | 84.0% | 66.0% |
| Pulaski County | 19,157 | 96.5% | 89.6% | 86.3% | 14,549 | 56.8% | 46.6% | 29.9% |
| Radford city | 15,638 | 98.5% | 91.5% | 90.4% | 1,100 | 91.5% | 67.3% | 63.6% |
| Rappahannock County | | | | | 7,502 | 43.7% | 45.8% | 33.8% |
| Richmond County | | | | | 9,080 | 61.8% | 34.2% | 26.8% |
| Richmond city | 229,384 | 99.6% | 99.9% | 99.6% | 11 | 36.3% | 100.0% | 36.3% |
| Roanoke County | 78,714 | 99.9% | 86.7% | 86.7% | 18,200 | 91.2% | 47.8% | 46.7% |
| Roanoke city | 97,833 | 99.6% | 94.6% | 94.2% | 14 | 100.0% | 71.4% | 71.4% |
| Rockbridge County | 1,894 | 97.3% | 96.8% | 94.4% | 20,699 | 75.4% | 48.7% | 40.8% |
| Rockingham County | 34,540 | 95.4% | 88.7% | 84.4% | 50,857 | 56.6% | 74.1% | 45.2% |
| Russell County | 164 | 100.0% | 1.2% | 1.2% | 25,284 | 91.4% | 62.4% | 58.6% |
| Salem city | 25,523 | 99.7% | 95.5% | 95.3% | | | | |
| Scott County | 368 | 100.0% | 100.0% | 100.0% | 21,108 | 80.5% | 54.1% | 47.6% |
| Shenandoah County | 13,500 | 99.2% | 91.0% | 90.4% | 31,468 | 68.6% | 64.4% | 51.4% |
| Smyth County | 7,158 | 99.8% | 99.4% | 99.3% | 22,291 | 93.3% | 34.3% | 32.3% |
| Southampton County | 318 | 100.0% | 83.9% | 83.9% | 17,614 | 40.8% | 63.4% | 30.7% |
| Spotsylvania County | 99,078 | 98.7% | 94.7% | 93.4% | 47,610 | 77.4% | 40.4% | 34.5% |
| Stafford County | 132,275 | 98.3% | 95.4% | 93.8% | 31,105 | 89.1% | 60.9% | 54.4% |
| Staunton city | 25,325 | 98.5% | 94.5% | 93.0% | 579 | 78.0% | 100.0% | 78.0% |
| Suffolk city | 71,183 | 94.2% | 100.0% | 94.2% | 27,354 | 73.7% | 87.4% | 67.6% |
| Surry County | | | | | 6,527 | 92.6% | 65.7% | 61.7% |
| Sussex County | | | | | 10,680 | 64.7% | 48.6% | 38.4% |
| Tazewell County | 19,072 | 99.4% | 87.3% | 87.1% | 20,749 | 85.2% | 36.5% | 34.4% |
| Virginia Beach city | 446,292 | 99.2% | 99.8% | 99.1% | 9,326 | 87.7% | 86.6% | 76.8% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Warren County | 16,308 | 98.8% | 71.7% | 70.8% | 25,132 | 73.9% | 40.9% | 29.3% |
| Washington County | 16,664 | 99.5% | 85.8% | 85.5% | 37,294 | 86.1% | 54.0% | 50.5% |
| Waynesboro city | 22,262 | 98.3% | 99.3% | 97.7% | 546 | 98.9% | 100.0% | 98.9% |
| Westmoreland County | 3,930 | 99.5% | 53.4% | 53.3% | 14,782 | 65.9% | 52.5% | 34.6% |
| Williamsburg city | 15,893 | 98.7% | 99.2% | 97.9% | 16 | 100.0% | 100.0% | 100.0% |
| Winchester city | 27,936 | 99.6% | 98.5% | 98.1% | | | | |
| Wise County | 12,364 | 98.9% | 84.6% | 83.9% | 23,057 | 93.2% | 38.2% | 37.2% |
| Wythe County | 7,032 | 98.8% | 90.3% | 89.4% | 21,079 | 47.2% | 47.1% | 26.9% |
| York County | 65,668 | 98.9% | 99.0% | 98.0% | 5,673 | 94.0% | 94.0% | 89.5% |
| Washington | 6,454,972 | 98.6% | 96.8% | 95.6% | 1,330,814 | 56.9% | 66.7% | 41.9% |
| Adams County | 10,862 | 95.3% | 91.8% | 87.8% | 10,099 | 12.3% | 71.4% | 10.6% |
| Asotin County | 20,873 | 99.8% | 96.1% | 96.0% | 1,635 | 32.9% | 36.3% | 25.5% |
| Benton County | 186,138 | 98.5% | 94.3% | 93.0% | 26,653 | 90.7% | 87.6% | 81.3% |
| Chelan County | 52,580 | 98.9% | 97.1% | 96.2% | 27,346 | 77.0% | 68.8% | 60.1% |
| Clallam County | 49,716 | 92.5% | 88.1% | 82.3% | 28,089 | 19.3% | 49.4% | 8.6% |
| Clark County | 444,059 | 99.1% | 99.5% | 98.7% | 72,720 | 39.7% | 60.9% | 35.1% |
| Columbia County | | | | | 4,026 | 66.1% | 74.7% | 65.8% |
| Cowlitz County | 74,807 | 99.1% | 95.4% | 94.7% | 37,149 | 52.2% | 37.5% | 24.3% |
| Douglas County | 32,796 | 99.5% | 100.0% | 99.5% | 11,396 | 73.7% | 73.4% | 56.9% |
| Ferry County | | | | | 7,448 | 24.3% | 40.2% | 17.6% |
| Franklin County | 87,080 | 92.3% | 76.1% | 68.5% | 11,598 | 59.3% | 56.6% | 30.2% |
| Garfield County | | | | | 2,363 | 64.3% | 63.8% | 57.8% |
| Grant County | 55,408 | 99.7% | 92.3% | 92.0% | 45,903 | 67.3% | 76.9% | 53.3% |
| Grays Harbor County | 47,074 | 99.4% | 85.8% | 85.3% | 29,964 | 68.7% | 67.9% | 51.5% |
| Island County | 43,243 | 96.4% | 67.4% | 65.1% | 43,382 | 73.8% | 51.9% | 38.2% |
| Jefferson County | 15,717 | 96.8% | 59.5% | 57.1% | 17,872 | 51.0% | 51.4% | 31.9% |
| King County | 2,190,819 | 99.2% | 98.9% | 98.2% | 75,970 | 74.6% | 85.0% | 65.8% |
| Kitsap County | 227,766 | 97.9% | 91.4% | 89.7% | 49,907 | 73.2% | 67.0% | 50.1% |
| Kittitas County | 24,704 | 100.0% | 99.9% | 99.9% | 20,485 | 93.7% | 87.3% | 84.2% |
| Klickitat County | 4,668 | 94.0% | 99.9% | 93.9% | 18,603 | 28.4% | 61.6% | 25.5% |
| Lewis County | 33,023 | 98.3% | 95.2% | 93.6% | 52,347 | 26.2% | 69.9% | 19.6% |
| Lincoln County | | | | | 11,601 | 6.9% | 65.8% | 6.1% |
| Mason County | 20,935 | 97.6% | 63.2% | 62.2% | 47,231 | 76.5% | 35.4% | 27.8% |
| Okanogan County | 8,302 | 89.4% | 91.6% | 81.6% | 34,825 | 19.4% | 60.7% | 13.6% |
| Pacific County | 9,075 | 91.8% | 68.1% | 62.5% | 15,038 | 72.7% | 68.0% | 53.6% |
| Pend Oreille County | | | | | 14,179 | 53.4% | 61.1% | 31.8% |
| Pierce County | 861,399 | 98.3% | 97.8% | 96.3% | 65,981 | 48.4% | 65.9% | 35.0% |
| San Juan County | 3,614 | 95.8% | 80.9% | 77.8% | 15,048 | 63.5% | 39.3% | 30.0% |
| Skagit County | 85,623 | 99.2% | 91.1% | 90.4% | 45,556 | 65.4% | 69.7% | 48.7% |
| Skamania County | | | | | 12,460 | 33.6% | 66.2% | 30.8% |
| Snohomish County | 737,939 | 98.4% | 99.3% | 97.9% | 102,140 | 60.9% | 74.8% | 47.7% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Spokane County | 466,824 | 98.9% | 99.8% | 98.7% | 82,866 | 28.3% | 85.1% | 26.9% |
| Stevens County | 5,452 | 89.7% | 100.0% | 89.7% | 42,777 | 27.6% | 56.7% | 23.6% |
| Thurston County | 233,624 | 98.7% | 94.9% | 93.9% | 65,134 | 63.3% | 54.2% | 38.3% |
| Wahkiakum County | | | | | 4,688 | 68.1% | 56.5% | 46.8% |
| Walla Walla County | 49,015 | 95.3% | 84.0% | 79.6% | 12,875 | 63.1% | 66.7% | 49.8% |
| Whatcom County | 163,530 | 98.0% | 91.6% | 91.0% | 67,147 | 66.7% | 64.3% | 44.3% |
| Whitman County | 30,418 | 93.6% | 100.0% | 93.6% | 17,201 | 57.1% | 42.8% | 28.2% |
| Yakima County | 177,889 | 98.3% | 97.5% | 95.9% | 79,112 | 87.0% | 88.6% | 79.6% |
| West Virginia | 795,101 | 92.5% | 92.5% | 86.1% | 980,055 | 52.6% | 45.2% | 29.4% |
| Barbour County | | | | | 15,414 | 7.7% | 44.1% | 4.3% |
| Berkeley County | 87,162 | 97.8% | 95.5% | 93.6% | 42,328 | 69.0% | 71.2% | 53.9% |
| Boone County | | | | | 20,968 | 68.5% | 32.6% | 22.2% |
| Braxton County | | | | | 12,185 | 36.5% | 43.4% | 30.3% |
| Brooke County | 12,785 | 99.4% | 87.8% | 87.5% | 8,948 | 74.5% | 37.0% | 29.2% |
| Cabell County | 72,386 | 95.4% | 98.9% | 94.5% | 20,344 | 65.9% | 51.7% | 41.5% |
| Calhoun County | | | | | 6,068 | 3.0% | 13.1% | 0.8% |
| Clay County | | | | | 7,814 | 12.2% | 14.3% | 1.2% |
| Doddridge County | | | | | 7,698 | 44.1% | 32.9% | 26.1% |
| Fayette County | 14,758 | 81.1% | 76.5% | 60.7% | 24,729 | 40.4% | 40.1% | 18.2% |
| Gilmer County | | | | | 7,325 | 29.9% | 49.0% | 23.9% |
| Grant County | | | | | 10,968 | 39.3% | 43.0% | 26.5% |
| Greenbrier County | 7,058 | 73.7% | 72.2% | 52.1% | 25,377 | 32.2% | 48.6% | 19.3% |
| Hampshire County | | | | | 23,468 | 24.1% | 44.4% | 17.0% |
| Hancock County | 18,935 | 99.8% | 94.8% | 94.6% | 9,237 | 70.5% | 68.5% | 56.4% |
| Hardy County | | | | | 14,192 | 82.6% | 51.3% | 45.8% |
| Harrison County | 36,136 | 93.1% | 96.1% | 89.9% | 28,779 | 55.1% | 50.2% | 37.2% |
| Jackson County | | | | | 27,716 | 53.0% | 68.2% | 46.7% |
| Jefferson County | 22,598 | 99.2% | 85.8% | 85.2% | 36,381 | 85.3% | 59.2% | 50.7% |
| Kanawha County | 124,363 | 88.9% | 92.4% | 82.4% | 51,152 | 44.1% | 54.6% | 27.0% |
| Lewis County | 4,387 | 99.1% | 95.6% | 94.8% | 12,380 | 48.3% | 37.6% | 27.3% |
| Lincoln County | | | | | 19,901 | 48.3% | 23.6% | 15.1% |
| Logan County | 8,564 | 51.5% | 61.6% | 38.0% | 22,752 | 49.7% | 9.8% | 4.1% |
| Marion County | 31,407 | 95.5% | 97.0% | 92.6% | 24,545 | 61.4% | 57.1% | 42.1% |
| Marshall County | 15,074 | 99.7% | 67.4% | 67.3% | 14,678 | 51.9% | 27.9% | 16.6% |
| Mason County | 7,805 | 78.6% | 88.6% | 70.9% | 17,195 | 28.9% | 38.2% | 15.6% |
| McDowell County | | | | | 17,850 | 82.2% | 16.7% | 10.8% |
| Mercer County | 34,307 | 89.3% | 84.9% | 76.5% | 24,393 | 52.7% | 52.5% | 31.8% |
| Mineral County | 8,212 | 98.4% | 98.5% | 97.0% | 18,643 | 66.9% | 63.7% | 47.3% |
| Mingo County | | | | | 22,573 | 60.8% | 2.4% | 2.0% |
| Monongalia County | 78,216 | 98.4% | 96.9% | 95.3% | 28,653 | 73.5% | 58.2% | 48.3% |
| Monroe County | | | | | 12,296 | 46.8% | 20.1% | 12.8% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Morgan County | | | | | 17,430 | 46.6% | 57.1% | 34.3% |
| Nicholas County | | | | | 24,335 | 44.1% | 52.0% | 27.2% |
| Ohio County | 27,809 | 99.7% | 95.6% | 95.3% | 13,638 | 80.5% | 72.2% | 63.8% |
| Pendleton County | | | | | 6,011 | 62.8% | 28.5% | 21.6% |
| Pleasants County | | | | | 7,586 | 54.6% | 46.6% | 33.7% |
| Pocahontas County | | | | | 7,819 | 17.7% | 14.6% | 0.7% |
| Preston County | | | | | 34,172 | 66.2% | 58.6% | 45.4% |
| Putnam County | 37,562 | 92.1% | 90.9% | 84.3% | 19,453 | 47.3% | 41.0% | 25.0% |
| Raleigh County | 41,559 | 86.3% | 91.3% | 79.2% | 31,323 | 59.4% | 45.4% | 28.5% |
| Randolph County | 10,943 | 64.6% | 83.2% | 52.9% | 16,657 | 19.5% | 35.7% | 8.4% |
| Ritchie County | | | | | 8,207 | 82.6% | 40.1% | 37.7% |
| Roane County | | | | | 13,834 | 26.3% | 42.5% | 22.8% |
| Summers County | | | | | 11,762 | 27.3% | 62.8% | 23.4% |
| Taylor County | 5,134 | 97.4% | 96.9% | 94.3% | 11,208 | 59.9% | 62.1% | 43.7% |
| Tucker County | | | | | 6,568 | 63.6% | 58.9% | 52.5% |
| Tyler County | | | | | 8,183 | 24.7% | 49.1% | 20.6% |
| Upshur County | 8,487 | 69.3% | 73.3% | 52.2% | 15,225 | 28.7% | 17.0% | 7.4% |
| Wayne County | 15,451 | 94.7% | 95.6% | 90.7% | 22,547 | 40.4% | 38.2% | 22.4% |
| Webster County | | | | | 8,167 | 55.9% | 51.5% | 43.9% |
| Wetzel County | 5,278 | 78.6% | 96.7% | 76.8% | 8,747 | 30.2% | 10.9% | 7.7% |
| Wirt County | | | | | 5,091 | 25.5% | 44.0% | 13.5% |
| Wood County | 58,725 | 93.5% | 97.2% | 90.9% | 24,615 | 62.7% | 52.0% | 38.9% |
| Wyoming County | | | | | 20,527 | 85.0% | 23.2% | 21.6% |
| Wisconsin | 3,926,612 | 98.4% | 96.1% | 94.7% | 1,965,927 | 70.3% | 56.7% | 45.7% |
| Adams County | | | | | 21,226 | 69.7% | 29.8% | 19.7% |
| Ashland County | 7,207 | 99.2% | 59.6% | 59.3% | 8,832 | 44.7% | 28.9% | 16.6% |
| Barron County | 9,898 | 99.7% | 93.4% | 93.3% | 36,945 | 73.0% | 58.3% | 47.4% |
| Bayfield County | | | | | 16,608 | 85.1% | 27.6% | 23.7% |
| Brown County | 224,072 | 99.8% | 99.3% | 99.2% | 45,964 | 95.0% | 85.3% | 81.7% |
| Buffalo County | | | | | 13,391 | 79.7% | 9.4% | 8.3% |
| Burnett County | | | | | 17,036 | 69.5% | 37.1% | 32.5% |
| Calumet County | 24,825 | 99.8% | 100.0% | 99.8% | 27,893 | 99.4% | 77.2% | 76.8% |
| Chippewa County | 24,919 | 94.6% | 99.0% | 93.7% | 41,888 | 73.8% | 63.6% | 48.6% |
| Clark County | | | | | 34,691 | 36.9% | 48.5% | 28.6% |
| Columbia County | 19,388 | 94.9% | 96.4% | 92.2% | 38,805 | 77.7% | 57.7% | 48.0% |
| Crawford County | 5,811 | 99.3% | 99.8% | 99.1% | 10,196 | 38.8% | 17.6% | 12.0% |
| Dane County | 488,425 | 97.7% | 99.1% | 96.9% | 79,778 | 74.3% | 80.1% | 62.8% |
| Dodge County | 39,781 | 99.7% | 89.8% | 89.6% | 48,501 | 99.0% | 69.7% | 69.2% |
| Door County | 9,287 | 93.5% | 95.6% | 90.2% | 21,239 | 51.3% | 51.2% | 26.4% |
| Douglas County | 26,876 | 96.1% | 100.0% | 96.1% | 17,268 | 28.8% | 42.9% | 17.6% |
| Dunn County | 16,227 | 93.5% | 98.4% | 92.0% | 29,424 | 70.0% | 43.1% | 32.3% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|-----------------------|--|---|---|-------------------|--|---|---|
| | Pop. Evaluate d | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/ 20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Eau Claire County | 81,517 | 96.1% | 99.2% | 95.3% | 25,320 | 65.8% | 60.8% | 44.7% |
| Florence County | | | | | 4,688 | 38.8% | 29.6% | 21.6% |
| Fond du Lac County | 65,680 | 99.8% | 100.0% | 99.8% | 38,156 | 97.2% | 93.0% | 90.5% |
| Forest County | | | | | 9,381 | 49.9% | 15.1% | 10.1% |
| Grant County | 11,431 | 90.1% | 56.5% | 49.0% | 39,845 | 57.4% | 38.3% | 25.4% |
| Green County | 10,683 | 98.8% | 99.0% | 97.9% | 26,133 | 42.4% | 63.1% | 38.2% |
| Green Lake County | 5,211 | 97.0% | 99.1% | 96.2% | 14,009 | 58.1% | 54.0% | 32.1% |
| Iowa County | 4,874 | 98.5% | 53.5% | 53.1% | 18,991 | 45.6% | 38.8% | 22.5% |
| Iron County | 1,962 | 95.1% | 58.0% | 53.9% | 4,262 | 15.3% | 26.1% | 4.0% |
| Jackson County | 4,342 | 92.7% | 98.0% | 90.9% | 16,494 | 27.8% | 32.5% | 14.4% |
| Jefferson County | 47,192 | 99.7% | 90.9% | 90.7% | 38,592 | 96.5% | 84.4% | 82.2% |
| Juneau County | | | | | 26,866 | 57.0% | 52.5% | 37.4% |
| Kenosha County | 145,282 | 97.2% | 96.5% | 93.8% | 22,535 | 76.0% | 80.6% | 62.7% |
| Kewaunee County | | | | | 20,623 | 91.5% | 95.6% | 88.0% |
| La Crosse County | 98,291 | 96.9% | 90.0% | 87.1% | 22,003 | 67.1% | 39.6% | 29.9% |
| Lafayette County | | | | | 16,877 | 43.6% | 44.3% | 22.6% |
| Langlade County | 7,819 | 100.0% | 88.9% | 88.9% | 11,740 | 73.9% | 22.2% | 16.2% |
| Lincoln County | 9,076 | 93.1% | 90.7% | 84.8% | 19,300 | 34.4% | 15.9% | 4.1% |
| Manitowoc County | 46,185 | 99.9% | 99.5% | 99.5% | 34,987 | 93.6% | 76.1% | 73.2% |
| Marathon County | 77,943 | 98.6% | 70.5% | 69.4% | 60,015 | 44.4% | 36.6% | 21.4% |
| Marinette County | 16,204 | 95.1% | 79.5% | 76.7% | 25,784 | 38.8% | 17.1% | 7.2% |
| Marquette County | | | | | 15,779 | 65.9% | 41.0% | 31.2% |
| Menominee County | | | | | 4,197 | 90.8% | 24.3% | 22.9% |
| Milwaukee County | 916,096 | 99.6% | 99.5% | 99.2% | 2,565 | 87.8% | 98.7% | 87.2% |
| Monroe County | 19,910 | 95.7% | 85.5% | 82.0% | 26,199 | 33.6% | 43.9% | 19.3% |
| Oconto County | | | | | 39,633 | 85.4% | 49.0% | 46.6% |
| Oneida County | 9,404 | 91.8% | 50.1% | 45.5% | 28,808 | 54.4% | 12.0% | 9.4% |
| Outagamie County | 143,021 | 99.3% | 98.8% | 98.2% | 49,106 | 93.2% | 69.4% | 65.2% |
| Ozaukee County | 70,024 | 98.5% | 98.0% | 96.6% | 22,985 | 97.3% | 87.6% | 85.8% |
| Pepin County | | | | | 7,410 | 81.4% | 40.2% | 33.1% |
| Pierce County | 12,163 | 98.8% | 97.7% | 96.8% | 30,369 | 83.4% | 64.9% | 58.5% |
| Polk County | | | | | 45,709 | 72.9% | 51.6% | 39.9% |
| Portage County | 44,396 | 97.2% | 85.1% | 82.7% | 26,322 | 83.8% | 47.3% | 42.2% |
| Price County | | | | | 14,179 | 57.7% | 25.6% | 20.4% |
| Racine County | 167,554 | 96.6% | 95.8% | 92.6% | 28,292 | 74.5% | 72.0% | 52.3% |
| Richland County | 4,939 | 96.4% | 74.6% | 71.2% | 12,151 | 64.7% | 17.2% | 11.1% |
| Rock County | 130,747 | 97.5% | 97.3% | 95.0% | 33,313 | 64.8% | 71.7% | 48.9% |
| Rusk County | | | | | 14,186 | 53.4% | 12.8% | 9.1% |
| Sauk County | 36,032 | 94.0% | 76.9% | 72.4% | 29,745 | 58.8% | 29.1% | 18.7% |
| Sawyer County | | | | | 18,559 | 46.5% | 34.0% | 21.7% |
| Shawano County | 12,185 | 99.6% | 98.6% | 98.2% | 28,701 | 84.8% | 62.5% | 58.6% |

| State, Territory, County or County Equivalent | Urban Areas | | | | Rural Areas | | | |
|---|----------------|----------------------------------|---------------------------------------|-------------------------------|----------------|----------------------------------|---------------------------------------|-------------------------------|
| | Pop. Evaluated | % of Pop. with Fixed 100/20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile | Pop. Evaluated | % of Pop. with Fixed 100/20 Mbps | % of Pop. with Mobile 5G-NR 35/3 Mbps | % of Pop. with Fixed & Mobile |
| Sheboygan County | 83,036 | 99.7% | 95.7% | 95.5% | 34,805 | 91.9% | 73.8% | 69.3% |
| St. Croix County | 34,353 | 94.5% | 99.0% | 93.6% | 61,664 | 63.2% | 90.2% | 57.9% |
| Taylor County | 4,135 | 99.2% | 95.6% | 94.9% | 15,840 | 14.7% | 8.6% | 4.1% |
| Trempealeau County | | | | | 30,899 | 78.1% | 27.1% | 22.5% |
| Vernon County | 4,137 | 100.0% | 97.0% | 97.0% | 26,923 | 92.3% | 33.2% | 30.2% |
| Vilas County | | | | | 23,763 | 40.8% | 14.1% | 4.3% |
| Walworth County | 65,850 | 96.0% | 86.8% | 83.3% | 39,530 | 72.8% | 66.7% | 49.2% |
| Washburn County | | | | | 16,911 | 37.3% | 42.7% | 26.1% |
| Washington County | 84,574 | 99.8% | 97.4% | 97.3% | 53,114 | 98.4% | 88.4% | 87.3% |
| Waukesha County | 347,091 | 99.2% | 96.8% | 96.0% | 63,343 | 95.9% | 88.9% | 85.6% |
| Waupaca County | 18,355 | 95.0% | 93.9% | 89.1% | 33,133 | 54.8% | 58.0% | 38.1% |
| Waushara County | 84 | 98.8% | 98.8% | 98.8% | 24,915 | 43.5% | 56.2% | 27.5% |
| Winnebago County | 140,685 | 99.2% | 99.7% | 98.9% | 30,033 | 82.9% | 74.4% | 67.7% |
| Wood County | 47,433 | 97.8% | 79.0% | 76.9% | 26,560 | 54.3% | 38.2% | 25.1% |
| Wyoming | 355,788 | 98.6% | 82.6% | 81.5% | 225,593 | 70.4% | 50.9% | 41.8% |
| Albany County | 32,825 | 100.0% | 45.2% | 45.2% | 5,206 | 81.9% | 43.7% | 41.5% |
| Big Horn County | | | | | 11,855 | 47.8% | 60.4% | 38.6% |
| Campbell County | 34,413 | 99.2% | 93.9% | 93.2% | 12,645 | 71.0% | 47.4% | 40.5% |
| Carbon County | 7,546 | 95.6% | 100.0% | 95.6% | 6,996 | 71.5% | 33.4% | 18.7% |
| Converse County | 6,463 | 100.0% | 95.1% | 95.1% | 7,323 | 81.6% | 40.4% | 35.1% |
| Crook County | | | | | 7,448 | 48.9% | 50.3% | 33.8% |
| Fremont County | 18,963 | 99.7% | 84.2% | 84.0% | 20,509 | 77.8% | 28.6% | 25.4% |
| Goshen County | 6,441 | 100.0% | 91.3% | 91.3% | 6,121 | 90.2% | 37.6% | 36.1% |
| Hot Springs County | | | | | 4,588 | 75.0% | 82.4% | 72.1% |
| Johnson County | 4,664 | 99.9% | 38.2% | 38.2% | 4,066 | 59.5% | 26.4% | 11.1% |
| Laramie County | 76,245 | 97.6% | 99.9% | 97.5% | 24,478 | 87.9% | 71.7% | 67.7% |
| Lincoln County | | | | | 20,660 | 72.0% | 51.7% | 39.6% |
| Natrona County | 67,196 | 99.7% | 100.0% | 99.7% | 12,405 | 89.3% | 76.4% | 71.6% |
| Niobrara County | | | | | 2,380 | 86.8% | 72.4% | 70.3% |
| Park County | 16,925 | 99.4% | 85.1% | 84.7% | 13,593 | 17.5% | 41.1% | 12.0% |
| Platte County | | | | | 8,645 | 92.6% | 74.1% | 72.1% |
| Sheridan County | 20,248 | 99.9% | 83.8% | 83.7% | 11,848 | 84.6% | 31.5% | 27.3% |
| Sublette County | | | | | 8,763 | 74.8% | 51.9% | 51.1% |
| Sweetwater County | 36,823 | 97.1% | 42.1% | 40.3% | 4,522 | 62.5% | 37.3% | 24.3% |
| Teton County | 10,708 | 99.2% | 100.0% | 99.2% | 12,579 | 80.5% | 63.5% | 57.5% |
| Uinta County | 11,430 | 90.5% | 33.3% | 31.2% | 9,282 | 14.8% | 19.8% | 4.7% |
| Washakie County | 4,898 | 100.0% | 92.8% | 92.8% | 2,821 | 49.2% | 40.1% | 22.9% |
| Weston County | | | | | 6,860 | 82.6% | 71.5% | 67.6% |

Source: FCC BDC data; Staff Block Estimates.

Note: For year-end 2022, we rely on the 2020 Census Urban Areas (See United States Census Bureau, *Urban and Rural*, <https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html>). A blank cell

indicates that the county contains either no populated Urban Areas or no populated Rural Areas.

APPX. B-14

Service Availability (Millions) of Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Minimum Advertised Speed of 35/3 Mbps on Tribal Lands by State (December 31, 2022)

| | Fixed 100/20 Mbps | | Mobile 5G-NR 35/3 Mbps | | Fixed 100/20 Mbps and Mobile 5G-NR 35/3 Mbps | | |
|--|-------------------|-----------|------------------------|-----------|--|-----------|-----------|
| | Pop. Evaluated | Pop. | % of Pop. | Pop. | % of Pop. | Pop. | % of Pop. |
| All Tribal Lands | 4,043,227 | 3,086,560 | 76.3% | 3,145,177 | 77.8% | 2,663,757 | 65.9% |
| Alaska Native Village Statistical Areas | 269,755 | 162,806 | 60.4% | 117,621 | 43.6% | 97,841 | 36.3% |
| Federal Reservations | 1,056,973 | 599,136 | 56.7% | 688,602 | 65.1% | 467,432 | 44.2% |
| Alabama | 321 | 0 | 0.0% | 69 | 21.5% | 0 | 0.0% |
| Alaska | 1,200 | 39 | 3.3% | 9 | 0.8% | 0 | 0.0% |
| Arizona | 168,817 | 33,141 | 19.6% | 73,517 | 43.5% | 29,279 | 17.3% |
| California | 68,497 | 42,023 | 61.4% | 58,936 | 86.0% | 39,953 | 58.3% |
| Colorado | 13,917 | 8,229 | 59.1% | 7,834 | 56.3% | 5,106 | 36.7% |
| Connecticut | 651 | 562 | 86.3% | 461 | 70.8% | 372 | 57.1% |
| Florida | 3,913 | 1,608 | 41.1% | 3,330 | 85.1% | 1,608 | 41.1% |
| Idaho | 33,361 | 12,428 | 37.3% | 17,298 | 51.9% | 8,447 | 25.3% |
| Indiana | 16 | 16 | 100.0% | 16 | 100.0% | 16 | 100.0% |
| Iowa | 993 | 867 | 87.3% | 599 | 60.3% | 567 | 57.1% |
| Kansas | 5,432 | 4,877 | 89.8% | 4,163 | 76.6% | 3,801 | 70.0% |
| Louisiana | 950 | 637 | 67.1% | 831 | 87.5% | 635 | 66.8% |
| Maine | 2,281 | 2,184 | 95.7% | 822 | 36.0% | 773 | 33.9% |
| Massachusetts | 98 | 98 | 100.0% | 0 | 0.0% | 0 | 0.0% |
| Michigan | 33,852 | 31,017 | 91.6% | 24,484 | 72.3% | 23,027 | 68.0% |
| Minnesota | 39,095 | 30,759 | 78.7% | 16,142 | 41.3% | 12,399 | 31.7% |
| Mississippi | 7,882 | 3,445 | 43.7% | 4,663 | 59.2% | 1,802 | 22.9% |
| Montana | 69,552 | 35,563 | 51.1% | 43,038 | 61.9% | 27,573 | 39.6% |
| Nebraska | 8,097 | 3,682 | 45.5% | 3,054 | 37.7% | 494 | 6.1% |
| Nevada | 11,330 | 7,817 | 69.0% | 8,639 | 76.2% | 7,297 | 64.4% |
| New Mexico | 119,317 | 43,372 | 36.4% | 77,710 | 65.1% | 34,059 | 28.5% |
| New York | 77,771 | 64,593 | 83.1% | 65,911 | 84.8% | 57,808 | 74.3% |
| North Carolina | 9,091 | 496 | 5.5% | 2,023 | 22.3% | 83 | 0.9% |
| North Dakota | 22,307 | 20,749 | 93.0% | 12,109 | 54.3% | 11,191 | 50.2% |
| Oklahoma | 45,839 | 20,010 | 43.7% | 35,556 | 77.6% | 18,016 | 39.3% |
| Oregon | 8,734 | 4,450 | 51.0% | 6,343 | 72.6% | 2,957 | 33.9% |
| Rhode Island | 1 | 1 | 100.0% | 1 | 100.0% | 1 | 100.0% |
| South Carolina | 997 | 993 | 99.6% | 403 | 40.4% | 403 | 40.4% |
| South Dakota | 61,023 | 47,285 | 77.5% | 41,247 | 67.6% | 33,681 | 55.2% |
| Tennessee | 82 | 81 | 98.8% | 82 | 100.0% | 81 | 98.8% |
| Texas | 2,463 | 1,800 | 73.1% | 1,756 | 71.3% | 1,674 | 68.0% |
| Utah | 32,383 | 13,808 | 42.6% | 21,120 | 65.2% | 12,584 | 38.9% |
| Washington | 138,514 | 103,774 | 74.9% | 117,642 | 84.9% | 94,319 | 68.1% |

| | Pop. Evaluated | Fixed 100/20 Mbps | | Mobile 5G-NR 35/3 Mbps | | Fixed 100/20 Mbps and Mobile 5G-NR 35/3 Mbps | |
|--------------------------|-------------------|----------------------|--------------|---------------------------|--------------|--|--------------|
| | | Pop. | % of Pop. | Pop. | % of Pop. | Pop. | % of Pop. |
| Wisconsin | 43,317 | 35,915 | 82.9% | 25,654 | 59.2% | 24,357 | 56.2% |
| Wyoming | 24,879 | 22,817 | 91.7% | 13,140 | 52.8% | 13,069 | 52.5% |
| Hawaiian Home Lands | 34,358 | 32,529 | 94.7% | 32,309 | 94.0% | 30,866 | 89.8% |
| Tribal Statistical Areas | 2,682,141 | 2,292,089 | 85.5% | 2,306,645 | 86.0% | 2,067,618 | 77.1% |
| California | 3,212 | 3,183 | 99.1% | 3,204 | 99.8% | 3,183 | 99.1% |
| New York | 2,504 | 2,385 | 95.2% | 1,764 | 70.4% | 1,682 | 67.2% |
| Oklahoma | 2,628,939 | 2,247,858 | 85.5% | 2,272,804 | 86.5% | 2,036,882 | 77.5% |
| Virginia | 5,009 | 2,597 | 51.8% | 2,410 | 48.1% | 1,434 | 28.6% |
| Washington | 42,477 | 36,066 | 84.9% | 26,463 | 62.3% | 24,437 | 57.5% |

Source: FCC BDC data; Staff Block Estimates.

APPX. B-15

Service Availability (Millions) on Tribal Lands of Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps (In-Vehicle Mobile Services) (December 31, 2022)

| Area | Pop. Evaluated | Including Fixed Wireless | | Excluding Fixed Wireless | |
|---|-------------------|-----------------------------|-------|-----------------------------|-------|
| | | Pop. | % | Pop. | % |
| Tribal Lands | 4.043 | 2.242 | 55.5% | 2.113 | 52.3% |
| Rural Areas | 2.219 | 0.702 | 31.6% | 0.589 | 26.5% |
| Urban Areas | 1.824 | 1.540 | 84.4% | 1.524 | 83.5% |
| Alaska Native Village Statistical Areas | 0.270 | 0.097 | 36.1% | 0.087 | 32.2% |
| Rural Areas | 0.176 | 0.032 | 18.3% | 0.023 | 12.9% |
| Urban Areas | 0.094 | 0.065 | 69.2% | 0.064 | 68.2% |
| Federal Reservations | 1.057 | 0.329 | 31.1% | 0.294 | 27.8% |
| Rural Areas | 0.780 | 0.150 | 19.2% | 0.126 | 16.2% |
| Urban Areas | 0.277 | 0.179 | 64.6% | 0.168 | 60.5% |
| Hawaiian Home Lands | 0.034 | 0.025 | 71.7% | 0.025 | 71.7% |
| Rural Areas | 0.008 | 0.003 | 40.0% | 0.003 | 40.0% |
| Urban Areas | 0.026 | 0.021 | 81.7% | 0.021 | 81.7% |
| Tribal Statistical Areas | 2.682 | 1.791 | 66.8% | 1.707 | 63.7% |
| Rural Areas | 1.255 | 0.516 | 41.1% | 0.436 | 34.8% |
| Urban Areas | 1.427 | 1.275 | 89.4% | 1.271 | 89.1% |

Source: FCC BDC data; Staff Block Estimates.

APPX. B-16

Service Availability (Millions) on Tribal Lands of Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (Outdoor Stationary Services) (December 31, 2022)

| Area | Pop. Evaluated | Including Fixed Wireless | | Excluding Fixed Wireless | |
|--|----------------|--------------------------|-------|--------------------------|-------|
| | | Pop. | % | Pop. | % |
| Tribal Lands | 4.043 | 2.948 | 72.9% | 2.697 | 66.7% |
| Rural Areas | 2.219 | 1.210 | 54.5% | 0.981 | 44.2% |
| Urban Areas | 1.824 | 1.738 | 95.3% | 1.717 | 94.1% |
| Alaska Native Village Statistical Areas | 0.270 | 0.131 | 48.4% | 0.110 | 40.8% |
| Rural Areas | 0.176 | 0.053 | 30.3% | 0.035 | 19.8% |
| Urban Areas | 0.094 | 0.077 | 82.3% | 0.075 | 80.1% |
| Federal Reservations | 1.057 | 0.546 | 51.6% | 0.475 | 44.9% |
| Rural Areas | 0.780 | 0.306 | 39.3% | 0.249 | 31.9% |
| Urban Areas | 0.277 | 0.239 | 86.4% | 0.225 | 81.3% |
| Hawaiian Home Lands | 0.034 | 0.032 | 93.5% | 0.032 | 93.5% |
| Rural Areas | 0.008 | 0.006 | 75.5% | 0.006 | 75.5% |
| Urban Areas | 0.026 | 0.026 | 99.2% | 0.026 | 99.1% |
| Tribal Statistical Areas | 2.682 | 2.239 | 83.5% | 2.081 | 77.6% |
| Rural Areas | 1.255 | 0.844 | 67.2% | 0.691 | 55.0% |
| Urban Areas | 1.427 | 1.395 | 97.8% | 1.390 | 97.4% |

Source: FCC BDC data; Staff Block Estimates.

APPX. B-17

Service Availability (Millions) on Tribal Lands of Fixed Terrestrial 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (In-Vehicle Mobile Services) (December 31, 2022)

| Area | Pop. Evaluated | Including Fixed Wireless | | Excluding Fixed Wireless | |
|--|----------------|--------------------------|-------|--------------------------|-------|
| | | Pop. | % | Pop. | % |
| Tribal Lands | 4.043 | 2.762 | 68.3% | 2.542 | 62.9% |
| Rural Areas | 2.219 | 1.059 | 47.7% | 0.860 | 38.7% |
| Urban Areas | 1.824 | 1.703 | 93.3% | 1.682 | 92.2% |
| Alaska Native Village Statistical Areas | 0.270 | 0.130 | 48.0% | 0.110 | 40.6% |
| Rural Areas | 0.176 | 0.052 | 29.8% | 0.034 | 19.6% |
| Urban Areas | 0.094 | 0.077 | 82.1% | 0.075 | 79.9% |
| Federal Reservations | 1.057 | 0.473 | 44.8% | 0.415 | 39.2% |
| Rural Areas | 0.780 | 0.248 | 31.8% | 0.203 | 26.0% |
| Urban Areas | 0.277 | 0.226 | 81.4% | 0.212 | 76.5% |
| Hawaiian Home Lands | 0.034 | 0.031 | 91.3% | 0.031 | 91.3% |
| Rural Areas | 0.008 | 0.006 | 69.4% | 0.006 | 69.4% |
| Urban Areas | 0.026 | 0.026 | 98.2% | 0.026 | 98.1% |
| Tribal Statistical Areas | 2.682 | 2.127 | 79.3% | 1.986 | 74.1% |
| Rural Areas | 1.255 | 0.753 | 60.0% | 0.617 | 49.1% |
| Urban Areas | 1.427 | 1.374 | 96.3% | 1.369 | 96.0% |

Source: FCC BDC data; Staff Block Estimates.

APPX. B-18

Service Availability (Millions) on Tribal Lands of Fixed Terrestrial 100/20 Mbps and Mobile 4G LTE with a Minimum Speed of 5/1 Mbps (Outdoor Stationary Services) (December 31, 2022)

| Area | Pop. Evaluated | Including Fixed Wireless | | Excluding Fixed Wireless | |
|--|----------------|--------------------------|-------|--------------------------|-------|
| | | Pop. | % | Pop. | % |
| Tribal Lands | 4.043 | 3.076 | 76.1% | 2.800 | 69.3% |
| Rural Areas | 2.219 | 1.328 | 59.9% | 1.074 | 48.4% |
| Urban Areas | 1.824 | 1.748 | 95.8% | 1.726 | 94.6% |
| Alaska Native Village Statistical Areas | 0.270 | 0.162 | 60.1% | 0.137 | 50.8% |
| Rural Areas | 0.176 | 0.077 | 44.0% | 0.054 | 30.9% |
| Urban Areas | 0.094 | 0.085 | 90.3% | 0.083 | 88.1% |
| Federal Reservations | 1.057 | 0.595 | 56.3% | 0.513 | 48.5% |
| Rural Areas | 0.780 | 0.355 | 45.6% | 0.287 | 36.8% |
| Urban Areas | 0.277 | 0.240 | 86.5% | 0.226 | 81.4% |
| Hawaiian Home Lands | 0.034 | 0.032 | 93.7% | 0.032 | 93.6% |
| Rural Areas | 0.008 | 0.006 | 76.1% | 0.006 | 76.1% |
| Urban Areas | 0.026 | 0.026 | 99.2% | 0.026 | 99.2% |
| Tribal Statistical Areas | 2.682 | 2.287 | 85.3% | 2.118 | 79.0% |
| Rural Areas | 1.255 | 0.890 | 70.9% | 0.726 | 57.9% |
| Urban Areas | 1.427 | 1.397 | 97.9% | 1.392 | 97.6% |

Source: FCC BDC data; Staff Block Estimates.

APPX. B-19

Service Availability (Millions) on Tribal Lands of Fixed Terrestrial 100/20 Mbps and Mobile 4G LTE with a Minimum Speed of 5/1 Mbps (In-Vehicle Mobile Services) (December 31, 2022)

| Area | Pop. Evaluated | Including Fixed Wireless | | Excluding Fixed Wireless | |
|--|----------------|--------------------------|-------|--------------------------|-------|
| | | Pop. | % | Pop. | % |
| Tribal Lands | 4.043 | 3.005 | 74.3% | 2.741 | 67.8% |
| Rural Areas | 2.219 | 1.259 | 56.7% | 1.016 | 45.8% |
| Urban Areas | 1.824 | 1.746 | 95.7% | 1.725 | 94.6% |
| Alaska Native Village Statistical Areas | 0.270 | 0.159 | 58.9% | 0.134 | 49.8% |
| Rural Areas | 0.176 | 0.074 | 42.2% | 0.052 | 29.4% |
| Urban Areas | 0.094 | 0.085 | 90.2% | 0.083 | 88.0% |
| Federal Reservations | 1.057 | 0.571 | 54.0% | 0.492 | 46.5% |
| Rural Areas | 0.780 | 0.331 | 42.5% | 0.267 | 34.2% |
| Urban Areas | 0.277 | 0.239 | 86.3% | 0.225 | 81.2% |
| Hawaiian Home Lands | 0.034 | 0.032 | 93.5% | 0.032 | 93.5% |
| Rural Areas | 0.008 | 0.006 | 75.4% | 0.006 | 75.4% |
| Urban Areas | 0.026 | 0.026 | 99.2% | 0.026 | 99.1% |
| Tribal Statistical Areas | 2.682 | 2.243 | 83.6% | 2.083 | 77.7% |
| Rural Areas | 1.255 | 0.847 | 67.5% | 0.692 | 55.1% |
| Urban Areas | 1.427 | 1.396 | 97.9% | 1.391 | 97.5% |

Source: FCC BDC data; Staff Block Estimates.

APPX. B-20
Mobile Broadband Penetration Rate by State and U.S. Territory

| Market Name | Market Population | Market Subscribers | Penetration Rate |
|--------------------------|-------------------|--------------------|------------------|
| Alabama | 5,024,279 | 7,199,971 | 143% |
| Alaska | 733,391 | 915,124 | 125% |
| American Samoa | 49,710 | 64,353 | 129% |
| Arizona | 7,151,502 | 9,088,300 | 127% |
| Arkansas | 3,011,524 | 4,159,367 | 138% |
| California | 39,538,223 | 60,892,488 | 154% |
| Colorado | 5,773,714 | 7,527,238 | 130% |
| Connecticut | 3,605,944 | 4,922,150 | 137% |
| Delaware | 989,948 | 1,331,546 | 135% |
| District of Columbia | 689,545 | 2,157,418 | 313% |
| Florida | 21,538,187 | 30,489,936 | 142% |
| Georgia | 10,711,908 | 17,340,764 | 162% |
| Guam | 153,836 | 287,716 | 187% |
| Hawaii | 1,455,271 | 2,019,816 | 139% |
| Idaho | 1,839,106 | 2,188,649 | 119% |
| Illinois | 12,812,508 | 18,780,531 | 147% |
| Indiana | 6,785,528 | 8,329,725 | 123% |
| Iowa | 3,190,369 | 4,368,050 | 137% |
| Kansas | 2,937,880 | 3,569,547 | 122% |
| Kentucky | 4,505,836 | 5,517,509 | 122% |
| Louisiana | 4,657,757 | 6,520,325 | 140% |
| Maine | 1,362,359 | 1,630,561 | 120% |
| Maryland | 6,177,224 | 8,622,416 | 140% |
| Massachusetts | 7,029,917 | 10,187,328 | 145% |
| Michigan | 10,077,331 | 14,511,454 | 144% |
| Minnesota | 5,706,494 | 7,358,738 | 129% |
| Mississippi | 2,961,279 | 4,071,355 | 137% |
| Missouri | 6,154,913 | 8,387,890 | 136% |
| Montana | 1,084,225 | 1,282,691 | 118% |
| Northern Mariana Islands | 47,329 | 79,760 | 169% |
| Nebraska | 1,961,504 | 2,575,272 | 131% |
| Nevada | 3,104,614 | 4,103,863 | 132% |
| New Hampshire | 1,377,529 | 1,771,650 | 129% |
| New Jersey | 9,288,994 | 13,954,224 | 150% |
| New Mexico | 2,117,522 | 3,013,685 | 142% |
| New York | 20,201,249 | 29,462,722 | 146% |
| North Carolina | 10,439,388 | 13,343,109 | 128% |
| North Dakota | 779,094 | 981,453 | 126% |
| Ohio | 11,799,448 | 15,641,767 | 133% |
| Oklahoma | 3,959,353 | 5,359,529 | 135% |
| Oregon | 4,237,256 | 5,221,279 | 123% |
| Pennsylvania | 13,002,700 | 17,943,765 | 138% |
| Puerto Rico | 3,285,874 | 4,470,827 | 136% |
| Rhode Island | 1,097,379 | 1,391,946 | 127% |
| South Carolina | 5,118,425 | 6,555,368 | 128% |
| South Dakota | 886,667 | 1,101,224 | 124% |
| Tennessee | 6,910,840 | 9,775,055 | 141% |
| Texas | 29,145,505 | 41,024,051 | 141% |

| Market Name | Market Population | Market Subscribers | Penetration Rate |
|---------------------|-------------------|--------------------|------------------|
| U.S. Virgin Islands | 87,146 | 133,300 | 153% |
| Utah | 3,271,616 | 4,731,514 | 145% |
| Vermont | 643,077 | 717,070 | 112% |
| Virginia | 8,631,393 | 11,368,538 | 132% |
| Washington | 7,705,281 | 9,740,849 | 126% |
| West Virginia | 1,793,716 | 2,348,320 | 131% |
| Wisconsin | 5,893,718 | 7,175,627 | 122% |
| Wyoming | 576,851 | 745,735 | 129% |

Source: December 2022 NRUF data; 2020 U.S. Census data.

APPX. B-21

Average Percentage of Households with Zero, One, Two, or at Least Three Provider Options for 25/3 Mbps Fixed Terrestrial Services by Census Block (December 31, 2022)

| | Zero | One | Two | At Least Three |
|---|-------|-------|-------|----------------|
| Population Density | | | | |
| First Quartile (Lowest Population Density) | 17.2% | 36.6% | 27.2% | 19.1% |
| Second Quartile | 1.9% | 18.7% | 34.4% | 45.0% |
| Third Quartile | 0.9% | 11.7% | 30.7% | 56.6% |
| Fourth Quartile (Highest Population Density) | 0.9% | 9.4% | 29.4% | 60.3% |
| Population Density - Excluding Fixed Wireless | | | | |
| First Quartile (Lowest Population Density) | 31.3% | 50.1% | 17.2% | 1.4% |
| Second Quartile | 3.8% | 44.0% | 46.2% | 6.0% |
| Third Quartile | 1.9% | 32.7% | 55.1% | 10.3% |
| Fourth Quartile (Highest Population Density) | 1.9% | 30.0% | 57.1% | 11.0% |
| Median Household Income | | | | |
| First Quartile (Lowest Median H/hold Income) | 6.7% | 22.6% | 30.6% | 40.1% |
| Second Quartile | 6.7% | 21.7% | 29.5% | 42.1% |
| Third Quartile | 4.6% | 18.5% | 30.1% | 46.8% |
| Fourth Quartile (Highest Median H/hold Income) | 1.9% | 12.9% | 31.6% | 53.6% |
| Median Household Income - Excluding Fixed Wireless | | | | |
| First Quartile (Lowest Median H/hold Income) | 11.0% | 48.3% | 35.7% | 4.9% |
| Second Quartile | 12.5% | 42.2% | 39.1% | 6.1% |
| Third Quartile | 10.0% | 37.1% | 45.1% | 7.7% |
| Fourth Quartile (Highest Median H/hold Income) | 4.3% | 28.5% | 57.1% | 10.1% |
| Household Count | | | | |
| First Quartile (Lowest H/hold Count) | 6.1% | 19.3% | 30.3% | 44.2% |
| Second Quartile | 5.6% | 19.4% | 30.2% | 44.8% |
| Third Quartile | 5.3% | 19.6% | 30.4% | 44.7% |
| Fourth Quartile (Highest H/hold Count) | 3.9% | 18.2% | 30.8% | 47.2% |
| Household Count - Excluding Fixed Wireless | | | | |
| First Quartile (Lowest H/hold Count) | 11.2% | 37.9% | 43.9% | 7.0% |
| Second Quartile | 10.4% | 38.4% | 44.2% | 6.9% |
| Third Quartile | 9.8% | 40.0% | 43.3% | 7.0% |

| | Zero | One | Two | At Least Three |
|---|------|-------|-------|----------------|
| Fourth Quartile (Highest H/hold Count) | 7.5% | 40.5% | 44.2% | 7.8% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Median household income is based on 2022 data and is measured in 2022 inflation-adjusted dollars.

APPX. B-22

Average Percentage of Households with Zero, One, Two, or at Least Three Provider Options for 940/500 Mbps Fixed Terrestrial Services by Census Block Group (December 31, 2022)

| | Zero | One | Two | At Least Three |
|---|-------|-------|------|----------------|
| Population Density | | | | |
| First Quartile (Lowest Population Density) | 76.4% | 22.4% | 1.2% | 0.1% |
| Second Quartile | 63.4% | 33.6% | 2.8% | 0.1% |
| Third Quartile | 55.5% | 39.7% | 4.6% | 0.2% |
| Fourth Quartile (Highest Population Density) | 51.5% | 42.2% | 6.1% | 0.2% |
| Population Density - Excluding Fixed Wireless | | | | |
| First Quartile (Lowest Population Density) | 77.1% | 21.7% | 1.1% | 0.1% |
| Second Quartile | 64.2% | 32.9% | 2.7% | 0.1% |
| Third Quartile | 56.4% | 38.9% | 4.5% | 0.2% |
| Fourth Quartile (Highest Population Density) | 52.1% | 41.8% | 6.0% | 0.1% |
| Median Household Income | | | | |
| First Quartile (Lowest Median H/hold Income) | 68.9% | 28.9% | 2.1% | 0.1% |
| Second Quartile | 65.3% | 32.0% | 2.5% | 0.1% |
| Third Quartile | 61.0% | 35.3% | 3.5% | 0.2% |
| Fourth Quartile (Highest Median H/hold Income) | 50.7% | 42.5% | 6.6% | 0.2% |
| Median Household Income - Excluding Fixed Wireless | | | | |
| First Quartile (Lowest Median H/hold Income) | 70.1% | 27.8% | 2.0% | 0.1% |
| Second Quartile | 66.1% | 31.4% | 2.4% | 0.1% |
| Third Quartile | 61.6% | 34.8% | 3.4% | 0.2% |
| Fourth Quartile (Highest Median H/hold Income) | 51.1% | 42.2% | 6.5% | 0.2% |
| Household Count | | | | |
| First Quartile (Lowest H/hold Count) | 59.8% | 35.6% | 4.5% | 0.1% |
| Second Quartile | 60.9% | 35.1% | 3.9% | 0.1% |
| Third Quartile | 62.8% | 33.8% | 3.2% | 0.2% |
| Fourth Quartile (Highest H/hold Count) | 63.4% | 33.4% | 3.0% | 0.2% |
| Household Count - Excluding Fixed Wireless | | | | |
| First Quartile (Lowest H/hold Count) | 60.4% | 35.0% | 4.4% | 0.1% |
| Second Quartile | 61.7% | 34.4% | 3.8% | 0.1% |
| Third Quartile | 63.7% | 33.1% | 3.1% | 0.1% |
| Fourth Quartile (Highest H/hold Count) | 64.1% | 32.8% | 2.9% | 0.1% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Median household income is based on 2022 data and is measured in 2022 inflation-adjusted dollars.

APPX. B-23

Average Percentage of Population with Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (Outdoor Stationary Services) by Census Block Group (December 31, 2022)

| | Fixed Terrestrial 100/20 Mbps | Mobile 5G-NR 35/3 Mbps | Both Fixed and Mobile 5G-NR |
|---|----------------------------------|---------------------------|--------------------------------|
| Median Household Income - Including Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 89.4% | 95.8% | 87.2% |
| Second Quartile | 88.8% | 94.2% | 85.5% |
| Third Quartile | 91.5% | 96.3% | 89.2% |
| Fourth Quartile (Highest Median Household Income) | 96.5% | 98.7% | 95.5% |
| Population Density - Including Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 72.4% | 86.3% | 64.8% |
| Second Quartile | 96.7% | 99.2% | 96.0% |
| Third Quartile | 98.6% | 99.7% | 98.3% |
| Fourth Quartile (Highest Population Density) | 98.6% | 99.9% | 98.5% |
| Household Poverty Rate - Including Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 93.5% | 97.9% | 92.2% |
| Second Quartile | 92.0% | 96.1% | 89.5% |
| Third Quartile | 90.0% | 95.1% | 87.2% |
| Fourth Quartile (Highest Household Poverty Rate) | 90.8% | 96.0% | 88.7% |
| Median Household Income - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 87.3% | 95.8% | 85.2% |
| Second Quartile | 86.0% | 94.2% | 83.0% |
| Third Quartile | 88.4% | 96.3% | 86.3% |
| Fourth Quartile (Highest Median Household Income) | 95.0% | 98.7% | 94.1% |
| Population Density - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 64.9% | 86.3% | 58.1% |
| Second Quartile | 95.6% | 99.2% | 94.9% |
| Third Quartile | 98.1% | 99.7% | 97.8% |
| Fourth Quartile (Highest Population Density) | 98.0% | 99.9% | 97.8% |
| Household Poverty Rate - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 91.3% | 97.9% | 90.1% |
| Second Quartile | 89.2% | 96.1% | 87.0% |
| Third Quartile | 87.4% | 95.1% | 84.8% |
| Fourth Quartile (Highest Household Poverty Rate) | 88.8% | 96.0% | 86.8% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Median household income is based on 2022 data and is measured in 2022 inflation-adjusted dollars.

APPX. B-24

Average Percentage of Population with Fixed Terrestrial Services at 100/20 Mbps and Mobile 4G LTE with a Minimum Speed of 5/1 Mbps (Outdoor Stationary Services) by Census Block Group (December 31, 2022)

| | Fixed Terrestrial 100/20 Mbps | Mobile 5G-NR 35/3 Mbps | Both Fixed and Mobile 5G-NR |
|---|--|-----------------------------------|--|
| Median Household Income - Including Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 89.4% | 99.1% | 89.0% |
| Second Quartile | 88.8% | 99.1% | 88.4% |
| Third Quartile | 91.5% | 99.4% | 91.2% |
| Fourth Quartile (Highest Median Household Income) | 96.5% | 99.7% | 96.3% |
| Population Density - Including Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 72.4% | 97.7% | 71.4% |
| Second Quartile | 96.7% | 99.8% | 96.6% |
| Third Quartile | 98.6% | 99.9% | 98.5% |
| Fourth Quartile (Highest Population Density) | 98.6% | 99.9% | 98.5% |
| Household Poverty Rate - Including Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 93.5% | 99.6% | 93.3% |
| Second Quartile | 92.0% | 99.4% | 91.6% |
| Third Quartile | 90.0% | 99.2% | 89.6% |
| Fourth Quartile (Highest Household Poverty Rate) | 90.8% | 99.2% | 90.5% |
| Median Household Income - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 87.3% | 99.1% | 86.9% |
| Second Quartile | 86.0% | 99.1% | 85.5% |
| Third Quartile | 88.4% | 99.4% | 88.1% |
| Fourth Quartile (Highest Median Household Income) | 95.0% | 99.7% | 94.7% |
| Population Density - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 64.9% | 97.7% | 64.0% |
| Second Quartile | 95.6% | 99.8% | 95.5% |
| Third Quartile | 98.1% | 99.9% | 98.0% |
| Fourth Quartile (Highest Population Density) | 98.0% | 99.9% | 97.8% |
| Household Poverty Rate - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 91.3% | 99.6% | 91.1% |
| Second Quartile | 89.2% | 99.4% | 88.8% |
| Third Quartile | 87.4% | 99.2% | 87.0% |
| Fourth Quartile (Highest Household Poverty Rate) | 88.8% | 99.2% | 88.4% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Median household income is based on 2022 data and is measured in 2022 inflation-adjusted dollars.

APPX. B-25

Average Percentage of Population with Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps (In-Vehicle Mobile Services) by Census Block Group (December 31, 2022)

| | Fixed Terrestrial 100/20 Mbps | Mobile 5G-NR 35/3 Mbps | Both Fixed and Mobile 5G-NR |
|---|----------------------------------|---------------------------|--------------------------------|
| Median Household Income - Including Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 89.4% | 75.8% | 71.2% |
| Second Quartile | 88.8% | 68.6% | 65.0% |
| Third Quartile | 91.5% | 70.1% | 67.1% |
| Fourth Quartile (Highest Median Household Income) | 96.5% | 72.7% | 71.1% |
| Population Density - Including Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 72.4% | 39.8% | 32.0% |
| Second Quartile | 96.7% | 72.2% | 69.8% |
| Third Quartile | 98.6% | 83.4% | 82.2% |
| Fourth Quartile (Highest Population Density) | 98.6% | 91.8% | 90.5% |
| Household Poverty Rate - Including Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 93.5% | 71.4% | 68.4% |
| Second Quartile | 92.0% | 69.1% | 66.4% |
| Third Quartile | 90.0% | 70.0% | 66.6% |
| Fourth Quartile (Highest Household Poverty Rate) | 90.8% | 76.7% | 73.1% |
| Median Household Income - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 87.3% | 75.8% | 69.8% |
| Second Quartile | 86.0% | 68.6% | 63.7% |
| Third Quartile | 88.4% | 70.1% | 65.6% |
| Fourth Quartile (Highest Median Household Income) | 95.0% | 72.7% | 70.2% |
| Population Density - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 64.9% | 39.8% | 28.7% |
| Second Quartile | 95.6% | 72.2% | 69.0% |
| Third Quartile | 98.1% | 83.4% | 81.7% |
| Fourth Quartile (Highest Population Density) | 98.0% | 91.8% | 89.9% |
| Household Poverty Rate - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 91.3% | 71.4% | 67.1% |
| Second Quartile | 89.2% | 69.1% | 65.1% |
| Third Quartile | 87.4% | 70.0% | 65.3% |
| Fourth Quartile (Highest Household Poverty Rate) | 88.8% | 76.7% | 71.7% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Median household income is based on 2022 data and is measured in 2022 inflation-adjusted dollars.

APPX. B-26

Average Percentage of Population with Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (In-Vehicle Mobile Services) by Census Block Group (December 31, 2022)

| | Fixed Terrestrial 100/20 Mbps | Mobile 5G-NR 35/3 Mbps | Both Fixed and Mobile 5G-NR |
|---|----------------------------------|---------------------------|--------------------------------|
| Median Household Income - Including Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 89.4% | 90.3% | 83.4% |
| Second Quartile | 88.8% | 86.7% | 80.1% |
| Third Quartile | 91.5% | 89.7% | 84.2% |
| Fourth Quartile (Highest Median Household Income) | 96.5% | 94.2% | 91.6% |
| Population Density - Including Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 72.4% | 68.8% | 52.9% |
| Second Quartile | 96.7% | 94.2% | 91.2% |
| Third Quartile | 98.6% | 98.3% | 96.9% |
| Fourth Quartile (Highest Population Density) | 98.6% | 99.5% | 98.1% |
| Household Poverty Rate - Including Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 93.5% | 92.5% | 87.8% |
| Second Quartile | 92.0% | 89.4% | 84.4% |
| Third Quartile | 90.0% | 88.2% | 82.2% |
| Fourth Quartile (Highest Household Poverty Rate) | 90.8% | 90.7% | 85.0% |
| Median Household Income - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 87.3% | 90.3% | 81.5% |
| Second Quartile | 86.0% | 86.7% | 77.9% |
| Third Quartile | 88.4% | 89.7% | 81.6% |
| Fourth Quartile (Highest Median Household Income) | 95.0% | 94.2% | 90.2% |
| Population Density - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 64.9% | 68.8% | 47.2% |
| Second Quartile | 95.6% | 94.2% | 90.2% |
| Third Quartile | 98.1% | 98.3% | 96.5% |
| Fourth Quartile (Highest Population Density) | 98.0% | 99.5% | 97.5% |
| Household Poverty Rate - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 91.3% | 92.5% | 85.9% |
| Second Quartile | 89.2% | 89.4% | 82.2% |
| Third Quartile | 87.4% | 88.2% | 80.1% |
| Fourth Quartile (Highest Household Poverty Rate) | 88.8% | 90.7% | 83.2% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Median household income is based on 2022 data and is measured in 2022 inflation-adjusted dollars.

APPX. B-27

Average Percentage of Population with Fixed Terrestrial Services at 100/20 Mbps and Mobile 4G LTE with a Minimum Speed of 5/1 Mbps (In-Vehicle Mobile Services) by Census Block Group (December 31, 2022)

| | Fixed Terrestrial 100/20 Mbps | Mobile 5G-NR 35/3 Mbps | Both Fixed and Mobile 5G-NR |
|---|--|-----------------------------------|--|
| Median Household Income - Including Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 89.4% | 96.8% | 87.8% |
| Second Quartile | 88.8% | 95.3% | 86.3% |
| Third Quartile | 91.5% | 96.4% | 89.3% |
| Fourth Quartile (Highest Median Household Income) | 96.5% | 98.0% | 94.9% |
| Population Density - Including Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 72.4% | 87.8% | 65.8% |
| Second Quartile | 96.7% | 99.0% | 95.8% |
| Third Quartile | 98.6% | 99.8% | 98.4% |
| Fourth Quartile (Highest Population Density) | 98.6% | 99.9% | 98.5% |
| Household Poverty Rate - Including Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 93.5% | 97.4% | 91.8% |
| Second Quartile | 92.0% | 96.3% | 89.7% |
| Third Quartile | 90.0% | 95.8% | 87.7% |
| Fourth Quartile (Highest Household Poverty Rate) | 90.8% | 96.9% | 89.3% |
| Median Household Income - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Median Household Income) | 87.3% | 96.8% | 85.8% |
| Second Quartile | 86.0% | 95.3% | 83.6% |
| Third Quartile | 88.4% | 96.4% | 86.4% |
| Fourth Quartile (Highest Median Household Income) | 95.0% | 98.0% | 93.4% |
| Population Density - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Population Density) | 64.9% | 87.8% | 58.9% |
| Second Quartile | 95.6% | 99.0% | 94.7% |
| Third Quartile | 98.1% | 99.8% | 97.9% |
| Fourth Quartile (Highest Population Density) | 98.0% | 99.9% | 97.8% |
| Household Poverty Rate - Excluding Fixed Wireless | | | |
| First Quartile (Lowest Household Poverty Rate) | 91.3% | 97.4% | 89.7% |
| Second Quartile | 89.2% | 96.3% | 87.1% |
| Third Quartile | 87.4% | 95.8% | 85.2% |
| Fourth Quartile (Highest Household Poverty Rate) | 88.8% | 96.9% | 87.3% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Median household income is based on 2022 data and is measured in 2022 inflation-adjusted dollars.

APPX. B-28

**Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at
100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (Outdoor Stationary Services)
(December 31, 2022)**

| | Population | Population Density | Per Capita Income | Median Household Income | Household Poverty Rate |
|--|------------|-----------------------|-------------------|----------------------------|------------------------------|
| United States - Including Fixed Wireless | | | | | |
| Served | 1,440.8*** | 7,969.0*** | \$43,020.05*** | \$88,765.54*** | 12.9%*** |
| Unserved | 1,282.3 | 1,735.0 | \$36,871.45 | \$73,141.99 | 13.8% |
| Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,318.7*** | 465.5*** | \$37,992.83*** | \$80,054.89*** | 11.4%*** |
| Unserved | 1,220.5 | 123.6 | \$35,622.24 | \$72,157.87 | 12.6% |
| Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,448.7*** | 8,455.0*** | \$43,345.35*** | \$89,338.58*** | 13.1%*** |
| Unserved | 1,393.2 | 4,622.8 | \$39,158.24 | \$75,007.99 | 15.9% |
| Tribal Areas - Including Fixed Wireless | | | | | |
| Served | 1,274.8*** | 2,211.3*** | \$33,458.19*** | \$66,366.56*** | 16.1%*** |
| Unserved | 1,201.1 | 289.0 | \$29,488.03 | \$59,105.90 | 18.5% |
| Tribal Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,181.6 | 352.8*** | \$30,000.31 | \$61,700.69 | 16.5%** |
| Unserved | 1,180.5 | 115.6 | \$29,179.34 | \$58,931.06 | 18.6% |
| Tribal Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,305.2 | 2,817.0*** | \$34,577.18* | \$67,864.55*** | 16.0% |
| Unserved | 1,311.6 | 1,219.2 | \$31,142.98 | \$60,039.34 | 17.8% |
| United States - Excluding Fixed Wireless | | | | | |
| Served | 1,440.3*** | 7,986.3*** | \$43,361.09*** | \$89,497.12*** | 12.8%*** |
| Unserved | 1,304.6 | 2,531.6 | \$36,948.63 | \$73,616.99 | 13.9% |
| Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,295.9*** | 559.3*** | \$38,190.45*** | \$79,787.61*** | 11.8%*** |
| Unserved | 1,231.2 | 132.7 | \$35,758.78 | \$72,770.33 | 12.5% |
| Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,447.1*** | 8,335.7*** | \$43,604.24*** | \$89,959.20*** | 12.9%*** |
| Unserved | 1,414.2 | 6,110.2 | \$38,754.95 | \$74,949.49 | 16.2% |
| Tribal Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,272.9** | 2,434.4*** | \$33,761.81*** | \$66,768.14*** | 16.1%*** |
| Unserved | 1,209.5 | 297.8 | \$29,622.08 | \$59,464.55 | 18.3% |
| Tribal Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,144.2 | 425.9*** | \$29,643.31 | \$61,581.07 | 16.8% |
| Unserved | 1,187.3 | 120.6 | \$29,306.62 | \$59,161.49 | 18.4% |
| Tribal Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,303.8 | 2,917.1*** | \$34,747.88** | \$67,998.16** | 15.9% |
| Unserved | 1,315.3 | 1,143.6 | \$31,129.27 | \$60,911.15 | 17.7% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Per capita income and median household income are based on 2022 data and are measured in 2022 inflation-adjusted dollars.

APPX. B-29

**Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile LTE with a Minimum Speed of 5/1 Mbps (Outdoor Stationary Services)
(December 31, 2022)**

| | Population | Population Density | Per Capita Income | Median Household Income | Household Poverty Rate |
|--|------------|--------------------|-------------------|-------------------------|------------------------|
| United States - Including Fixed Wireless | | | | | |
| Served | 1,436.2*** | 7,730.3*** | \$42,953.87*** | \$88,526.61*** | 12.9%*** |
| Unserved | 1,281.3 | 1,862.0 | \$36,480.64 | \$72,321.19 | 14.0% |
| Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,295.9*** | 384.2*** | \$38,092.83*** | \$79,120.73*** | 11.4%*** |
| Unserved | 1,218.4 | 117.2 | \$35,314.60 | \$71,620.47 | 12.7% |
| Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,448.8*** | 8,391.0*** | \$43,391.17*** | \$89,389.53*** | 13.0%*** |
| Unserved | 1,389.2 | 4,854.6 | \$38,526.28 | \$73,596.57 | 16.3% |
| Tribal Areas - Including Fixed Wireless | | | | | |
| Served | 1,268.2** | 2,084.0*** | \$33,338.71*** | \$66,210.63*** | 16.1%*** |
| Unserved | 1,202.2 | 268.0 | \$29,281.53 | \$58,643.98 | 18.7% |
| Tribal Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,155.8 | 353.5*** | \$29,957.46 | \$61,823.48* | 16.4%*** |
| Unserved | 1,190.4 | 95.0 | \$29,125.39 | \$58,639.83 | 18.9% |
| Tribal Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,314.3 | 2,794.6*** | \$34,719.75*** | \$67,999.53*** | 15.9% |
| Unserved | 1,265.7 | 1,196.1 | \$30,118.75 | \$58,666.18 | 18.2% |
| United States - Excluding Fixed Wireless | | | | | |
| Served | 1,436.7*** | 7,785.7*** | \$43,320.75*** | \$89,324.73*** | 12.8%*** |
| Unserved | 1,304.6 | 2,661.8 | \$36,632.94 | \$72,984.98 | 14.1% |
| Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,281.6*** | 456.1*** | \$38,351.41*** | \$79,208.26*** | 11.8%*** |
| Unserved | 1,229.9 | 126.5 | \$35,534.45 | \$72,381.36 | 12.5% |
| Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,447.1*** | 8,274.3*** | \$43,652.15*** | \$90,008.99*** | 12.9%*** |
| Unserved | 1,412.9 | 6,342.6 | \$38,257.14 | \$73,911.96 | 16.5% |
| Tribal Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,271.5** | 2,336.4*** | \$33,676.53*** | \$66,602.16*** | 16.1%*** |
| Unserved | 1,207.5 | 274.0 | \$29,484.59 | \$59,227.35 | 18.4% |
| Tribal Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,130.3 | 447.5*** | \$29,529.79 | \$61,305.67 | 17.1% |
| Unserved | 1,192.8 | 100.3 | \$29,317.25 | \$59,105.08 | 18.4% |
| Tribal Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,313.6 | 2,899.0*** | \$34,908.06*** | \$68,169.54*** | 15.9%* |
| Unserved | 1,278.1 | 1,109.9 | \$30,291.21 | \$59,816.26 | 18.0% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Per capita income and median household income are based on 2022 data and are measured in 2022 inflation-adjusted dollars.

APPX. B-30

Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 35/3 Mbps (In-Vehicle Mobile Services) (December 31, 2022)

| | Population | Population Density | Per Capita Income | Median Household Income | Household Poverty Rate |
|--|------------|--------------------|-------------------|-------------------------|------------------------|
| United States - Including Fixed Wireless | | | | | |
| Served | 1,383.2*** | 11,478.3*** | \$40,496.33*** | \$81,909.92*** | 14.9%*** |
| Unserved | 1,407.1 | 2,861.8 | \$41,912.82 | \$86,208.53 | 12.0% |
| Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,222.8 | 854.7*** | \$34,021.83*** | \$73,762.73 | 13.4%*** |
| Unserved | 1,240.9 | 171.3 | \$36,165.94 | \$73,755.00 | 12.3% |
| Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,386.0*** | 11,664.9*** | \$40,608.45*** | \$82,051.86*** | 14.9%*** |
| Unserved | 1,497.1 | 4,319.5 | \$45,037.73 | \$93,028.99 | 11.9% |
| Tribal Areas - Including Fixed Wireless | | | | | |
| Served | 1,287.2** | 2,944.2*** | \$33,990.93*** | \$67,087.78*** | 15.6%*** |
| Unserved | 1,218.3 | 582.7 | \$30,467.87 | \$60,976.77 | 18.0% |
| Tribal Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,094.4 | 535.9*** | \$29,654.87 | \$63,406.33 | 14.2%** |
| Unserved | 1,185.1 | 148.8 | \$29,343.68 | \$59,338.30 | 18.4% |
| Tribal Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,307.9 | 3,202.9*** | \$34,446.19 | \$67,471.76 | 15.7% |
| Unserved | 1,304.4 | 1,708.7 | \$33,377.32 | \$65,224.64 | 17.0% |
| United States - Excluding Fixed Wireless | | | | | |
| Served | 1,381.2*** | 11,294.9*** | \$40,735.82*** | \$82,423.59*** | 14.7%*** |
| Unserved | 1,407.5 | 3,247.9 | \$41,723.74 | \$85,775.04 | 12.2% |
| Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,170.0*** | 961.6*** | \$33,809.60*** | \$72,408.54 | 13.5%*** |
| Unserved | 1,242.0 | 174.5 | \$36,153.71 | \$73,786.24 | 12.3% |
| Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,384.1*** | 11,435.9*** | \$40,829.47*** | \$82,560.54*** | 14.7%*** |
| Unserved | 1,493.9 | 4,852.5 | \$44,641.93 | \$92,112.44 | 12.2% |
| Tribal Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,294.6** | 3,071.9*** | \$34,168.86*** | \$67,291.27*** | 15.7%*** |
| Unserved | 1,217.0 | 583.3 | \$30,470.27 | \$61,014.86 | 17.9% |
| Tribal Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,105.3 | 627.3*** | \$28,753.08 | \$62,520.74 | 14.8% |
| Unserved | 1,183.5 | 150.2 | \$29,380.98 | \$59,418.91 | 18.3% |
| Tribal Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,310.4 | 3,275.1*** | \$34,611.84 | \$67,681.87 | 15.8% |
| Unserved | 1,301.7 | 1,680.2 | \$33,224.09 | \$65,058.08 | 16.9% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Per capita income and median household income are based on 2022 data and are measured in 2022 inflation-adjusted dollars.

APPX. B-31

Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Minimum Speed of 7/1 Mbps (In-Vehicle Mobile Services) (December 31, 2022)

| | Population | Population Density | Per Capita Income | Median Household Income | Household Poverty Rate |
|--|------------|--------------------|-------------------|-------------------------|------------------------|
| United States - Including Fixed Wireless | | | | | |
| Served | 1,431.2*** | 8,676.5*** | \$42,578.60*** | \$87,762.73*** | 13.3%*** |
| Unserved | 1,334.2 | 1,718.2 | \$39,023.52 | \$78,432.91 | 13.0% |
| Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,280.8*** | 585.6*** | \$36,297.59 | \$76,951.95*** | 12.0%* |
| Unserved | 1,235.2 | 142.8 | \$36,075.32 | \$73,352.82 | 12.4% |
| Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,437.1*** | 8,993.5*** | \$42,823.86 | \$88,190.37*** | 13.3%*** |
| Unserved | 1,461.4 | 3,743.6 | \$42,862.52 | \$85,177.43 | 13.7% |
| Tribal Areas - Including Fixed Wireless | | | | | |
| Served | 1,282.1*** | 2,441.1*** | \$33,551.46*** | \$66,768.65*** | 15.8%*** |
| Unserved | 1,204.9 | 361.6 | \$29,913.49 | \$59,716.59 | 18.4% |
| Tribal Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,161.6 | 374.7*** | \$29,814.85 | \$61,961.76 | 15.7%** |
| Unserved | 1,183.8 | 133.8 | \$29,284.84 | \$59,144.07 | 18.6% |
| Tribal Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,309.3 | 2,907.8*** | \$34,385.68 | \$67,828.73* | 15.9% |
| Unserved | 1,296.9 | 1,353.8 | \$32,648.67 | \$62,200.94 | 17.7% |
| United States - Excluding Fixed Wireless | | | | | |
| Served | 1,429.6*** | 8,647.8*** | \$42,882.28*** | \$88,422.08*** | 13.1% |
| Unserved | 1,345.7 | 2,404.6 | \$38,854.14 | \$78,201.30 | 13.2% |
| Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,223.3 | 724.4*** | \$35,855.78 | \$75,055.05* | 12.6% |
| Unserved | 1,241.7 | 149.5 | \$36,120.01 | \$73,650.72 | 12.4% |
| Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,435.2*** | 8,864.1*** | \$43,073.61*** | \$88,789.20*** | 13.1%*** |
| Unserved | 1,464.1 | 4,971.4 | \$42,002.27 | \$83,560.86 | 14.3% |
| Tribal Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,284.0*** | 2,627.8*** | \$33,730.69*** | \$67,127.06*** | 15.9%*** |
| Unserved | 1,208.2 | 365.4 | \$30,006.52 | \$59,895.42 | 18.2% |
| Tribal Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,148.2 | 444.1*** | \$29,358.55 | \$62,046.04 | 15.8%* |
| Unserved | 1,184.3 | 136.9 | \$29,358.44 | \$59,258.74 | 18.4% |
| Tribal Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,306.7 | 2,993.2*** | \$34,457.97 | \$67,956.30* | 15.9% |
| Unserved | 1,305.2 | 1,293.9 | \$32,639.46 | \$62,470.87 | 17.4% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Per capita income and median household income are based on 2022 data and are measured in 2022 inflation-adjusted dollars.

APPX. B-32

**Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at
100/20 Mbps and Mobile LTE with a Minimum Speed of 5/1 Mbps (In-Vehicle Mobile Services)
(December 31, 2022)**

| | Population | Population Density | Per Capita Income | Median Household Income | Household Poverty Rate |
|--|------------|--------------------|-------------------|-------------------------|------------------------|
| United States - Including Fixed Wireless | | | | | |
| Served | 1,434.0*** | 8,091.7*** | \$42,677.35*** | \$87,933.73*** | 13.1%*** |
| Unserved | 1,306.6 | 1,704.6 | \$38,011.51 | \$75,956.07 | 13.4% |
| Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,270.2*** | 494.5*** | \$36,231.17 | \$75,775.77*** | 12.1%** |
| Unserved | 1,233.5 | 124.2 | \$36,070.58 | \$73,295.93 | 12.4% |
| Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,443.8** | 8,548.5*** | \$43,064.49*** | \$88,676.14*** | 13.2%*** |
| Unserved | 1,429.0 | 4,353.7 | \$41,328.23 | \$80,643.99 | 15.0% |
| Tribal Areas - Including Fixed Wireless | | | | | |
| Served | 1,268.5** | 2,225.5*** | \$33,360.53*** | \$66,160.13*** | 16.1%*** |
| Unserved | 1,206.6 | 260.7 | \$29,553.49 | \$59,246.49 | 18.5% |
| Tribal Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,130.3 | 423.8*** | \$29,425.09 | \$60,897.01 | 16.6%* |
| Unserved | 1,194.8 | 95.9 | \$29,339.92 | \$59,153.23 | 18.6% |
| Tribal Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,313.0 | 2,804.7*** | \$34,616.66** | \$67,830.81*** | 16.0% |
| Unserved | 1,273.6 | 1,193.1 | \$30,761.62 | \$59,771.97 | 17.9% |
| United States - Excluding Fixed Wireless | | | | | |
| Served | 1,433.5*** | 8,113.2*** | \$43,018.65*** | \$88,667.16*** | 13.0%*** |
| Unserved | 1,323.7 | 2,476.2 | \$37,901.97 | \$75,958.36 | 13.6% |
| Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,234.9 | 610.3*** | \$35,853.15 | \$74,187.57 | 12.7%** |
| Unserved | 1,241.1 | 132.9 | \$36,135.54 | \$73,693.57 | 12.3% |
| Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,442.0 | 8,432.0*** | \$43,322.83*** | \$89,288.71*** | 13.0%*** |
| Unserved | 1,440.9 | 5,798.6 | \$40,447.28 | \$79,329.89 | 15.4% |
| Tribal Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,273.4** | 2,460.8*** | \$33,700.25*** | \$66,534.53*** | 16.2%*** |
| Unserved | 1,209.0 | 272.4 | \$29,660.89 | \$59,626.15 | 18.2% |
| Tribal Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,108.4 | 536.5*** | \$29,108.57 | \$60,658.93 | 17.2% |
| Unserved | 1,193.6 | 101.9 | \$29,402.91 | \$59,331.34 | 18.3% |
| Tribal Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,312.0 | 2,910.9*** | \$34,770.28** | \$67,894.97** | 15.9% |
| Unserved | 1,285.1 | 1,113.2 | \$30,935.14 | \$61,080.94 | 17.8% |

Source: FCC BDC data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Per capita income and median household income are based on 2022 data and are measured in 2022 inflation-adjusted dollars.

APPX. B-33

Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Median Ookla Speed of 35/3 Mbps (December 31, 2022)

| | Population | Population Density | Per Capita Income | Median Household Income | Household Poverty Rate |
|---|------------|--------------------|-------------------|-------------------------|------------------------|
| United States - Including Fixed Wireless | | | | | |
| Served | 1,446.6*** | 8,873.1*** | \$43,056.18*** | \$88,900.78*** | 13.0%*** |
| Unserved | 1,409.6 | 2,141.0 | \$41,616.16 | \$84,342.11 | 11.9% |
| Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,386.1*** | 622.0*** | \$39,380.23 | \$85,741.46*** | 10.3% |
| Unserved | 1,334.9 | 163.8 | \$38,874.35 | \$80,796.12 | 10.8% |
| Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,448.1*** | 9,073.3*** | \$43,144.77*** | \$88,977.63*** | 13.1% |
| Unserved | 1,481.3 | 4,037.4 | \$44,283.39 | \$87,868.34 | 13.1% |
| United States - Excluding Fixed Wireless | | | | | |
| Served | 1,446.6*** | 8,873.1*** | \$43,056.18*** | \$88,900.78*** | 13.0%*** |
| Unserved | 1,409.6 | 2,141.0 | \$41,616.16 | \$84,342.11 | 11.9% |
| Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,386.1*** | 622.0*** | \$39,380.23 | \$85,741.46*** | 10.3% |
| Unserved | 1,334.9 | 163.8 | \$38,874.35 | \$80,796.12 | 10.8% |
| Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,448.1*** | 9,073.3*** | \$43,144.77*** | \$88,977.63*** | 13.1% |
| Unserved | 1,481.3 | 4,037.4 | \$44,283.39 | \$87,868.34 | 13.1% |

Source: FCC BDC data; Ookla Speedtest data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Per capita income and median household income are based on 2022 data and are measured in 2022 inflation-adjusted dollars.

APPX. B-34

Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile 5G-NR with a Median Ookla Speed of 7/1 Mbps (December 31, 2022)

| | Population | Population Density | Per Capital Income | Median Household Income | Household Poverty Rate |
|---|------------|--------------------|--------------------|-------------------------|------------------------|
| United States - Including Fixed Wireless | | | | | |
| Served | 1,456.6*** | 8,265.4*** | \$43,611.29*** | \$90,164.25*** | 12.8%*** |
| Unserved | 1,363.3 | 2,345.0 | \$39,185.78 | \$78,376.19 | 13.1% |
| Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,414.7*** | 446.1*** | \$40,775.00*** | \$87,759.37*** | 9.8%*** |
| Unserved | 1,318.0 | 143.7 | \$38,372.16 | \$79,383.38 | 11.1% |
| Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,458.6*** | 8,643.8*** | \$43,748.25*** | \$90,282.22*** | 12.9%*** |
| Unserved | 1,417.5 | 4,985.1 | \$40,183.47 | \$77,097.05 | 15.5% |
| United States - Excluding Fixed Wireless | | | | | |
| Served | 1,454.8*** | 8,246.0*** | \$43,913.33*** | \$90,811.70*** | 12.6%*** |
| Unserved | 1,383.4 | 3,351.5 | \$39,035.15 | \$78,402.23 | 13.4% |
| Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,398.7*** | 538.6*** | \$41,556.74*** | \$89,049.01*** | 9.9%*** |
| Unserved | 1,329.6 | 153.1 | \$38,438.11 | \$79,889.12 | 11.0% |

| | Population | Population Density | Per Capital Income | Median Household Income | Household Poverty Rate |
|---|------------|--------------------|--------------------|-------------------------|------------------------|
| Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,456.7*** | 8,509.9*** | \$43,993.89*** | \$90,872.65*** | 12.7%*** |
| Unserved | 1,437.8 | 6,576.5 | \$39,648.06 | \$76,819.42 | 15.9% |

Source: FCC BDC data; Ookla Speedtest data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Per capita income and median household income are based on 2022 data and are measured in 2022 inflation-adjusted dollars.

APPX. B-35

Comparison of Demographic Data Between Areas With and Without Fixed Terrestrial Services at 100/20 Mbps and Mobile Broadband with a Median Ookla Speed of 10/3 Mbps (December 31, 2022)

| | Population | Population Density | Per Capital Income | Median Household Income | Household Poverty Rate |
|---|------------|--------------------|--------------------|-------------------------|------------------------|
| United States - Including Fixed Wireless | | | | | |
| Served | 1,446.1*** | 7,916.7*** | \$43,306.63*** | \$89,375.34*** | 12.8%*** |
| Unserved | 1,297.1 | 1,945.7 | \$36,680.43 | \$72,750.34 | 14.0% |
| Rural Areas - Including Fixed Wireless | | | | | |
| Served | 1,356.3*** | 390.3*** | \$39,873.03*** | \$84,097.71*** | 10.4%*** |
| Unserved | 1,243.6 | 129.7 | \$35,780.86 | \$72,759.03 | 12.4% |
| Urban Areas - Including Fixed Wireless | | | | | |
| Served | 1,452.6*** | 8,464.2*** | \$43,556.29*** | \$89,766.55*** | 13.0%*** |
| Unserved | 1,379.1 | 4,728.4 | \$38,088.35 | \$72,736.24 | 16.4% |
| United States - Excluding Fixed Wireless | | | | | |
| Served | 1,445.5*** | 7,942.5*** | \$43,639.54*** | \$90,087.15*** | 12.7%*** |
| Unserved | 1,321.0 | 2,785.2 | \$36,874.50 | \$73,524.54 | 14.0% |
| Rural Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,346.9*** | 464.2*** | \$40,416.95*** | \$84,880.50*** | 10.7%*** |
| Unserved | 1,256.0 | 137.8 | \$36,039.45 | \$73,648.33 | 12.2% |
| Urban Areas - Excluding Fixed Wireless | | | | | |
| Served | 1,450.8*** | 8,340.2*** | \$43,810.92*** | \$90,368.02*** | 12.8%*** |
| Unserved | 1,405.7 | 6,234.2 | \$37,981.50 | \$73,354.13 | 16.5% |

Source: FCC BDC data; Ookla Speedtest data; Staff Block Estimates; 2020 Census; ACS Five-Year Estimates for 2018-2022. Per capita income and median household income are based on 2022 data and are measured in 2022 inflation-adjusted dollars.

**STATEMENT OF
CHAIRWOMAN JESSICA ROSENWORCEL**

Re: *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 22-270, 2024 Section 706 Report (March 14, 2024)

In the United States, we dream big and do audacious things. We connected the coasts with railways. We crisscrossed this country with interstate highways. We did these things because they strengthened our communities, our economy, and our national security. Today we are engaged in the same kind of history-making because we are building high-speed broadband to everyone, everywhere in this country.

We have committed to this course—at the Federal Communications Commission, with our colleagues at other agencies, and with Congress—because we know that all of us need access to broadband to have a fair shot at 21st century success.

Nothing made this apparent like the pandemic. After all, it was just four years ago this week that so many of us were told to head home. Life moved online—school, work, healthcare, and so much more. But not all of us were able to make this digital leap. Not everyone had access to reliable broadband. The pandemic exposed our digital divide in living color.

That is why we are now in the bold business of fixing this divide. That is why today the Commission updates its standard for broadband, our baseline, to 100 Megabits down and 20 Megabits up from 25 Megabits down and 3 Megabits up. This fix is overdue. It aligns us with pandemic legislation like the Bipartisan Infrastructure Law and the work of our colleagues at other agencies. It also helps us better identify the extent to which low-income neighborhoods and rural communities are underserved. And because doing big things is in our DNA, we also adopt a long-term goal of 1 Gigabit down and 500 Megabits up.

One more thing. The law requires that we assess how reasonable and timely the deployment of broadband is in this country. So we do something in this report that is simple. We are honest. Our goal is to connect everyone, everywhere to high-speed broadband. But the last fully vetted and validated annual data before this agency show conclusively that we are not there yet. Nearly 24 million are not connected, including 28% of Americans living in rural areas and more than 23% of people on Tribal lands. That means millions of people still do not have the broadband they need to fully participate in modern life. We are working on it. That is why we have revamped our broadband mapping at this agency. It is why we are refining our universal service programs. It is why our colleagues at other agencies have been given unprecedented billions from Congress to help build broadband infrastructure to places that are still without.

Don't bet against us. Because we are making progress. So many providers are building and so many communities are planning their digital futures. Big things are ahead.

Thank you to the staff across the agency for their work on this report, including Allison Baker, Michele Berlove, Brad Berry, Bryan Boyle, David Brodian, Ted Burmeister, Jessica Campbell, Adam Copeland, Lisa Edwards, CJ Ferraro, Janice Gorin, Joel Graham, Jodie Griffin, Audra Hale-Maddox, Heather Hendrickson, Clint Highfill, Jesse Jachman, Alex Johns, Julia Johnson, Jamile Kadre, Melissa Kirkel, Ed Krachmer, Heidi Lankau, Chris Laughlin, Jodie May, Ben Nashed, Khoa Nguyen, Kimia Nikseresht, Nick Page, Jordan Reth, Johnnay Schrieber, Christi Shewman, Gilbert Smith, Simon Solemani, Noah Stein, Renae Stong, Raphael Sznajder, Jennifer Vickers, George Weber, Eric Wu, and Suzanne Yelen from the Wireline Competition Bureau; Johannes Bauer, Nicholas Copeland, Judith Dempsey, Chelsea Fallon, Lonnie Hofmann, Steven Kauffman, Evan Kwerel, Ken Lynch, Catherine Matraves, Jeffrey Ocker, Steven Rosenberg, Michelle Schaefer, Molly Schwarz, Alexander Simmons, Donald Stockdale, and Patrick Sun from the Office of Economics and Analytics; Barbara Esbin, Garnet Hanly, Jean Kiddoo, Susannah Larson, Susan Mort, Paul Powell, Jessica Quinley, Sayuri Rajapakse, Sean

Spivey, and Matt Warner from the Wireless Telecommunications Bureau; Scott Mackoul and Kerry Murray from the Space Bureau; Eduard Bartholme, Zac Champ, Bambi Kraus, Wes Platt, and Cara Voth from the Consumer and Governmental Affairs Bureau; Ben Bartolme, Doug Klein, Irene Ly, Rick Mallen, Erika Olsen, Karen Onyeije, Brayden Parker, Robert Primosch, Anjali Singh, Sheryl Wilkerson, Derek Yeo, and Chin Yoo from the Office of General Counsel; and Joy Ragsdale from the Office of Communications Business Opportunities.

**DISSENTING STATEMENT OF
COMMISSIONER BRENDAN CARR**

Re: *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 22-270, 2024 Section 706 Report (March 14, 2024)

Today's Section 706 Report is the FCC's first in three years. Thanks to the passage of time, we came to this proceeding with a fresh opportunity to grade the pace of progress that broadband providers have made over the past few years to bring Americans across the digital divide.

We've made impressive strides. Definitely so. Wireline providers are aggressively rolling out fiber optic networks with gigabit speeds. 5G networks now stretch from coast to coast. Fixed wireless has become a competitive mainstay with millions of new subscribers in the residential broadband market. Thousands of satellites launched into low-earth orbit offer speeds comparable to terrestrial broadband, particularly in rural and remote areas that were traditionally left behind. And billions of dollars in federal support are flowing to close any remaining gaps. By any possible measure, we're seeing real progress in the availability of high-speed broadband.

If there were ever moment—if there were ever a stretch of time—where the pace, cadence, and speed of broadband builds would result in the FCC agreeing, on a unanimous basis, that broadband is “being deployed to all Americans in a reasonable and timely fashion,”¹ as Section 706 states, today would be that day. But it isn't. The more than \$8 billion for broadband allocated by states and localities under the American Rescue Plan does not matter. The more than \$9 billion awarded through the Treasury Department's Capital Projects Fund does not matter. The more than \$21 billion doled out to the FCC's low-income and school kids programs does not matter.

So what today's decision really does is lay bare for everyone to see that the Section 706 inquiry is no longer about assessing the pace of broadband builds—it is about the next month or two. It is about Title II. The reason the FCC gives the Biden Administration's broadband efforts a failing grade today, the first the FCC has handed out since 2016,² is because the FCC believes that a negative finding will empower it soon enough to impose new controls on the Internet.

None of this is really all that surprising. But what's surprising, or at least interesting to me, is how the FCC arrived at this conclusion.

This 706 Report makes three basic errors that work to obscure the state of progress. *First*, the report relies on bad data. It uses broadband deployment statistics that are 15 months old when newer information is available at our fingertips. And the numbers used in this report have inaccuracies that were since corrected. *Second*, the FCC reads a new standard into the law that Congress never enacted. Rather than measure the incremental progress of broadband availability as Section 706 requires, the FCC moves the goalposts and undertakes an all-or-nothing inquiry using factors that appear nowhere in the statute. In

¹ 47 U.S.C. § 1302(b).

² Compare *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Fourteenth Broadband Deployment Report, 36 FCC Rcd 836 (2021); *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 2020 Broadband Deployment Report, 35 FCC Rcd 8986 (2020); *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Broadband Deployment Report, 34 FCC Rcd 3857 (2019); *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 2018 Broadband Deployment Report, 33 FCC Rcd 1660 (2018). The FCC did not release a 706 Report in 2017, 2022, or 2023.

other words, the agency uses criteria that could never be satisfied. *And third*, while we all agree that the FCC should be aiming for 100/20 Mbps in our programs (which we've been doing since at least 2016), the 706 Report uses that benchmark to disregard technological neutrality and consumer expectations.

* * *

Start with the data. In 2020, Congress enacted the Broadband DATA Act, which directed the FCC to undertake a biannual Broadband Data Collection (BDC) “relating to the availability and quality of service of fixed and mobile broadband Internet access service for the Commission to create broadband coverage maps.”³ Congress recognized that these information collections would be imperfect. After all, they largely rely on self-reported data from providers. So Congress required the FCC to iterate continuously by undertaking a fresh BDC every six months and subjecting that data collection to a public challenge process. Each iteration would be more accurate than the last. To date, the Commission has released three versions of the map. In this 706 Report, the Commission relies on the BDC for the first time. The maps represent a monumental achievement thanks to the tireless work of Commission staff.

But there is a very big problem: this 706 Report doesn't use the latest BDC datasets. The 706 Report relies on BDC Version 2, which shows broadband deployment as of December 31, 2022. The most recent dataset, BDC Version 3, was released last year in November 2023 and reflects broadband deployment as of June 30, 2023. The FCC barely mentions the existence of BDC Version 3, let alone explains why it wasn't used.⁴ The 706 Report's reliance on stale data undermines entirely the FCC's conclusions. It discredits the whole exercise and renders its ultimate conclusions untenable as to the current state of broadband availability.

The use of bad data has a compounding effect. For starters, the 706 Report glosses over all the developments that happened between the last two versions of the BDC. Six months may not sound like much, but it's a lifetime in today's climate of dynamism, investment, and intermodal competition. The rapid improvements in broadband availability and quality should be obvious to everyone. Consider the following changes over the course of six months, by no means exhaustive:

- **Total deployments:** BDC Version 3 shows 151.8 million units served by fixed terrestrial broadband at 100/20 Mbps. BDC Version 2, by contrast, had that number at 145.7 million. No surprise. Shovels are well in the ground under our FCC funding programs. After all, December 31, 2023 was the 60% service milestone under CAF Phase II. Meanwhile, the December 31, 2025 deadline for 40% service under RDOF Phase I is fast approaching.
- **Fixed wireless:** BDC Version 3 shows 66.0 million locations with fixed wireless service at 100/20 Mbps. BDC Version 2, used in the 706 Report, shows 41.9 million units with fixed wireless service at 100/20 Mbps. The growth of fixed wireless was also expected. Newly lit C-band and previously freed up 2.5 GHz spectrum have unlocked the possibilities of fixed wireless and intensified competition for the addressable in-home broadband segment. Mobile broadband

³ Broadband Deployment Accuracy and Technology Availability Act, Pub. L. No. 116-130, 134 Stat. 228 (2020) (codified at 47 U.S.C. §§ 641-646) (Broadband DATA Act).

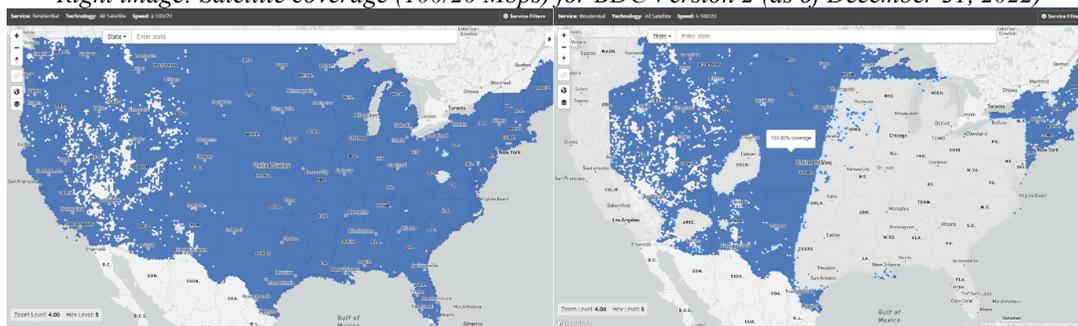
⁴ The FCC offers two defenses for using the older BDC Version 2. First, the FCC claims to follow previous 706 reports, which used datasets from trailing years. *See* 706 Report at fn.720. That comparison is flawed. Unlike past reports, this 706 Report has access to a comprehensive data collection updated on a rolling, biannual basis. Second, the FCC states that the verification of *BDC Version 4* remains ongoing. *See id.* (“Further, we evaluate December 2022 data because, among other things, the verification process for the more recent data, from June 2023 and December 2023, has not been completed.”). But the FCC provides no basis for ignoring BDC Version 3, which is current as of June 2023 and corrects numerous deficiencies in BDC Version 2.

providers have announced new fixed wireless deployments and record-shattering net adds on a seemingly daily basis during the intervening six months between BDC Version 2 and Version 3.

- **Satellite:** BDC Version 3 shows 99.6% of locations with satellite service at 100/20 Mbps. BDC Version 2, used in the 706 Report, shows 16.09% of locations with satellite service at 100/20 Mbps. Here again, no surprise. Starlink successfully launched approximately 1,000 satellites between December 31, 2022 and June 30, 2023.⁵ You don't need to zoom into the FCC maps below to see the vivid differences in high-speed satellite coverage over the span of six months.

Left image: Satellite coverage (100/20 Mbps) for BDC Version 3 (as of June 30, 2023)

Right image: Satellite coverage (100/20 Mbps) for BDC Version 2 (as of December 31, 2022)



Worse, the dataset used in the 706 Report (BDC Version 2) has inaccuracies that overstate the number of unserved locations. When announcing BDC Version 3, the FCC rightly highlighted the improvements in accuracy—resulting in a gross addition of 3 million broadband serviceable locations and a drop in 1.1 million net unserved locations. These corrections were the result of 4.8 million challenges to broadband availability, 1.5 million accepted challenges to broadband location, mobile coverage audits, and FCC-initiated verification efforts.⁶ But the Commission disregards this newer, cleaner dataset for a 15-month-old snapshot that's demonstrably inaccurate in many ways.

* * *

Now turn to the statute. Section 706(b) directs the FCC to study the “*availability* of advanced telecommunications capability to all Americans.”⁷ The FCC’s inquiry, in turn, must “determine whether advanced telecommunications capability *is being deployed* to all Americans *in a reasonable and timely fashion*.”⁸ The 706 Report defies this directive in several ways.

To start, the statute limits the scope of the 706 Report to the “*availability*” of broadband—that is, whether it “*is being deployed* to all Americans in a reasonable and timely fashion.” We have traditionally conducted the Section 706 exercise with a focus on availability, consistent with the law’s plain language.

⁵ See Wikipedia, *List of Starlink and Starshield launches* (last visited Mar. 8, 2023), https://en.wikipedia.org/wiki/List_of_Starlink_and_Starshield_launches.

⁶ See Chairwoman Rosenworcel Note, *National Broadband Map 3.0: Thankful for Continued Improvements* (Nov. 17, 2023), <https://www.fcc.gov/news-events/notes/2023/11/17/national-broadband-map-30-thankful-continued-improvements>.

⁷ 47 U.S.C. § 1302(b) (emphasis added).

⁸ 47 U.S.C. § 1302(b) (emphasis added).

For the first time, however, the Commission conducts a completely new inquiry by focusing on “universal service,” “affordability,” “adoption,” and “equitable access.”⁹

That cannot be right. *For one*, those terms appear nowhere in Section 706. Congress knows they are different from “availability,” as demonstrated elsewhere. As one example, the Communications Act has a specific section on “universal service.” And in that section, Congress uses “affordable” to modify “availability.”¹⁰ Section 706’s limited reference to “availability” is therefore no accident; it was meant to constrain the scope of our 706 Report.¹¹ *And for another*, the remedies envisioned in connection with the 706 Report—“removing barriers to infrastructure investment” and “promoting competition in the telecommunications market”—would be woefully incomplete under the Commission’s expansive reading.

Having inserted “universal service” and other terms into Section 706, the Commission then undertakes a simplistic, binary determination of whether advanced telecommunications capability *has been* deployed to all Americans. That interpretation reads the “reasonable and timely” language out of the statute and contradicts Congress’s use of the present progressive tense “is being deployed.” It also disregards language Congress used for FCC inquiries that result in a negative determination. In such cases, Congress states that the FCC “shall take immediate action to accelerate deployment,” thus confirming Congress’s focus in Section 706 on the pace of deployment and the progress that providers are making. Yet the FCC in this 706 Report makes no attempt at a progress report or a comparative finding.

Even assuming Section 706 means what the Commission now says, the 706 Report still flunks the statute. The 706 Report uses outdated (and demonstrably inaccurate) BDC datasets, and such data, by definition, cannot inform any inquiry Congress asked us to undertake when superior alternatives are available. The 706 Report could have measured incremental progress by putting our rich, iterative BDC datasets side by side. In particular, we could have compared BDC Version 3 to the previous two iterations and isolated changes resulting from new deployments (as opposed to errors uncovered during the challenge process). But we did not.

* * *

The liberties the Commission takes with the data and the law necessarily color its adoption of a new 100/20 Mbps benchmark. Now, to be clear, I would have no objection to the FCC setting a goal of 100/20 Mbps for our programs. As noted earlier, we have been doing so for at least eight years now. But the item’s treatment of the new benchmark is troubling in several respects.

First, the 100/20 Mbps requirement appears to be part and parcel of the Commission’s broader attempt to circumvent the statutory requirement of technological neutrality. Section 706 defines “advanced telecommunications capability” as, “*without regard to any transmission media or technology*, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications *using any technology*.”¹² Not

⁹ One should not take solace in the item’s failure to make affirmative determinations about affordability, adoption, and other factors based on incomplete data, for the Commission states its intent to “revisit” these quixotic exercises in future reports. *See, e.g.*, 706 Report at paras. 104, 114, 121.

¹⁰ *See, e.g.*, 47 U.S.C. § 254(i) (“The Commission and the States should ensure that universal service is available at rates that are just, reasonable, and affordable.”).

¹¹ According to the FCC, the Infrastructure Investment and Jobs Act (IIJA) describes Section 706 as containing “statutorily mandated goals of universal service.” 706 Report at para. 6. But as the FCC concedes, this passing characterization did not amend Section 706. *Id.* So the IIJA does not permit us to disregard Section 706’s plain language.

¹² 47 U.S.C. § 1302(d)(1) (emphases added).

just once, but twice, the statute expressly requires technological neutrality.

Yet the 706 Report disregards Congress’s directive—most notably, by ignoring satellite deployment. According to the latest BDC, more than 99% of eligible locations have high-speed satellite service at 100/20 Mbps. In refusing to account for high-speed satellite, the item claims to follow past FCC practice. That ostrich-like assertion ignores the obvious fact that the quality and availability of high-speed, low-earth orbit satellite service has improved dramatically since our last report in 2021—so much so that satellite has become a viable source of intermodal competition. Next, the item cites to low take rates.¹³ But evidence of consumer adoption, even if it were based on the latest BDC datasets (which it isn’t), has nothing to do with the “availability” of service, which is the inquiry the statute requires. And in any case, a rationale based on take rates would prove too much. For example, it would defeat the adoption of 100/20 Mbps altogether, which also has low take rates according to the Commission’s data.¹⁴ Next, the FCC claims, without citing to any evidence, that BDC-reported satellite speeds are overstated due to the theoretical capacity constraints of satellite spectrum.¹⁵ I have already explained elsewhere why the Commission cannot use armchair speculation to pretend high-speed satellite broadband doesn’t exist.¹⁶ In any case, the FCC cannot have it both ways: either the BDC represents the best evidence of broadband deployment or it doesn’t.

Arbitrarily picking and choosing preferred technologies, unfortunately, has become all too common in this Administration.¹⁷ When I saw the original draft of the *Notice of Inquiry* in this proceeding, I was surprised to learn that it did not even propose to consider fixed wireless. And while I appreciated the ultimate decision to consider fixed wireless at my suggestion, I echo Commissioner Simington’s worry that Commission’s long-term goal of 1,000/500 Mbps lays the groundwork to step even further away from our technological neutrality mandate. I hope it is not a Trojan Horse to exclude fixed wireless in a future report because it is deemed not “capable” of supporting aspirational speeds. Because, fundamentally, the problem with counting broadband as something other than broadband is that it leads inevitably to wasteful overbuilding and upgrading communities that already have connectivity rather than remaining focused on the communities still stuck on the wrong side of the digital divide.

Second, the 706 Report justifies 100/20 Mbps by invoking the performance benchmarks in BEAD, ARPA, and our other high-cost programs.¹⁸ But the comparison is inapt. Our 706 Report should look at the current state of broadband availability. Federal funding programs are measured on a long-term horizon spanning many years. If the federal government is to spend billions of dollars on broadband deployment, that investment should endure for the long run. In other words, our funding programs establish 100/20 Mbps goals in an effort to futureproof each dollar that is spent. Section 706, on the other hand, does not direct the FCC to measure futureproofed service.

Finally, the 706 Report makes a surprisingly weak showing to justify 100/20 Mbps as the *minimum* threshold to count as official broadband service—which is, after all, the point of the 706 Report.

¹³ 706 Report at para. 58.

¹⁴ See 706 Report at fn. 226 & Fig. 23.

¹⁵ 706 Report at para. 58 & fn. 223.

¹⁶ See Dissenting Statement of Commissioner Brendan Carr, *Application for Review of Starlink Services, LLC, Rural Digital Opportunity Fund, Rural Digital Opportunity Fund (Auction 904), Viasat Auction 904 Application for Review*, Order on Review, WC Docket No. 19- 126, OEA Docket No. 20-34, GN Docket No. 21-231 (Dec. 12, 2023), <https://docs.fcc.gov/public/attachments/FCC-23-105A2.pdf>.

¹⁷ See, e.g., *Redlight Report*, Ranking Member, U.S. Senate Committee on Commerce, Science, and Transportation (Sept. 2023), <https://www.commerce.senate.gov/services/files/0B6D8C56-7DFD-440F-8BCC-F448579964A3>.

¹⁸ See 706 Report at paras. 27-28.

As Section 706 indicates, the FCC should be looking first to identify the voice, video, and data applications that consumers are demanding and then, as a second step, adopt metrics that define “advanced telecommunications capability” based on that determination. Put differently, is it really fair to say consumers don’t have “advanced telecommunications capability” at a speed lower than 100/20 Mbps? The answer may be yes, but the item provides no compelling reason why.¹⁹ Just look at the revealed preferences. As the 706 Report acknowledges, the take rate for 100/20 Mbps was quite low as of December 2022.²⁰ Do these consumers know something we don’t? These flaws suggest the benchmark was selected, not based on hard evidence or reasonable customer expectations, but as another lever to reverse-engineer a predetermined outcome.

* * *

I could go on, but everyone sees where the politics are headed. After putting off our Section 706 report for the past three years, the FCC now issues this 706 Report just ahead of what many expect will be a Title II vote to come.²¹

In a regulatory environment where the FCC believes that doling out a failing grade will give the agency more power, I don’t think it is too surprising, as I noted at the outset, that this Commission landed where it did. But the FCC’s basic data and legal errors will ultimately sink whatever future decisions rely on this report as a justification or basis for action. I am sure the courts will see through that gambit. I dissent.

¹⁹ As the FCC’s former Chief Economist has observed, the longstanding benchmark of 25/3 can readily support routine consumer applications—from videoconferencing to 4K streaming to real-time gaming. See Michelle P. Connolly, *Mindfully Wasteful Spending: The Definition of Broadband*, Free State Foundation Report (May 18, 2023), <https://freestatefoundation.org/wp-content/uploads/2023/08/Mindfully-Wasteful-Spending-The-Definition-of-Broadband-051823.pdf>. See also 706 Report at fn. 151 (acknowledging this point).

²⁰ See 706 Report at fn. 226 & Fig. 23 (adoption rate between 2% and 38% for 100/20 Mbps depending on technology). In supporting the 100/20 Mbps benchmark, however, the 706 Report points to the adoption rate for services with *download speeds* at 100 Mbps or higher. See 706 Report at para. 29 (adoption rate between 68% and 79% for 100 Mbps download only).

²¹ See *Protecting and Promoting the Open Internet*, Notice of Proposed Rulemaking, 29 FCC Rcd 5561, paras. 143-47 (2023) (proposing to rely on Section 706 as legal authority for Title II reclassification).

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS**

Re: *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 22-270, 2024 Section 706 Report (March 14, 2024)

Today, in assessing “the availability of advanced telecommunications capabilities,” we update our broadband benchmark to 100 Mbps download speed and 20 Mbps upload speed, better aligning with consumer expectations, other federal programming and the offerings of many ISPs. For the first time, we assess 5G mobile coverage data for speeds of at least 35/3, and we update our short-term goal for school and classroom broadband access. I support all of these steps, ensuring that our section 706 Report will continue to accurately reflect the availability of advanced telecommunications capability nationwide.

We have made great progress since issuing our last section 706 report in 2021.¹ But there remains much work to be done to close the digital divide, and I agree with the Report’s conclusion that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion.

One of those challenges is affordability. I want to focus, specifically, on this account because our ability to solve this aspect of the digital divide is in grave peril. I’m talking about the lack of funding for the Affordable Connectivity Program. Over 23 million American households have relied on the ACP to subscribe to broadband. These households will soon confront a hard choice between bill shock and disconnection. We should not let that happen.

ACP has had a significant impact nationwide. Americans throughout the country enroll – in urban, rural, and Tribal communities. At the time of the ACP enrollment freeze last month, over 130,000 households in my home state of Kansas were enrolled, over 1,707,000 in Florida, 186,000 in Connecticut, and 470,000 in Virginia, the home states of my colleagues. Over 329,000 Tribal households were enrolled, and notably ACP has surpassed expectations for rural enrollment.²

ACP enrollees include young learners, grandparents, and everyone in between. To put it plainly, ACP is the most effective program we’ve ever had in helping low-income Americans get online and stay online. Those benefits are in jeopardy because we recently announced that April will be the last fully funded month in the Program. That means without additional funding from Congress, millions of Americans will lose access to affordable broadband. Millions of low-income American households will face monthly Internet bills that will skyrocket, and I fear many will be unable to remain connected. This fear is supported by data the Commission recently released. 77 percent of recent survey respondents said that losing their ACP benefit would disrupt their service by making them change their plan or drop service entirely.³ Nationwide, 49 percent of ACP households are subscription vulnerable, meaning that they find the Internet very difficult to fit into their monthly budgets and are constantly on the edge of

¹ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 20-269, Fourteenth Broadband Deployment Report, 36 FCC Rcd 836 (Jan. 19, 2021).

² John Horrigan, *The Affordable Connectivity Program and Rural America: It’s going surprisingly well*, Benton Institute for Broadband & Society, June 27, 2023, <https://www.benton.org/blog/affordable-connectivity-program-and-rural-america>.

³ ACP Consumer Survey, FCC, available at <https://www.fcc.gov/acp-survey> (last visited Mar. 12, 2024) (ACP Consumer Survey).

disconnection.⁴ 68 percent of ACP households reported that they had inconsistent or zero connectivity prior to ACP, and 80 percent cited affordability as the reason for this lack of connectivity.⁵ I have heard directly from people about how having access to affordable, high-quality broadband has impacted their lives, and what the risk of losing access could mean. But, don't take my word for it. Let me share one story with you.

I met Debra, a dynamic grandmother, when I was recently in Illinois to discuss ACP. She is currently receiving federal housing assistance and moved to Lake County, an hour away from her family and church community. She told me that, thanks to ACP, she's "hooked" on the Internet. She goes to church online every Sunday and speaks to her grandchildren and family once a week. She is taking advantage of her Internet connection to use MapQuest and explore her new community. She also started a knitting business online, and she told me when I met her just after Valentine's Day last month that she has joined an online dating site for seniors. I wished her luck. When we discussed the potential end of the program, she asked me, "what am I going to have to give up to keep what you've put in my life? Maybe eat less food?"

The lack of an affordability program also risks harming the biggest investment the country has ever made in broadband infrastructure deployment, the Broadband Equity Access and Deployment Program (BEAD). Without ACP, BEAD's \$42.5 billion to deploy broadband networks to reach millions of unserved and underserved communities, primarily in rural communities, will not reach as far as it could. ACP makes building out to these rural homes less risky and less expensive, because more of the serviceable population can afford to subscribe. Indeed, a recent study concluded that ACP reduces the subsidy needed to incentivize building in rural areas by a whopping 25 percent.⁶ With ACP, states can stretch their BEAD dollars farther and can connect some of the 24 million Americans identified in our section 706 Report.

I'm an optimist, so I remain hopeful that Congress will fund ACP going forward. And there is reason for hope. President Biden has asked Congress to fund ACP as part of his budget, and recently called again on Congress to extend its funding. There is a bipartisan, bicameral effort to fund ACP – the Affordable Connectivity Program Extension Act – which I am proud to strongly support. Additionally, nearly 400 other government leaders, industry, and public interest groups support the Extension Act as well. At the state and local level, 26 bipartisan governors and 174 mayors have urged Congress to act. I stand ready and willing to do whatever it takes to make sure that these Congressional proposals bear fruit, so that next year when we adopt our 2025 section 706 Report, we can highlight that the availability of advanced telecommunications capability to all Americans has improved because Americans continue to have access to affordable broadband.

I thank the Commission staff for their hard work. I approve.

⁴ John Horrigan, *Affordability and the Digital Divide*, EveryoneOn, Dec. 21, 2021, <https://static1.squarespace.com/static/5aa8af1fc3c16a54bcbb0415/t/61ad7722de56262d89e76c94/1638758180025/EveryoneOn+Report+on+Affordability+%26+the+Digital+Divide+2021.pdf>.

⁵ ACP Consumer Survey.

⁶ *Closing the Digital Divide Benefits Everyone, Not Just the Disconnected*, Common Sense Media and BCG, https://www.common sense media.org/sites/default/files/research/report/2022-cs-bcg-closing-digital-divide_final-release-3-for-web.pdf.

**DISSENTING STATEMENT OF
COMMISSIONER NATHAN SIMINGTON**

Re: *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 22-270, 2024 Section 706 Report (March 14, 2024)

I agree with all of Commissioner Carr's points, but I want to focus on a few specific issues.

I think the report deserves some praise for considering latency (the time it takes a packet to reach its destination, measured in milliseconds) and not just speed (the amount of data that a connection can carry per time period, measured in megabits per second). Especially as speed ceases to be the bottleneck, other connection characteristics like latency and jitter (moment-to-moment variations in latency) become more important for improving application performance and user experience. It's high latency, not low speed, that makes your video chat feel choppy, that makes you lag in a video game, that makes skipping to a different part of a movie painful, and that makes web browsing feel unresponsive. So as we push for better internet service for Americans, I'm glad we're going to be considering what can be done to drive down latency and make sure that all Americans can fully enjoy these interactive internet applications. This does not necessarily mean new rules or impositions on ISPs, but might instead involve initiatives with router manufacturers and Wi-Fi vendors to reduce other sources of latency and jitter, such as a buffer bloat or avoidable Wi-Fi interference.¹

Unfortunately, I am unable to support the report due to numerous other issues. While I'm glad the report addresses latency, I'm disappointed that it nonetheless sets an unnecessary long-term speed target of 1000/500 Mbps. Certainly, for the same price, I would take gigabit service over 100/20 Mbps service, but I wouldn't get much added utility out of it. A 100/20 Mbps connection is enough to watch multiple 4K video streams, make multiple video calls, and play multiple online games, all at the same time. Before we adopt a 1000/500 Mbps long-term goal and begin to design our universal service programs around reaching it, we need to be able to articulate the use cases for such high speeds that justify making the taxpayer subsidize deployment of such service to every corner of the country. This report does no such thing, and I fear that it instead sets the stage for a generation of wasteful spending.

The second issue, even more glaring, is the exclusion of satellite-based internet service from the report's analysis. Before the advent of Low Earth Orbit (LEO) constellations, it used to be that satellite internet was unbearably slow and extremely high latency. These old services were not adequate substitutes for wired broadband, just make-dos for when no viable alternative existed. And if that was still what the satellite internet market looked like, we would be right to exclude it from consideration in our assessment of broadband access and affordability in the United States.

But SpaceX's LEO-based Starlink service has completely changed the game. Starlink is available in almost every corner of all 50 states and offers low latency and speeds nearing or exceeding 100/20 Mbps, especially in rural areas, which are most likely to lack access to comparable wireline service in the first place.² The report says that satellite services are limited in the numbers of customers they can serve, but that limit is only a function of how much spectrum they are allowed to use and how many satellites they can launch per year, both things the FCC has control over. If we give Starlink and its forthcoming competitors access to more spectrum and permission for more launches, and if we allow them to compete for Universal Service Fund subsidies on equal footing with other providers, I have no doubt that they

¹ Dave Taht & Members and supporters of the Bufferbloat.net community Comments.

² Starlink Map, <https://www.starlink.com/map>; Starlink Specifications, <https://www.starlink.com/legal/documents/DOC-1400-28829-70>.

could easily offer low latency 100/20 Mbps service to every household that does not already have it.

So, for these reasons, I must respectfully dissent.

**STATEMENT OF
COMMISSIONER ANNA M. GOMEZ**

Re: *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 22-270, 2024 Section 706 Report (March 14, 2024)

I support the adoption of today's Section 706 Report, which updates the benchmark for broadband to 100/20 Mbps and finds that more work must be done to connect the unconnected. I couldn't agree more.

Today's Report finds that 24 million Americans lack access to fixed broadband connectivity. More must be done to ensure that broadband is being reasonably and timely deployed to all Americans, and particularly those that have been historically underserved—consumers who live in rural, tribal, and low-income communities. More must also be done to ensure that when broadband is deployed, that it is affordable to consumers. Ensuring that connectivity is affordable will ensure that once deployed, networks can be sustained.

Unfortunately, one of the FCC's greatest tools to closing the digital divide and supporting connectivity, the Affordable Connectivity Program (ACP), will end next month. For low-income rural Americans, the ACP has been a lifeline to ensuring they have access to connectivity. For rural Americans who are yet to be served, the end of ACP means that the Broadband, Equity, Access Deployment (BEAD) Program's \$42.5 billion investment in broadband infrastructure may not reach them. These rural consumers have been waiting for connectivity to finally come to them—but may be disappointed when the buildout does not go as far as expected.

We've made so much progress. But as today's Report finds, more must be done. The ACP is a key tool that is necessary to continue our progress to connecting everyone everywhere, particularly, those in rural and hard to reach areas.

Thank you to the Chairwoman for her leadership on this item, and for her leadership in establishing the ACP. Thank you also to the staff of the Wireline Competition Bureau, Wireless Telecommunications Bureau, and Office of Economics and Analytics for their work on this item.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
All-In Pricing for Cable and Satellite Television
Service
MB Docket No. 23-203

REPORT AND ORDER

Adopted: March 14, 2024

Released: March 19, 2024

By the Commission: Chairwoman Rosenworcel and Commissioner Starks issuing separate statements;
Commissioners Carr and Simington dissenting and issuing separate statements.

TABLE OF CONTENTS

Heading Paragraph #
I. INTRODUCTION..... 1
II. BACKGROUND..... 2
III. DISCUSSION 4
A. Need for the “All-In” Rule..... 6
B. The “All-In” Rule 12
1. General Implementation..... 13
a. Compliance Date..... 18
b. Bundled Services 19
2. Specific Implementation Issues Raised in the Record..... 23
a. Billing Materials 23
b. Promotional Materials..... 26
C. Legal Authority..... 31
1. Section 642 of the Act, 47 U.S.C. § 562 (Television Viewer Protection Act of 2019 (TVPA)) 32
2. Section 632 of the Act, 47 U.S.C. § 552 (Cable Operators)..... 34
3. Section 335 of the Act, 47 U.S.C. § 335 (Direct Broadcast Service Providers)..... 37
4. Other Federal Statutes 43
5. The First Amendment..... 44
D. Existing Consumer Protections..... 50
1. State and Local Requirements 51
2. The Television Viewer Protection Act of 2019, 47 U.S.C. § 562 (TVPA) and Other Federal Requirements..... 52
E. Competitive Effects 58
F. Cost/Benefit Analysis 60
G. Digital Equity and Inclusion 61
IV. PROCEDURAL MATTERS..... 62
V. ORDERING CLAUSES..... 65
Appendix A – List of Commenters
Appendix B – Final Rule
Appendix C – Final Regulatory Flexibility Act Analysis

I. INTRODUCTION

1. In this Report and Order (*Order*), we take action to benefit video consumers by requiring cable operators and direct broadcast satellite (DBS) providers to specify the “all-in” price for video programming in their promotional materials that include pricing information and on subscribers’ bills. Our action today enables consumers to make purchasing decisions with access to clear, easy-to-understand, and accurate information disclosing the price of video programming. We believe that an “all-in” price for video service also will increase transparency and have a positive effect on competition in the video programming marketplace by allowing consumers to make better informed choices among the ranges of video programming service options available to them.

II. BACKGROUND

2. Sections 335 and 632 of the Communications Act of 1934, as amended (the Act), authorize the Commission to adopt public interest regulations for DBS providers and direct the Commission to adopt cable operator customer service requirements, respectively.¹ In 2019, Congress adopted the Television Viewer Protection Act of 2019 (TVPA), which bolstered the consumer protection provisions of the Act by adding specific consumer protections.² The TVPA revised the Act to add section 642, which, among other things, requires greater transparency in subscribers’ bills.³ As Congress explained then, and we observe today, consumers face “unexpected and confusing fees when purchasing video programming,” including “fees for broadcast TV [and] regional sports.”⁴

3. On June 20, 2023, the Commission released a Notice of Proposed Rulemaking (*NPRM*), observing that consumers who choose a video service based on an advertised monthly price may be surprised by unexpected fees that cable operators and DBS providers charge and list in the fine print separately from the top-line listed service price. The Commission found that such fees can be potentially misleading and make it difficult for consumers to compare the prices of competing video service providers.⁵ In the *NPRM*, the Commission proposed to enhance pricing transparency by requiring cable operators and DBS providers to provide the “all-in” price for video programming in their promotional materials and on subscribers’ bills.⁶ The Commission sought comment on whether the proposal is

¹ 47 U.S.C. §§ 335, 552.

² Television Viewer Protection Act of 2019, Pub. L. No. 116-94, 133 Stat. 2534 (2019). The TVPA was enacted as Title X of the “Further Consolidated Appropriations Act, 2020” (H.R. 1865, 116th Cong.) (2019-20).

³ 47 U.S.C. § 562. Section 642 provides four main areas of consumer protection related to billing: (1) before entering into a contract with a consumer, a multichannel video programming distributor (MVPD) must provide the consumer the total monthly charge for MVPD service, whether offered individually or as part of a bundled service, including any related administrative fees, equipment fees, or other charges, (2) not later than 24 hours after contracting with a consumer, an MVPD must provide the total monthly charge that a consumer can expect to pay and permit the consumer to cancel without fee or penalty for 24 hours, (3) with respect to electronic bills, MVPDs must include an itemized statement that breaks down the total amount charged for MVPD service and the amount of all related taxes, administrative fees, equipment fees, or other charges; the termination date of the contract for service between the consumer and the provider; and the termination date of any applicable promotional discount, and (4) MVPDs and fixed broadband Internet service providers must not charge a consumer for using their own equipment and also must not charge lease or rental fees to subscribers to whom they do not provide equipment. *Id.*

⁴ H.R. Rep 116–329, at 6 (2019). *See also* Jonathan Schwantes, Consumer Reports, How Cable Companies Use Hidden Fees to Raise Prices and Disguise the True Cost of Service, CR CABLE BILL REPORT 2019 (Oct. 2019), <https://advocacy.consumerreports.org/wp-content/uploads/2019/10/CR-Cable-Bill-Report-2019.pdf> (reporting on the cable industry’s practice of charging “hidden fees” beyond the rates that they promote) (CR Cable Bill Report 2019).

⁵ *All-In Pricing for Cable and Satellite Television Service*, MB Docket No. 23-203, FCC 23-52, Notice of Proposed Rulemaking, 2023 WL 4105426 at *1, para. 2 (rel. June 20, 2023) (*NPRM*).

⁶ *Id.* at *2, para. 5.

sufficient to ensure that subscribers and potential subscribers have accurate information about the cost for video service for which they will be billed. Specifically, the Commission sought comment on (i) the specifics of the proposed requirement for increased marketing and billing transparency, (ii) existing federal, state, and local requirements related to truth-in-billing, (iii) the marketplace practices regarding advertising and billing, and (iv) the Commission's legal authority to adopt this proposal.⁷ The Commission also included a request for comment on the costs and benefits of the proposal, as well as the effects that the proposal could have on equity and inclusion.⁸ The Commission received comments and *ex parte* filings from individuals, consumer advocates, cable, DBS, broadcast industry members, trade associations, state and local governments, and franchising authorities.⁹ A number of comments describe general consumer frustration with unexpected "fees" (for example, for broadcast television programming and regional sports programming¹⁰ charges listed separately from the monthly subscription rate for video programming) that are actually charges for the video programming for which the subscriber pays.¹¹

III. DISCUSSION

4. In this *Order*, we adopt the proposal in the *NPRM* to require that cable operators and DBS providers provide the "all-in" price of video programming as a prominent single line item on subscribers' bills and in promotional materials that state a price.¹² We find that the record demonstrates that charges and fees for video programming provided by cable and DBS providers are often obscured in misleading promotional materials and bills, which causes significant and costly confusion for consumers.

⁷ *Id.*

⁸ *Id.*

⁹ See Appendix A (List of Commenters). See also Letter from Mary Beth Murphy, Vice President/Deputy General Counsel, NCTA– The Internet & Television Ass'n, to Marlene H. Dortch, Esq., Secretary, FCC (filed Oct. 2, 2023) (NCTA Oct. 2 *Ex Parte*); Letter from Leora Hochstein, Vice President, Government Public Policy and Government Affairs, Verizon, to Marlene H. Dortch, Esq., Secretary, FCC (filed Nov. 13, 2023) (Verizon Nov. 13 *Ex Parte*); Letter from Michael Nilsson Counsel to DIRECTV, to Marlene H. Dortch, Esq., Secretary, FCC (filed Jan. 31, 2024) (DIRECTV *Ex Parte*); Letter from Mary Beth Murphy, Vice President and Deputy General Counsel, NCTA – The Internet & Television Ass'n, to Marlene H. Dortch, Secretary, FCC, MB Docket No. 23-203 (filed Feb. 14, 2023) (NCTA Feb. 14 *Ex Parte*); Letter from Charles Dudley, Florida Internet & Television Ass'n; Andy Blunt, MCTA – The Missouri Internet & Television Ass'n; David Koren, Ohio Cable Telecommunications Ass'n; and Walt Baum, Texas Cable Ass'n, to Marlene H. Dortch, Esq., Secretary, FCC (filed Mar. 5, 2024) (State Cable Ass'ns Mar. 5 *Ex Parte*); Letter from Leora Hochstein, Vice President, Government Public Policy and Government Affairs, Verizon, to Marlene H. Dortch, Esq., Secretary, FCC (filed Mar. 6, 2024) (Verizon Mar. 6 *Ex Parte*); Letter from Mary Beth Murphy, Vice President/Deputy General Counsel, NCTA– The Internet & Television Ass'n, to Marlene H. Dortch, Esq., Secretary, FCC (filed Mar. 6, 2023) (NCTA Mar. 6 *Ex Parte*); Letter from Stacy Fuller, SVP, External Affairs, DIRECTV, to Marlene H. Dortch, Esq., Secretary, FCC (filed Mar. 7, 2024) (DIRECTV Mar. 7 *Ex Parte*); Letter from Brian Hurley, ACA Connects, to Marlene H. Dortch, Esq., Secretary, FCC (filed Mar. 7, 2024) (ACA Connects Mar. 7 *Ex Parte*); Letter from Keith J. Leitch, President, One Ministries, Inc. (KQSL), to Marlene H. Dortch, Esq., Secretary, FCC (filed Mar. 7, 2024); Letter from Leora Hochstein, Vice President, Government Public Policy and Government Affairs, Verizon, to Marlene H. Dortch, Esq., Secretary, FCC (filed Mar. 8, 2024) (Verizon Mar. 8 *Ex Parte*); Letter from Michael Nilsson, Counsel to ACA Connects, to Marlene H. Dortch, Secretary, FCC (filed Mar. 8, 2024) (ACA Connects Mar. 8 *Ex Parte*).

¹⁰ See generally *Review of the Commission's Program Access Rules and Examination of Programming Tying Arrangements*, First Report and Order, 25 FCC Rcd 746, Appx. A at 121 (2010) (defining "Regional Sports Network"); *Altitude Sports & Entm't, LLC v. Comcast Corp.*, No. 19-cv-3253-WJM-MEH, 2020 WL 8255520 at *1 (D. Colo. Nov. 25, 2020) (defining the "relevant product market" for regional sports programming).

¹¹ See, e.g., Comments of Truth in Advertising, Inc. (Truth in Advertising Comments); Daniel Drake Comments at 1; Jonathan Bates Comments at 1; Maureen Comments at 1; M Mondesir Comments at 1; Kenneth Lubar Comments at 1; Mitchel Bakke Comments at 1; Matt Mann Comments at 1.

¹² *NPRM*, 2023 WL 4105426 at *2, para. 6.

We, therefore, adopt the “all-in” rule to promote pricing transparency and to complement existing consumer protections and practices of cable operators and DBS providers.

5. First, we describe current marketplace practices and conclude that the “all-in” rule is well-tailored to address the need for consumers to have accurate information about the cost of video service. Next, we consider issues related to implementation of the “all-in” rule, including how the rule applies to bundled services and billing material (including for currently-offered and grandfathered or legacy plans) and promotional material (including national and regional marketing where charges to consumers vary by geography and promotional discounts). We discuss the legal authority we rely upon to implement the “all-in” rule. We conclude that section 642 of the Act (the TVPA), section 632 of the Act (covering cable operators), section 335 of the Act (covering DBS providers), as well as ancillary authority, provide ample authority for the “all-in” rule. We also conclude that the “all-in” rule is consistent with the First Amendment. We consider existing local, state, and voluntary consumer protections adopted and implemented by cable operators and DBS providers, as well as existing federal requirements stemming from the TVPA applicable to multichannel video programming distributors (MVPDs), that relate to transparency and disclosure of pricing information. We conclude that the “all-in” rule will complement existing protections by further mitigating consumer confusion about the aggregate cost of video programming. Finally, we consider the potential competitive effects of the “all-in” rule and conclude that increased consumer access to clear, easy-to-understand, and accurate information likely encourages price competition, innovation, and the provision of high-quality services.

A. Need for the “All-In” Rule

6. Based on the record, we find that there is a need for the “all-in” rule so that consumers can make better informed decisions about their service and can comparison shop among video programming providers without having to “read fine print or try to determine which ‘fees’ or ‘surcharges’ are really charges related to video programming services that might raise the monthly cost compared to other offers they are considering.”¹³ In the *NPRM*, the Commission sought comment on whether consumers encounter misleading promotions or receive misleading bills, and on current industry practices regarding pricing categorization.¹⁴ As described below, individuals, consumer protection organizations, state and local governments, and franchise authorities report that consumers experience “considerable” confusion and surprise when unanticipated charges and fees for cable and satellite video programming are not included in the advertised price in promotional materials and are separately listed on bills.¹⁵

¹³ Comments of the City of Oklahoma City, Oklahoma; City of Minneapolis, Minnesota; Metropolitan Area Communications Commission; Northwest Suburbs Cable Communications Commission; North Metro Telecommunications Commission; South Washington County Telecommunications Commission; North Suburban Communications Commission; City of Edmond, Oklahoma; City of Coon Rapids, Minnesota; and City of Aumsville, Oregon, at 6 (Local Franchise Authorities Comments). *See also* Comments of the Texas Coalition of Cities For Utility Issues, City of Boston, Massachusetts, the Mt. Hood Cable Regulatory Commission, Fairfax County, Virginia and National Association of Telecommunications Officers and Advisors (NATOA), at 10 (Local Government Comments) (stating their belief “that a robust disclosure requirement that works alongside local consumer protection regulation will be a welcome addition to the cable sector and improve prices and competition for consumers”).

¹⁴ *NPRM*, 2023 WL 4105426 at *2-4, paras. 7-10.

¹⁵ *See, e.g.*, Reply Comments of the City of Oklahoma City, Oklahoma; City of Minneapolis, Minnesota; Metropolitan Area Communications Commission; Northwest Suburbs Cable Communications Commission; North Metro Telecommunications Commission; South Washington County Telecommunications Commission; North Suburban Communications Commission; City of Edmond, Oklahoma; City of Coon Rapids, Minnesota; City of Aumsville, Oregon; and City of Mustang, Oklahoma (the Local Franchise Authorities), at 3 (Local Franchise Authorities Reply Comments) (concluding the all-in rule is needed to resolve the “[c]onsiderable confusion among consumers regarding ‘junk fees’” on subscribers’ bills); Reply Comments of the Colorado Communications and Utility Alliance at 2 (asserting that “cable operators and DBS television providers have been using fees associated

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7. Consumer protection groups describe significant, recurring issues with consumer access to clear, easy-to-understand, and accurate information about the price of cable operator and DBS provider video programming. Truth in Advertising, for example, contends that “several cable and satellite service companies [are] engaged in deceptive pricing practices, including the use of unexpected fees.”¹⁶ Truth in Advertising discusses a 2019 analysis by Consumer Reports of 800 cable bills, revealing the cable industry generates \$450 per customer, per year, from company-imposed fees, and that nearly 60% of Americans who encounter these unexpected or hidden fees report the fees caused them to exceed their budget.¹⁷ Consumer Reports examined hundreds of cable and satellite television bills collected in 2018 and made several findings in the 2019 report, “including that consumers pay significantly more than the advertised price for video programming ... because of the addition of various fees, surcharges, and taxes.”¹⁸ According to Consumer Reports, fees are “often imposed or increased with little notice, and are often listed among a dizzying array of other charges, including government-imposed fees and taxes” while cable companies “continue advertising relatively low base rates.”¹⁹ Further, a 2018 “Secret Shopper Investigation” conducted by Consumer Reports found that consumers were provided with inaccurate or confusing fee-related information by customer service representatives of cable and DBS providers on a number of occasions.²⁰ This included customer service representatives portraying certain

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with ‘broadcast television’ and ‘regional sports’ to obfuscate the true price of cable television service”); Comments of Kenneth Lubar (stating that “[t]he advertised fees [of cable companies] are misleading and hinder effective comparison of true costs”); Consumer Reports (with Public Knowledge) Comments at 5 (Consumer Reports and Public Knowledge Comments) (observing that hidden fees “enable cable companies to camouflage price increases, confounding consumer efforts to comparison shop and to maintain household budgets”); Comments of the National Association of Broadcasters at 5 (NAB Comments) (“Current advertising and billing methods used by MVPDs can lead consumers to believe that retransmission consent fee payments are somehow different from all the other inputs into MVPDs’ programming packages or that retransmission consent payments to broadcasters constitute a tax or governmental regulatory fee.”).

¹⁶ Truth in Advertising Comments at 2.

¹⁷ *Id.* at 4-5 (citing CR Cable Bill Report 2019). Truth in Advertising lists examples of issues with the disclosure of pricing for video programming, including: a Comcast advertisement for free installation that becomes a hidden fee; lack of disclosure of a price increase for the second year of a two-year service agreements with AT&T, CenturyLink, and DIRECTV; and Frontier “failing to honor its advertised prices for its TV and internet bundle.” *Id.* at 2. Truth in Advertising asserts that “[b]ecause the harm imposed by such fees is so widespread and injurious, numerous consumers have complained ... about losing significant money to cable companies that employ these tactics.” *Id.* at 4-5.

¹⁸ Consumer Reports and Public Knowledge Comments at 2-3 (citing CR Cable Bill Report 2019) (“Specifically, CR determined that for cable bills, additional charges of all types amount to an additional 33 percent mark-up over the base price of service. Many of these additional charges are not included in the advertised price, and are instead buried in the fine print of the service plan.”). *See also* NPRM, 2023 WL 4105426 at *1, para. 4 (citing Consumer Reports and Public Knowledge Reply Comments, MB Docket No. 21-501, at 2 (filed Mar. 7, 2022)).

¹⁹ Consumer Reports and Public Knowledge Comments at 5. *See also, e.g.*, Local Government Comments at 5 (highlighting TechHive’s documentation of the practices of Comcast, Charter and Cox in 2021 (citing Jared Newman, Cable-bill Transparency Laws Haven’t Killed Sneaky Fees, TechHive (Jan. 28, 2021), <https://www.techhive.com/article/579177/cable-bill-transparency-laws-havent-killed-sneaky-fees.html> (describing instances in which many charges and fees would not be known to the consumer “without clicking on the fine print” and service providers withholding information about “broadcast and regional fees,” for example, “from [a] bill summary until the final stage of the checkout process, after you’ve provided a social security number and agreed to a credit check”)). *But see* Reply Comments of NCTA – The Internet & Television Association at 3 (NCTA Reply Comments) (arguing the TechHive “article is clear that fees are being disclosed to consumers prior to purchase” and that, since the publication of the article, “methods of disclosing pricing information have continued to evolve to better meet the needs of our members’ existing and potential customers”).

company-imposed fees as government-imposed taxes and fees; failing to mention fees; or offering incomplete fee information.²¹

8. Comments filed by individual consumers as well as state and local governments and franchise authorities likewise detail concerns about misleading promotional materials and bills for cable and DBS service and urge the Commission to adopt an “all-in” rule to protect consumers. The record indicates that approximately 24 to 33 percent of a consumer’s bill is attributable to company-imposed fees such as “Broadcast TV Fees,” “Regional Sports Surcharges,” “HD Technology Fees,” and others,²² and that the “dollar amount of company-imposed fees has skyrocketed.”²³ However, consumers too often lack transparent information about fees that significantly increase the cost of advertised and billed video services and how they will affect their total cost and bottom-line budget.²⁴ Increases in fees relating to video programming during the term of the service agreement are sources of consumer surprise and confusion, and it is “especially notable ... that these fees are being raised by cable companies even while many consumers are locked into supposed ‘fixed-rate’ contracts.”²⁵ As the Local Government Commenters emphasize, these fees disproportionately impact lower-income households.²⁶

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²⁰ Consumer Reports and Public Knowledge Comments at 14-15 (describing how in “late 2018, seven [Consumer Reports] secret shoppers made a total of 74 calls to customer service representatives (CSRs) of Charter, Comcast, DIRECTV, Frontier, and Verizon ... [and] pos[ed] as potential new customers interested in obtaining TV and internet service”). *But see* NCTA Reply Comments at 3 (noting that the secret shopper survey occurred before the TVPA was adopted in 2019). Although this survey took place before the passage of the TVPA, the record indicates that cable operators and satellite providers continue to charge the very same “add-on” fees at issue in the Consumer Reports survey. *Compare* Consumer Reports and Public Knowledge Comments at 4-8 *with* NCTA Reply Comments at 8-12 (criticizing and justifying the use of add-on fees, respectively).

²¹ Consumer Reports and Public Knowledge Comments at 15, 19 (concluding “that providers seldom acknowledge that company-imposed fees are in fact imposed at the discretion of the cable companies, and, further, that they frequently state or suggest the exact opposite: that the company has no choice but to charge these fees”).

²² *See id.* at 3-4, 10.

²³ *Id.* at 6. Data from the Local Government Commenters reveals cumulative increases in sports broadcasting and regional sports network programming charges; an increase in broadcast fees as much as five- to seven-fold since 2016, while cable prices have increased 25 to 50 percent; an increase in equipment fees in the last two to three years; and that regional sports fees have tripled, quadrupled, or quintupled in the last six years. *See* Local Government Comments at 6-7 and Appendix A (describing and attaching “fee data over time in four major metropolitan areas ... demonstrat[ing] the increased consumer costs over time and the increasing contribution of cable operator-created fees toward a consumer’s final bill”). *See also* City of Seattle Comments at 6 (discussing how fees are growing cost components across Seattle’s two franchised service areas).

²⁴ *See* Consumer Reports and Public Knowledge Comments at 6. *See also* Comments of Jonathan Bates (“It’s misleading and false advertisement ... to promote any pricing that doesn’t include mandatory fees.”); Comments of Maureen (describing a consumer’s experience of confusion after telling a customer service agent that she was on a fixed income, and later discovering a \$20 fee for “local channels” being charged separately when her understanding was that such channels are “included with the cable package”); Comments of M. Mondesir (observing that “my cable bill with Spectrum included ‘TV Select \$49.99’ – that was the actual name of the plan – and it added \$28.19 in hidden ‘Other Charges,’” which was a 56 percent increase from the advertised price and included a \$21 “Broadcast TV Surcharge”); Local Franchise Authorities Comments at 5 (noting 83 reports from cable subscribers in the City of Minneapolis asking about broadcast fees, regional sports fees, or otherwise not understanding their monthly bill).

²⁵ Consumer Reports and Public Knowledge Comments at 5. Companies have been accused of increasing hidden fees after customers have agreed to a fixed-fee fixed-term contract. Local Government Comments at 5 (citing Harold Feld, *Junk Fees and Cable TV: Lessons from the Television Viewer Protection Act*, CPI Anti-Trust Chronicle at 5 (April 2023)). The Northwest Suburbs Cable Commission, for example, received a complaint that a consumer’s “broadcast fee went up when it stated on their bill that the fee was going down [and] Comcast could not explain the reason for the increase and what the broadcast fee was for.” Local Franchise Authorities Comments at 5.

²⁶ Local Government Comments at 6. *See also infra* Section III.G (Digital Equity and Inclusion).

9. Misinformation and misunderstandings about how much subscribing to video programming service costs lead to subscriber complaints, disputed bills, and litigation. Consumer Reports observed that since 2016, state attorneys general in Massachusetts,²⁷ Minnesota,²⁸ and Washington²⁹ have “launched investigations and/or filed lawsuits accusing Comcast, one of the nation’s largest cable operators, of fee-related fraud.”³⁰ Truth in Advertising describes eight class-action lawsuits initiated by consumers challenging unexpected charges and fees.³¹ The Local Government Commenters report that “[c]lass action lawsuits or suits brought by state Attorneys General have resulted in settlements when companies impose fees that exceed its promise of a fixed price.”³² Local franchising authorities from several states also report a variety of complaints they are receiving, and the types of questions they respond to, in support of “subscribers who are confused” about the charges on bills from cable operators and DBS providers.³³

10. On the other hand, cable and DBS commenters dispute the characterization of their advertising and billing practices as misleading to consumers and argue that there is no need for the Commission to adopt an “all-in” rule. NCTA contends that “[p]roviding accurate and transparent pricing information to consumers is a marketplace necessity” given fierce competition for consumers in the video programming market.³⁴ According to NCTA, “[i]n the course of a prospective customer’s consideration

²⁷ Massachusetts reached a settlement with Comcast over alleged violations of the Massachusetts Consumer Protection Act, wherein Comcast was accused of failing to disclose fees that increased bills by up to forty percent and deceptive advertising practices. Consumer Reports and Public Knowledge Comments at 16 (citing Assurance of Discontinuance, *In the Matter of Comcast Cable Comm’ns LLC*, No. 18-3514 (Mass. Super. Ct. Nov. 9, 2018)); Press Release, Office of Attorney General Maura Healey, Comcast to Pay \$700,000 in Refunds and Cancel Debts for More Than 20,000 Massachusetts Customers to Resolve Allegations of Deceptive Advertising (Nov. 13, 2018) (announcing “Comcast will pay refunds and cancel debts for more than 20,000 Massachusetts customers as part of a settlement resolving allegations that the company violated state consumer protection laws by using deceptive advertisements to promote its long-term cable contracts”), <https://www.mass.gov/news/comcast-to-pay-700000-in-refunds-and-cancel-debts-for-more-than-20000-massachusetts-customers-to-resolve-allegations-of-deceptive-advertising>.

²⁸ The attorney general of Minnesota filed an “enforcement action in December 2018, accusing Comcast of misrepresenting company-imposed fees and the price of cable television packages, charging consumers for products they did not order, and failing to send the prepaid Visa cards that customers had been promised as a sign-up bonus.” Consumer Reports and Public Knowledge Comments at 16 (citing *State of Minnesota v. Comcast Cable Commc’ns, LLC*, No. 27-CV-18-20552 (Hennepin Cty. D. Ct. Dec. 21, 2018)). “On June 6, 2019, a state judge ruled against Comcast, finding that the cable company had violated the Washington State law almost half a million times by signing consumers up for the \$6 per month protection plan without their consent.” *Id.* at 17. Comcast was assessed a \$9.1 million penalty and ordered to pay back affected consumers with interest. *Id.*

²⁹ In Washington State, the attorney general “sued Comcast in 2016 for allegedly violating the state’s Consumer Protection Act.” *Id.* at 17 (citing *State of Washington v. Comcast Commc’ns Mgmt.*, Superior Court of Washington (June 6, 2019)).

³⁰ *Id.* at 15-17 (citing Assurance of Discontinuance, *In the Matter of Comcast Cable Commc’ns LLC*, No. 18-3514 (Mass. Super. Ct. Nov. 9, 2018)).

³¹ These include class action lawsuits against Cox, Frontier, AT&T, DIRECTV, CenturyLink, Comcast, DISH Network, and Charter Communications. Truth in Advertising Comments at 2-3.

³² Local Government Comments at 5.

³³ See Local Franchise Authorities Comments at 1-7 (describing how “the [Local Franchise Authorities] receive questions and complaints from subscribers who are confused about the nature of these fees”); Local Government Comments at 7; Connecticut Office of State Broadband (CT OSB) within the Connecticut Office of Consumer Counsel Comments at 6 (emphasizing consumer issues, in its experience) (Connecticut Office of State Broadband Comments).

³⁴ Comments of NCTA – The Internet & Television Association at 3 (NCTA Comments). See also Comments of Verizon at 1 (Verizon Comments) (asserting that in light of competition from streaming services in the video

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of which service package to buy (the ‘buy-flow’) and on customers’ bills, our members clearly disclose the specific amounts of the fees that will apply and the total amount customers will pay for service, thereby ensuring that customers are not ‘surprised by unexpected fees.’³⁵ In addition, NCTA argues that there is no need for the Commission to adopt an “all-in” requirement because the existing transparency in billing requirements of the TVPA sufficiently address this issue.³⁶ DIRECTV submits that an “all-in” rule could complicate “apples-to-apples” comparison shopping because it (i) would require the disclosure of only one variable in a service offering—price—rather than specific channels or other aspects of the video programming service that the provider offers, thus “creat[ing] confusion in a world where the content and other terms of the service offering differ dramatically among providers”; (ii) would apply only to cable and DBS and not other providers of video programming, including online video distributors; and (iii) would require a single price in national advertising even though actual prices differ depending on where a customer lives.³⁷

11. Although industry commenters assert that the practice of separating certain elements of the price for video programming and listing them as “fees” does not deceive consumers,³⁸ we believe that the weight of evidence in the record as detailed above suggests otherwise and that efforts to address these issues will benefit from a robust “all-in” rule. As Local Government Commenters contend, “[m]ore clarity and transparency are needed to help consumers understand their cable bills and make informed decisions about their services,” and “consumers should know what their video programming services will cost, including all charges cable operators add to those services.”³⁹ We agree that an “all-in” rule serves the dual purposes of helping consumers comparison shop among video programming providers when looking at promotional materials and helping subscribers recognize when the price for video service has changed when looking at their bills.⁴⁰ As we found in the *NPRM*, unexpected fees related to the cost of

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market, “there is no basis or need for the Commission to adopt far-reaching regulations regarding cable and satellite TV billing practices, particularly for competitive entrants like Verizon”); Comments of ACA Connects – America’s Communications Association at 2 (ACA Connects Comments) (“Consumers may be troubled by the high rates they are charged for video service but not because prices are hidden or not sufficiently disclosed.”); Reply Comments of Charter Communications, Inc., Comcast Corporation, Cox Communications, Inc., Mediacom Communications Corporation, Midcontinent Communications, and TDS Telecommunications Corporation (Cable Company Reply Comments) (asserting that “rules are unnecessary in the current, highly competitive video marketplace,” and “[t]he Cable Company Commenters already clearly inform consumers of the costs of their services, in response to marketplace forces and consistent with existing law”).

³⁵ NCTA Comments at 2-3.

³⁶ *Id.* at 4-7. See *infra* Section III.D.2 (discussing the TVPA).

³⁷ Comments of DIRECTV at ii, 9-12 (DIRECTV Comments). See also Comments of USTelecom – The Broadband Association at 2 (USTelecom Comments) (citing DIRECTV’s argument); NCTA Comments at 7 (“[U]niquely regulating cable and DBS advertising and pricing disclosures as proposed in the Notice would undercut this goal, making it harder for consumers to accurately compare video services, especially as others in the marketplace would have greater flexibility in how they present pricing information”). But see *infra* para. 31 (explaining that we do not require a single price in national or regional advertising, but instead will allow cable operators and DBS providers to advertise a range of “all-in” prices that will apply within the area covered by the promotion).

³⁸ See, e.g., NCTA Reply Comments at 2-3; NCTA Oct. 2 *Ex Parte* at 1-2.

³⁹ Local Franchise Authorities Comments at 5. NAB explains that, in its experience, MVPD-imposed fees, including those labeled “broadcast TV fee” or “broadcast TV surcharge” raise accuracy and transparency concerns, because they make the fees appear to be regulatory fees or taxes and because they single out certain programming without identifying the costs of all other video programming. NAB Comments at 2-3.

⁴⁰ *Id.* See also Local Government Comments at 3 (“agree[ing] that the proposal will serve consumers and promote competition, by enabling consumers to know what they will pay when they subscribe to cable television services,” and “will enable them to shop among various services more effectively, enabling competition”); Local Franchise Authorities Comments at 4 (contending that the “all-in” rule will lead to a reduction of “complaints received by

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video programming, and how those fees are disclosed, can “make it difficult for consumers to compare the prices of video programming providers.”⁴¹ An “all-in” price that lets consumers know the exact amount that they pay for video programming will give consumers a clear, easy-to-understand, and accurate price-point to consider.⁴² We disagree that requiring cable operators and DBS providers to present consumers with honest pricing information without addressing other variables of video programming service will complicate comparison shopping. The “all-in” rule does not prohibit additional information that may highlight or compare a service feature (for example, the number, quality, or types of video programming channels available).⁴³ Instead, it simply prohibits deceptive pricing practices. We also find, based on the record, that the “all-in” rule will benefit consumers, notwithstanding its application only to cable and DBS providers, considering the specific issues raised in the record with respect to these services.⁴⁴

B. The “All-In” Rule

12. We adopt the proposal in the *NPRM* to require cable operators and DBS providers to provide the “all-in” price for video programming service in both their promotional materials and on subscribers’ bills.⁴⁵ As noted in the *NPRM* and confirmed by the record in this proceeding, the public interest requires that cable operators and DBS providers represent their subscription charges transparently, accurately, and clearly.⁴⁶ While commenters representing the cable and DBS industry

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cable operators and [Local Franchise Authorities (LFAs)] regarding misleading or confusing advertisements and unexpectedly higher cable service bills for new subscribers”), 6 (“The all-in price will also help consumers comparison shop among video programming providers, including streaming services. Because cable operators have varying billing practices and different line items, consumers may have difficulty comparing the actual price of video programming services among various providers....”); City of Seattle Comments at 5, 7 (“strongly” supporting the Commission’s “all-in” proposal as “an effective and meaningful way to ensure that subscribers and potential subscribers have accurate information about the full cost of video services”).

⁴¹ *NPRM*, 2023 WL 4105426 at *1, para. 2. See Comments of Kenneth Lubar (discussing how “[t]he advertised fees [of cable companies] are misleading and hinder effective comparison of true costs”); Consumer Reports and Public Knowledge Comments at 5 (commenting that current disclosures are “confounding consumer efforts to comparison shop”); Local Government Comments at 3 (predicting the “all-in” rule “will enable [consumers] to shop among various services more effectively, enabling competition”); Local Franchise Authorities Comments at 6 (predicting the “all-in” rule will benefit comparison shop among video programming providers by requiring “the actual price of video programming”). But see NCTA Comments at 7 (discussing that the “all-in” rule would make it more difficult for consumers to accurately compare video services if competitors “have greater flexibility in how they present pricing information”); NCTA Reply Comments at 4 (describing the difficulty of applying the “all-in” rule to bundled services, such as broadband and voice, making “all-in” price comparisons “more complex and ... misleading”).

⁴² Thus, we disagree with industry commenters that suggest that an “all-in” rule will lead to less transparency because it addresses only one variable in a video service offering—price. See, e.g., DIRECTV Comments at 9-12. Commenters point to the success of the recently adopted broadband consumer label that also “offers helpful guidance for the Commission in adopting a consistent and clear obligation for cable services and DBS” and suggest the all-in rule should include factors similar to those required in a broadband consumer label. Local Government Comments at 10-11.

⁴³ See *infra* para. 15.

⁴⁴ See *infra* para. 30. Despite mentioning numerous streaming services, DIRECTV provides just one example of a non-cable, non-DBS provider that charges a “regional sports” junk fee. DIRECTV Comments at 10.

⁴⁵ *NPRM*, 2023 WL 4105426 at *2, para. 5.

⁴⁶ *Id.* (“We believe that the public interest requires that cable operators and DBS providers represent their subscription charges transparently, accurately, and clearly.”); *supra* Section III.A (Need for the “All-In” Rule).

object to the proposal, the record otherwise reflects a broad swath of support for adoption of an “all-in” price rule.⁴⁷

1. General Implementation

13. In accordance with this requirement, cable operators and DBS providers must aggregate the cost of video programming (that is, any and all amounts that the cable operator or DBS provider charges the consumer for video programming, including for broadcast retransmission consent, regional sports programming, and other programming-related fees) as a prominent single line item in promotional materials (if a price is included in those promotional materials) and on subscribers’ bills.⁴⁸ We do not require every cable or DBS advertisement to provide an “all-in” price where pricing is not otherwise included in the ad; but when a price is included in promotional materials, the “all-in” rule applies.⁴⁹ This aggregate price must include the full amount of the charge the cable operator or DBS provider charges (or intends to charge) the customer in exchange for video programming, including costs relating to broadcast television retransmission, and sports and entertainment programming. We agree with commenters that requiring cable and DBS providers to include these video programming charges in the “all-in” price will help consumers “better distinguish between operator-imposed charges and government-imposed taxes or fees”; as the record indicates, by separating out these charges, cable operators and DBS providers mislead consumers into believing such charges are government-imposed fees when they are nothing of the sort. Instead, such video programming charges are part of the aggregate cost for video programming in their promotional and billing material.⁵⁰

14. Consistent with the Commission’s proposal in the *NPRM*,⁵¹ amounts beyond those charged to the consumer for the video programming itself, such as taxes, administrative fees, equipment fees,⁵² and franchise fees,⁵³ or other such charges, are excluded from the “all-in” rule.⁵⁴ Commenters

⁴⁷ See generally Local Government Comments and Reply Comments; Local Franchising Authorities Comments and Reply Comments; Colorado Communications and Utility Alliance Reply Comments; Connecticut Office of State Broadband Comments; City of Seattle Comments; Consumer Reports and Public Knowledge Comments and Reply Comments; Truth in Advertising Comments; NAB Comments; ABC Television Affiliates Association Reply Comments; One Ministries, Inc. Comments; Daniel Drake Comments; Jonathan Bates Comments; Maureen Comments; M Mondesir Comments; Kenneth Lubar Comments; Mitchel Bakke Comments; Matt Mann Comments. *But see* NCTA Comments and Reply Comments; DIRECTV Comments; Verizon Comments and Reply Comments; Cable Company Reply Comments; USTelecom Comments.

⁴⁸ *NPRM*, 2023 WL 4105426 at *2, para. 6. See also Consumer Reports and Public Knowledge Comments at 8 (“If this rulemaking accomplishes nothing more, at least the aggravating practice of separating out retransmission consent costs in the form of a mandatory ‘Broadcast TV Fee’ or ‘Regional Sports Fee’ will be stymied if the advertised price accounts for these fees that consumers cannot opt out of and whose cost are not insignificant”). As discussed among commenters, “promotional material” generally includes online promotions. See *ACA Connects* Comments at 14-15 (explaining that video programming service providers rely on websites “not only to advertise and promote their services but also as a point of sale”).

⁴⁹ For purposes of the “all-in” rule, promotional material includes communications to consumers such as advertising and marketing.

⁵⁰ Local Franchise Authorities Comments at 7-8; Consumer Reports and Public Knowledge Comments at 5, 15, 19; Local Government Comments at 5; NCTA Reply Comments at 3.

⁵¹ *NPRM*, 2023 WL 4105426 at *2, para. 6 (stating that the Commission “intend[s] for this aggregate amount to include the full amount the cable operator or satellite provider charges (or intends to charge) the customer in exchange for video programming service (such as broadcast television, sports programming, and entertainment programming), but nothing more (that is, no taxes or charges unrelated to video programming).”

⁵² See *id.* at *2, para. 6 n.10 (declining to propose “to require that cable operators and DBS providers include equipment costs in the ‘all-in’ price listed on promotional materials and bills, as these costs are variable for each subscriber, and some subscribers use their own equipment and therefore do not incur such charges from the provider”).

discussed the potential benefits and downsides of extending the “all-in” rule to cover charges and fees not directly related to the provisioning of video programming. Consumer Reports and Public Knowledge, for example, support a broad application of the “all-in” rule, including where “fees might be variable,” such as equipment costs, because, if not, the advertised price “is not the real price a consumer will eventually pay.”⁵⁵ The Local Franchise Authorities, on the other hand, suggest “the Commission should be clear that an all-in price that includes government-imposed taxes or fees does not satisfy the rule.”⁵⁶ We are convinced, at this time, to focus the “all-in” rule on the issues identified in the record regarding the disclosure of charges associated with the video programming itself. We also are mindful of pragmatic difficulties of complying with the “all-in” rule when certain costs for *each consumer* (not for *each market*) vary more than others.⁵⁷ Compliance with the “all-in” rule could be complicated, for example, by taxes that may vary by location; and decisions on whether there is a need to purchase equipment and on the number and type of devices, which vary for each household.

15. As proposed in the *NPRM*, we are persuaded that service providers subject to the “all-in” requirement may provide their subscribers and potential subscribers with itemized information about how much of their subscription payments are attributable to specific costs relating to providing video

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⁵³ For purposes of this proceeding, we will consider Public, Educational, and Governmental Access Support Fees (PEG Fees) as part of franchise fees, consistent with prior Commission findings. *Implementation of Section 621(A)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992*, MB Docket No. 05-311, 34 FCC Rcd 6844, 6860-62, paras. 28-30 (2019) (finding that the definition of franchise fee in section 622(g)(1) encompasses PEG-related contributions).

⁵⁴ *Id.* at *7, para. 16 (concluding, tentatively, that “the terms ‘taxes,’ ‘administrative fees,’ ‘equipment fees,’ or ‘other charges’ cannot reasonably include separate charges for various types of video programming (e.g., amounts paid for retransmission consent rights or rights to transmit regional sports programming or any other programming)” (citing 47 U.S.C. § 542(c)). *See, e.g.*, NTCA – The Rural Broadband Association Comments at 6 (“NTCA agrees with the Commission’s proposal not to require taxes to be included in the all-in price or for taxes to be listed separately in promotional materials due to the challenges and possible confusion this would create with taxes varying according to a consumer’s location.”); NCTA Mar. 6 *Ex Parte* at 3 (contending that “[f]ranchise fees and PEG fees should be explicitly excluded from the all-in price” because “[l]ike taxes, the fees would be impractical to include in an all-in price”).

⁵⁵ Consumer Reports and Public Knowledge Comments at 10-11 (arguing “the fact that [equipment] fees might be variable is not a reason to exclude them in the aggregate price”). *See also* Local Government Comments at 10 (“Local Government Commenters believe . . . that taxes could be included in the cable operator disclosures; but even if the Commission does not require the inclusion of taxes, franchise fees are not taxes.”); Reply Comments of the Texas Coalition of Cities For Utility Issues, City of Boston, Massachusetts, the Mt. Hood Cable Regulatory Commission, Fairfax County, Virginia and National Association of Telecommunications Officers and Advisors (NATOA) at 6 (Local Government Reply Comments) (suggesting that the “all-in” price should include the total amount consumers will pay, including taxes, with the exception of local sales taxes); ACA Connects Comments at 15 (explaining that an “all-in” price that does not include all taxes and fees may lead consumers to experience “sticker shock” when they receive a bill).

⁵⁶ Local Franchise Authorities Comments at 8 (“[T]o ensure full transparency, the Commission should be clear that an all-in price that includes government-imposed taxes or fees does not satisfy the rule. Including government-imposed taxes and fees in the all-in price will continue to obscure cable operators’ decisions regarding pricing and additional charges.” (citing *NPRM*, 2023 WL 4105426 at *2, para. 7)).

⁵⁷ Consumer Reports and Public Knowledge Comments at 11 (arguing that “even if minor variations were present, tailoring an advertised price to reflect different prices does not strike us as overly burdensome”). *See also* NCTA Comments at 2-3 (discussing efforts made to disclose fees that are “typically dependent on what customers purchase and where they live”); Cable Company Reply Comments at 3 (“Cable operators also remain subject to applicable laws governing the full and accurate disclosure of the nature and amount of [taxes, administrative fees, equipment fees, or other charges and] fees.”).

programming or other items that contribute to the bill.⁵⁸ Thus, consistent with sections 622(c) and 642 of the Act,⁵⁹ cable operators and DBS providers may complement the prominent aggregate cost line item with an itemized explanation of the elements that compose that aggregate cost.⁶⁰ Information in addition to the “all-in” price may be included, so long as the cable operator or DBS provider portrays the video programming-related costs as part of the “all-in” price for service.⁶¹ Additional communications (the customer subscription and billing processes, for example) may also include information about other attributable costs with even more granularity, but may not be a substitute for, or obscure, compliance with the “all-in” price. The “all-in” rule, for example, does not prevent the additional disclosure of costs relating to retransmission consent fees incurred by cable operators and DBS providers. The record describes issues cable operators and DBS providers incur by recouping retransmission costs, which some providers would like to avoid entirely or inform their customers of, and there is a lack of evidence indicating that additional disclosures that the industry supports causes consumer confusion.⁶² Our decision does not prohibit additional disclosures or separate line items, including those required by section 642 of the Act or permitted under 622(c) of the Act.⁶³ We also decline at this time to “reform the retransmission consent marketplace,” as some commenters have requested, as it is beyond the scope of this proceeding and the focus of the Commission in other dockets.⁶⁴

⁵⁸ See *NPRM*, 2023 WL 4105426 at *3, para. 8; 47 U.S.C. § 562; NTCA – The Rural Broadband Association Comments at 5 (“NTCA notes that the Commission already permits cable operators to list franchise fees, public, educational, and government access fees, among others, as a separate line item on customers’ bills.”); Verizon Comments at 10 (“It likewise may enhance transparency to show consumers the various mandatory fees and taxes imposed by local governments.”); ACA Connects Comments at 17 (explaining that restricting the ability to break out fees would lead to “reduced transparency for consumers, who may be led to assume ... that the high and rising prices they are charged for cable service are merely an effort by the operator to generate unreasonable profits”). We note that in some instances this itemization may be required, as well as compliance with the “all-in” rule. See 47 U.S.C. § 562(b)(1) (requiring bill in electronic formats to include “an itemized statement that breaks down the total amount charged for or relating to the provision of the [MVPD] service by the amount charged for the provision of the service itself and the amount of all related taxes, administrative fees, equipment fees, or other charges”).

⁵⁹ 47 U.S.C. § 542(c) (permitting cable operators to identify franchisee fees, public, educational, and governmental access (PEG) fees, and other fees, taxes, assessments, or other charges imposed by the government “as a separate line item on each regular bill of each subscriber”); 47 U.S.C. § 562(b)(1) (requiring MVPD consumer bills to include an “itemized statement that breaks down the total amount charged for or relating to the provision of the covered service by the amount charged for the provision of the service itself and the amount of all related taxes, administrative fees, equipment fees, or other charges”).

⁶⁰ ACA Connects Comments at 9, 15.

⁶¹ See *id.* at 6-7 (describing how some ACA Connects members “explicitly pass through retransmission consent fees and [regional sports] fees as line items on subscriber bills” to promote transparency and “help customers understand the source of ... increases”).

⁶² See, e.g., *id.* at 6-7 (“To be clear, our Members would prefer to help their video customers by reducing prices or at least curbing price increases, but the dictates of the retransmission consent regime make this impossible. The best they can do is transparency: by explicitly identifying the programming fees that are driving up cable bills, they can at least help customers understand the source of these increases.”).

⁶³ See *NPRM*, 2023 WL 4105426 at *3, para. 8 (discussing that cable operators may identify certain charges imposed by the government “as a separate line item on each regular bill of each subscriber,” 47 U.S.C. § 542(c), and the MVPD electronic format billing requirement to include an itemized statement that breaks down the total amount charged, 47 U.S.C. § 562(b)(1)).

⁶⁴ See ACA Connects Comments at 9, 15 (urging the Commission to “to refocus its efforts on finding ways to reform the retransmission consent marketplace for the benefit of consumers”); NTCA – The Rural Broadband Association Reply Comments at 4 (arguing “the Commission can use this opportunity to address some of the practices that have resulted in these concerns – namely, costly and non-negotiable retransmission consent fees – and allow video service providers to provide consumers with transparent information about these fees.”). The

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16. In the *NPRM*, the Commission sought comment on whether the “all-in” proposal should differentiate between residential, small business, and enterprise subscribers.⁶⁵ We agree with commenters asserting that the “all-in” rule should apply to all residential customer services provided by cable and DBS operators, including residents in multiple tenant or dwelling unit environments served by such operators.⁶⁶ However, we are also persuaded that services provided and marketed to enterprise customers and bulk purchasers of non-residential video programming service should be exempt from the rule because, as NCTA explains, “[s]uch customers subscribe to video services under customized or individually negotiated plans and thus receive all of the relevant information during the customization or negotiation process.”⁶⁷

17. We decline to impose more specific requirements for how to present an “all-in” price to consumers beyond our finding that it must be a prominent single line item in promotional materials and on subscribers’ bills. In the *NPRM*, the Commission sought comment on whether the term “prominent” is specific enough to ensure that cable operators and DBS providers present consumers with easy-to-understand “all-in” subscription price, or whether we need to provide more detail about how the price for service must be communicated.⁶⁸ We do not at this time impose a “service nutrition-style label,” specific font size, or disclosure proximity requirement to comply with the “all-in” rule. Comments submitted on this point support a clear, easy-to-understand, and accurate statement of the total cost of video programming, while service providers suggest flexibility.⁶⁹ We find that the clear, easy-to-understand,

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Commission has and is addressing issues regarding retransmission consent in other dockets, and we continue to believe those issues should be addressed separate from the “all-in” rule. *See, e.g., Amendment of the Commission’s Rules Related to Retransmission Consent*, MB Docket No. 10-71, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 3351 (2014) (seeking comment on the Commission’s retransmission consent rules); *Reporting Requirements for Commercial Television Broadcast Station Blackouts*, Notice of Proposed Rulemaking, MB Docket No. 23-437, FCC 23-115, 2023 WL 8889607 (Dec. 21, 2023) (proposing a reporting framework that “would require public notice to the Commission of the beginning and resolution of any blackout and submission of information about the number of subscribers affected”); *Customer Rebates for Undelivered Video Programming During Blackouts*, Notice of Proposed Rulemaking, MB Docket No. 24-20, FCC 24-2, 2024 WL 212126 (Jan. 17, 2024) (seeking comment on whether to require cable operators and DBS providers to rebate subscribers for programming blackouts that result from failed retransmission consent negotiations or failed non-broadcast carriage negotiations); Federal Communications Commission, *Retransmission Consent*, <https://www.fcc.gov/media/policy/retransmission-consent> (last updated Sept. 27, 2021).

⁶⁵ *See NPRM*, 2023 WL 4105426 at *3, para. 9. Enterprise customers include bulk purchasers (such as multiple dwelling unit (MDU) or multiple tenant environment (MTE) owners) and typically do not include small business or residential customers. *See* NCTA Comments at 8.

⁶⁶ *See* Local Government Reply Comments at 9 (“[R]esidents of multi-dwelling units (MDUs) can often be the most vulnerable consumers and should not be excluded from the proposed rule’s protections.”).

⁶⁷ *See* NCTA Comments at 8 (“[E]nterprise customers and bulk purchasers (such as multiple dwelling unit (MDU) or multiple tenant environment (MTE) owners) should not be covered by the proposed rule.”); DIRECTV Comments at 16-17 (suggesting the Commission not regulate business services, as enterprise customers are sophisticated entities that do not need the Commission’s protection). *See also Safeguarding and Securing the Open Internet*, WC Docket No. 23-320, FCC 23-83, Notice of Proposed Rulemaking, 2023 WL 8543459 at *25, para. 60 (rel. Oct. 19, 2023) (explaining that the definition of “mass-market retail services” “excludes enterprise service offerings, which are typically offered to larger organizations through customized or individually negotiated arrangements, and special access services”).

⁶⁸ *See NPRM*, 2023 WL 4105426 at *2, para. 7.

⁶⁹ *See* Local Government Comments at ii (“urg[ing] the Commission to require cable operators and DBS providers to clearly and prominently display the total cost of video programming service and separately itemize the elements that compose that aggregate cost”); NCTA Reply Comments at 14-16; Cable Company Reply Comments at 5, 7; DIRECTV Comments at 13-14; NCTA Reply Comments at 15 (citing *Nat’l Inst. of Family and Life Advocates v. Becerra*, 138 S. Ct. 2361, 2372, 2377 (2018) (rejecting a compelled disclosure where the record showed that a

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and accurate communication of the aggregate price of video service that the cable operator or DBS provider charges best achieves our goal of promoting transparency in promotional and billing material.⁷⁰

a. Compliance Date

18. The “all-in” rule must be fully implemented within nine months of release of this *Report and Order* or after the Office of Management and Budget completes review of any information collection requirements that may be required under the Paperwork Reduction Act of 1995 (PRA),⁷¹ whichever is later, with the exception of small cable operators which will have 12 months to come into compliance. In the *NPRM*, we sought comment on what would be a reasonable implementation period for providers to update their systems to reflect any changes if we were to adopt the “all-in” price.⁷² Verizon has suggested the Commission “allow at least six months for providers to comply and ensure ‘a reasonable implementation period for providers to update their system,’ [and] an additional six months for parties to comply with any rules that affect legacy plans.”⁷³ NCTA contends that “given the scope of changes that could be necessary to implement an all-in pricing rule, the Commission should grant at least 12 months for operators to come into compliance.”⁷⁴ ACA Connects likewise argues that the Commission should provide at least twelve months for providers to implement any requirements, particularly for smaller cable operators that use software platforms from third-party vendors.⁷⁵ We conclude that a nine-month implementation period will be sufficient to fully implement the “all-in” rule, which will afford time to affect operating systems and address legacy plan billing. We note that Congress afforded MVPDs six months to implement the billing requirements of the TVPA and conclude that nine months for most providers is a time period that will similarly benefit consumers when implementing the “all-in” rule.⁷⁶

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smaller warning – half the size – would accomplish the government’s stated goals)); Verizon Comments at 9 n.21 (“The Commission should not regulate the even finer details of how such itemized or bundled charges are displayed on the bill by defining the term ‘prominent.’”).

⁷⁰ See Consumer Reports and Public Knowledge Comments at 4 (supporting “a strong requirement to display a prominent line item of the all-in price for video service as suggested by the Commission in the [*NPRM*]”).

⁷¹ Pub. L. No. 104-13, 109 Stat. 163 (1995) (codified in Chapter 35 of title 44 U.S.C.).

⁷² *NPRM*, 2023 WL 4105426 at *3, para. 9.

⁷³ Verizon Nov. 13 *Ex Parte* at 2 (quoting *NPRM*, 2023 WL 4105426 at *3, para. 9).

⁷⁴ NCTA Feb. 14 *Ex Parte* at 3. See also DIRECTV Mar. 7 *Ex Parte* at 2 (suggesting that the Commission “either extend[] the overall deadline to twelve months or maintain[] the current nine-month deadline for advertisements but allow[] an additional six months for billing”).

⁷⁵ As ACA explains, “smaller operators are dependent on third-party vendors that serve many customers, and smaller systems often have to ‘wait in line’ behind larger ones when implementing any changes to their billing systems.” ACA Connects Mar. 8 *Ex Parte* at 2. This is similar to the delays that small operators face in obtaining equipment that complies with our rules. See *TiVo Inc.’s Request for Clarification and Waiver of the Audiovisual Output Requirement of Section 76.640(b)(4)(iii), etc.*, MB Docket No. 12-230, etc., Memorandum Opinion and Order, 27 FCC Rcd 14875, 14884, para. 17 (observing that “small cable operators have, in the past, experienced difficulty obtaining compliant devices in the same time frame as larger operators”) (2012).

⁷⁶ Television Viewer Protection Act of 2019, Pub. L. No. 116-94, 133 Stat. 2534 (2019) § 1004(b) (“Section 642 of the [Act] ... shall apply beginning on the date that is 6 months after the date of the enactment of this Act. The [Commission] may grant an additional 6-month extension if [it] finds that good cause exists for such ... extension.”). The Commission granted a six-month extension due to “the national emergency concerning the COVID-19 pandemic.” *Implementation of Section 1004 of the Television Viewer Protection Act of 2019*, Order, 35 FCC Rcd 3008, 3009, para. 3 (MB 2020).

However, given the concerns raised by ACA Connects, we give small cable operators, i.e., those with annual receipts of \$47 million or less, an additional three months to come into compliance.⁷⁷

b. Bundled Services

19. The “all-in” rule requires clear, easy-to-understand, and accurate disclosure of the aggregate cost of video programming when a cable operator or DBS provider promotes or bills for video programming that is part of a bundle. Bundled services are increasingly popular among consumers. We agree with Verizon that bundles can be economically efficient and benefit consumers, and allow video programming service providers to distinguish themselves.⁷⁸ As part of the *NPRM*, the Commission asked for comment on whether to apply the “all-in” rule in circumstances where the cable operator or DBS provider bundles video programming with other services like broadband Internet service.⁷⁹ The Commission also inquired as to whether it was possible to provide an “all-in” price, as Verizon explains, “where the video component has not been priced or itemized separately from the bundle as a whole.”⁸⁰

20. The record raises issues with how bundled service offerings disclose and bill for the costs of video programming, particularly when charges and fees for the video programming element of the bundle increase due to a promotion schedule or otherwise. Consumer Reports argues “the video portion of a bundled offering should reflect the required prominent all-in price of the equivalent stand-alone video offering.”⁸¹ Truth in Advertising notes “deceptive pricing tactics” and comments that the rule should specifically address bundled and related services.⁸² The Connecticut Office of State Broadband submits that consumers would benefit from application of the “all-in” rule to the marketing and billing of oftentimes complicated bundles that include video programming service with other services, like phone and internet.⁸³ They discuss consumer reports of deceptive pricing specifically related to bundled services and are in favor of applying the “all-in” rule for the video programming portion of a bundled offering, “because many bundles are discounted”⁸⁴ and “the advertised prices for such bundles often omit fees that consumers are ultimately charged,” including video programming charges that unexpectedly increase the bottom-line monthly price of the bundled service.⁸⁵

21. Verizon and NCTA argue that applying the “all-in” rule to bundled packages that include video programming removes flexibility necessary to offer competitive packages, while potentially adding

⁷⁷ See 13 CFR § 121.201, NAICS Code 516210 (classifying “Media Streaming Distribution Services, Social Networks, and Other Media Networks and Content Providers” with annual receipts of \$47 million or less as small). See also *NPRM*, 2023 WL 4105426 at para. 20 (seeking comment on whether there are ways to limit any potential compliance burdens on providers, including “on small cable operators, as that term is defined by the Small Business Administration” and citing 13 CFR § 121.201, NAICS Code 516210).

⁷⁸ Verizon Comments at 11-12; Local Government Reply Comments at 11 (describing how “most streaming services offer very different products from cable and DBS providers”).

⁷⁹ *NPRM*, 2023 WL 4105426 at *2, para. 7.

⁸⁰ *Id.*; Verizon Comments at 11.

⁸¹ Consumer Reports and Public Knowledge Comments at 12.

⁸² Truth in Advertising Comments at 6, 8 (“TINA.org supports the Commission’s commencement of a rulemaking proceeding to address ... deceptive pricing tactics, and also urges the FCC to explicitly address bundled – and related – services in the text of the proposed rule.”).

⁸³ Connecticut Office of State Broadband Comments at 5 (explaining that “because so many of the cable subscribers bundle their video service with other services like phone and internet, the All- In rules need to be tailored to ensure that bundled services are not exempted”).

⁸⁴ Consumer Reports and Public Knowledge Comments at 12.

⁸⁵ Truth in Advertising Comments at 6, 7-8; Connecticut Office of State Broadband Comments at 5-6.

to consumer confusion.⁸⁶ Verizon contends that the “all-in” rule “threaten[s] to undermine this flexibility, by potentially requiring carriers to advertise and bill for a stand-alone price where none exists – that is, where the video component has not been priced or itemized separately from the bundle as a whole.”⁸⁷ As NCTA explains, video programming is “frequently bundled with other services, such as broadband ... and voice services, resulting in service packages that offer consumers a wide range of choices but do not easily lend themselves to apples-to-apples comparisons between providers.”⁸⁸ “[R]equiring an all-in price for video for bundled customers is also likely to increase customer confusion, not reduce it,” especially where the “consumers have been purchasing the plans for many years,”⁸⁹ Verizon asserts.

22. We find that application of the “all-in” rule is warranted when video programming service is offered and billed as part of a bundle of services. Our driving intent is to inform and enable consumers with information regardless of the type of service agreement they have with a provider, including agreements for bundles of services.⁹⁰ Thus, in circumstances in which a cable operator or DBS provider promotes or bills for a bundled service that includes video programming as part of a bundle that will result in a charge to a consumer, compliance with the “all-in” rule requires clear, easy-to-understand, and accurate disclosure of the aggregate customer fees and charges specific to video programming,⁹¹ and, if applicable, either the length of time that a promotional discount will be charged or the date on which a time period will end that will result in a price change for video programming. If a cable operator or DBS provider charges (or will charge) for a cost related to video programming in whole or in part (for example, charge for costs related to local broadcast programming), then disclosure of those costs must comply with the “all-in” rule. And if a discount is applied, it also must be presented in clear, easy-to-understand, and accurate terms, which includes any expiration date, if applicable, for example.⁹² In that manner, consumers will be better informed about an element of the service bundle that may lead to an unexpected charge or fee. Providers are free to describe in their promotional materials the value of bundling, including the discounts associated with bundling various services.

⁸⁶ Verizon Comments at 11; NCTA Reply Comments at 4 (describing the difficulty of applying the “all-in” rule to bundled services, such as broadband and voice, making “all-in” price comparisons “more complex and ... misleading”), 13-14 (describing how application of the “all-in” rule to service bundles “would not give an accurate picture to the consumer of the price they are paying, and would therefore be misleading”).

⁸⁷ *Id.* at 11-12 (explaining that some bundled offerings “contain no standalone price of video service or any separate video-specific discount, so providers would be forced into an arbitrary allocation of the discount among the bundled services” and how Verizon has provided a breakdown of separate prices and discounts for each service so customers can readily identify the portion of the bill attributable to video service); USTelecom Reply Comments at 3 (discussing the challenges with applying the “all-in” rule to bundles considering the difficulty of accurately pricing each element of the bundle (quoting Verizon Comments at 12)).

⁸⁸ NCTA Comments at 7.

⁸⁹ Verizon Comments at 12.

⁹⁰ See NAB Comments at 4 (“[T]hese fees can significantly increase the advertised and billed price of MVPD service.”).

⁹¹ Because our intent is to inform consumers about the price they are paying specifically for video programming and enable them to comparison shop, we disagree with NCTA’s contention that a provider should have the option of complying with the “all-in” rule by stating the full price of the bundle, inclusive of all video programming related fees. See NCTA Mar. 6 *Ex Parte* at 3.

⁹² Consumer Reports and Public Knowledge Comments at 12 (supporting disclosure of “clear and concise terms, including any expiration date”); see generally *Empowering Broadband Consumers Through Transparency*, CG Docket No. 22-2, Report and Order and Further Notice of Proposed Rulemaking, FCC 22-86, 37 FCC Rcd 13686, 13695, para. 25 (rel. Nov. 17, 2022) (*Broadband Transparency Order*) (discussing benefits of requiring the broadband label to “clearly disclose either the length of the introductory period or the date on which the introductory period will end”).

2. Specific Implementation Issues Raised in the Record

a. Billing Materials

23. *Pricing Disclosures And Billing Material.* The “all-in” rule requires providers to state the aggregate monthly (or regularly occurring) price for video programming on billing material so that consumers know the charges they will incur during the term of service and when.⁹³ We find requiring an “all-in” price on billing material further enables consumers access to important information about the cost of video programming, including increases in prices during the term of service.⁹⁴ DIRECTV contends that, as an alternative to the “all-in” rule, the Commission could require that bills be “accurate” and “disclose key information regarding programming-related fees clearly and conspicuously and in close proximity to pricing.”⁹⁵ We do not, however, accept that as an alternative to the “all-in” rule, as this proposal is a more subjective alternative that would be difficult to enforce and does not address issues identified in the record specific to charges related to video programming. Thus, subscriber billing material for video programming, standalone or otherwise, requires inclusion of the aggregate monthly amount the subscriber’s video programming will ultimately cost including all video programming related fees.⁹⁶ If a price is introductory or limited in time, for example, then the “all-in” rule requires customer billing to include clear, easy-to-understand, and accurate disclosure of the date the promotional rate ends (by stating either the length of a promotional period or the date on which it will end), and the post-promotion “all-in” rate (i.e., the roll-off rate) 60 and 30 days before the end of any promotional period⁹⁷ (as is necessary when offering a varying rate in promotional material, discussed below).⁹⁸

⁹³ See generally *id.* at 13695, para. 27 (“In the interest of simplicity and based on the record, at this time we require providers to display only the ‘retail’ monthly broadband price, by which we mean the price a provider offers broadband to consumers before applying any discounts such as those for paperless billing, automatic payment (autopay), or any other discounts.”).

⁹⁴ See Local Government Comments at 11 (suggesting the “all-in” rule for existing subscribers). See also ABC Television Affiliates Association Reply Comments at 6 (arguing that cable operators and DBS providers “should not be allowed to ... bill their subscribers in a manner that obfuscates the true cost of their services”). We note that section of 76.1603 of our rules requires cable operators to provide written notice to subscribers of any changes in rates or services at least 30 days in advance of the change, unless the change results from circumstances outside of the cable operator’s control in which case notice should be provided as soon as possible. See 47 CFR § 76.1603(b) (also requiring that notice of rate changes include the precise amount of the rate change and explain the reason for the change in readily understandable terms). See also Local Government Comments at 11 (suggesting “a notice should be given at least 30 days in advance of any price change to give consumers the opportunity to cancel their service and avoid the price increase”); Local Government Reply Comments at 9 (arguing that “the all in contract price must be the price for the entire term of the contract” and, “[i]f companies want the flexibility to change that subscriber’s price at any time, they can simply not offer the price guarantee”).

⁹⁵ DIRECTV Comments at 2 (“The Commission could permit an alternative to all-in pricing under which bills must (1) be accurate and (2) disclose key information regarding programming-related fees clearly and conspicuously and in close proximity to pricing.”).

⁹⁶ See 47 U.S.C. § 562(a)(1)-(3) (“Consumer Rights in Sales”).

⁹⁷ The “roll-off rate” is the rate as calculated at the time it is provided and does not require projections or estimates of what the rate will be at the time the promotional rate expires. See NCTA Mar. 6 *Ex Parte* at 2 (discussing how “cable operators do not know what their post-promotional rate will be, as rates are impacted by a variety of factors not under their exclusive control”). We recognize that rates may fluctuate during the term of the promotional period, and as such, disclosure of the post-promotional rate does not “effectively freeze the rates that an operator can charge during the promotional period,” as NCTA posits. *Id.* To the extent that a provider subject to this requirement has multiple or graduated roll-off periods, the operator will need to provide the roll-off rate 60 and 30 days before the end of each promotional period. See NCTA Mar. 6 *Ex Parte* at 2 n.7 (discussing disclosure of promotions that “include graduated roll-off prices”).

24. *Grandfathered Service Plans.* We are persuaded that the “all-in” rule should apply to billing materials for legacy or grandfathered service plans that cable operators and DBS providers no longer offer to subscribers and when promotional material is used to market legacy plans that are being renewed by customers. In the *NPRM*, the Commission sought comment on whether the proposal should apply to existing customers with legacy plans that are no longer available,⁹⁹ and industry commenters raise concern with how the “all-in” rule would apply to existing subscribers with legacy or grandfathered plans.¹⁰⁰ Verizon suggests we exempt legacy or grandfathered plans that are no longer available to new customers as the Commission did with the Broadband Nutrition Labels required of broadband Internet service providers.¹⁰¹ According to DIRECTV, “[a]t a minimum, the Commission should not seek to regulate bills for legacy offers not available to new subscribers,” which would have a “substantially diminished benefit for purposes of comparison shopping.”¹⁰² Consumer Reports disagrees, citing consumer benefits of pricing disclosures and suggests the “task need not be more complicated than a simple case of addition” of the “all-in” price.¹⁰³

25. We are persuaded that consumers of legacy plans benefit as much as consumers of available plans and that the benefits of providing an “all-in” price outweigh burdens described by industry.¹⁰⁴ It is a complicated process, according to Verizon, for it to apply an “all-in” rule across a wide variety of pricing plans and content packages that have changed over time to adapt to market forces,¹⁰⁵ and we appreciate the difficulties involved with changing various billing formats all at once.¹⁰⁶ We disagree, however, that inclusion of the “all-in” price on billing material for legacy plans will “cause unnecessary confusion.”¹⁰⁷ To the contrary, application of the “all-in” rule to the billing of legacy service plans, including potentially long-term or renewable agreements, will benefit consumers’ knowledge of how much their video programming service costs. As for promotional materials, grandfathered plans are not available to new consumers by definition, and therefore we expect that cable operators and DBS providers will not be marketing the services in a way that would trigger the “all-in” rule. But if the operator or provider issues promotional material used to inform or market a legacy plan to existing

⁹⁹ See *NPRM*, 2023 WL 4105426 at *3, para. 9.

¹⁰⁰ We refer to the terms “legacy” and “grandfathered” plans interchangeably; Verizon, for example, refers to legacy plans, while the Commission considered similar issues in the *Broadband Transparency Order* when discussing grandfathered plans. See *Broadband Transparency Order*, 37 FCC Rcd at 13718-19, paras. 100-04.

¹⁰¹ Verizon Comments at 8 (citing *Broadband Transparency Order*, 37 FCC Rcd at 13718, para. 100). See also ACA Connects Mar. 7 *Ex Parte* at 2, n.4 (arguing that the Commission “should decline to apply any requirements to legacy plans”); ACA Connects Mar. 8 *Ex Parte* at 2 (further contending that “cable operators often have dozens of such [legacy] plans, which can be artifacts of acquisitions,” and “[r]equiring changes to legacy-plan bills thus would greatly increase the compliance burden but would not make most legacy-plan subscribers any better off”).

¹⁰² DIRECTV Comments at 17 (citing *Broadband Transparency Order*, 37 FCC Rcd at 13718, para. 100). See also DIRECTV Mar. 7 *Ex Parte* at 2.

¹⁰³ Consumer Reports and Public Knowledge Comments at 12.

¹⁰⁴ See DIRECTV Comments at 17; Verizon Comments at 4; USTelecom Comments at 2-3 (citing DIRECTV Comments at 17; Verizon Comments at 7).

¹⁰⁵ Verizon Comments at 4. See also Verizon Mar. 6 *Ex Parte* at 1-2. In 2020, for example, Verizon transitioned from a Fios TV standalone product and Fios TV as a bundle with other services to a “Mix & Match” model enabling consumers to purchase TV, internet, and phone service in any combination. *Id.*; Verizon Reply Comments at 5-7.

¹⁰⁶ Verizon Comments at 8 (“In addition, regulation of legacy plans could provide an incentive for providers to eliminate them, which would lead to further consumer disruption.”).

¹⁰⁷ Verizon Reply Comments at 6 (“Requiring changes to these customers’ legacy bills would cause unnecessary confusion, especially when they have been purchasing the same plans for many years and are therefore fully aware of the total costs of the services to which they subscribed.”).

customers that are subscribed to such plans, then that material must include the “all-in” price.¹⁰⁸ By applying the “all-in” rule in this manner, we avoid unnecessary confusion to customers, while enabling subscriber access to information that is key to their understanding of the services they are purchasing under the grandfathered plans and ability to comparison shop.¹⁰⁹

b. Promotional Materials

26. *Time-Limited Promotional Discounts.* The “all-in” rule applies to promotional materials that state a price, including in circumstances involving a promotional discount when the amount billed to the customer by the cable operator or DBS provider may change (for example, at the end of a promotional period).¹¹⁰ And if a discount is applied, it also must be presented in clear, easy-to-understand, and accurate terms, which includes any expiration date, if applicable, for example. According to NCTA, consumers “do not jump immediately from advertising to bills,” rather they typically go through the “sales process during which providers disclose the total price that the consumer would pay, inclusive of the relevant fees.”¹¹¹ The record, however, indicates that the onboarding sales process has not proven to be entirely effective.¹¹² The record includes evidence indicating persistent confusion over the price for video programming, particularly with how the price for video programming is described in promotional material and when the price may vary over the term of the service agreement.¹¹³

¹⁰⁸ As we discuss below, we apply the “all-in” rule to promotional material to further our principal goal of allowing consumers to comparison shop among services, but new customers comparison shopping do not benefit from an “all-in” rule price for service that is not available to them. *See generally Broadband Transparency Order*, 37 FCC Red at 13718, para. 101 (“And such labels may even confuse consumers if those plans are not actually available to them.”).

¹⁰⁹ Consumer Reports and Public Knowledge Comments at 7-8.

¹¹⁰ NCTA argues “that the Commission did not provide notice that it was considering rules relating to promotional discounts in its Notice of Proposed Rulemaking” and thus a rule would violate the Administrative Procedure Act. NCTA March 6 *Ex Parte* at 2. *See also* State Cable Ass’ns Mar. 5 *Ex Parte* at 4-5. This argument is without merit. As an initial matter, the Commission in the *NPRM* notes that the TVPA provides that electronic bills must list, among other things, “the termination date of any applicable promotional discount.” *NPRM*, 2023 WL 4105426 at *2, para. 4 n.3, *7, para. 16. The *NPRM* also noted that the goal of the proposals in the *NPRM* was to provide consumers with the price of video programming service for which they are “or will be responsible” in clear terms, in order to allow consumers to make informed choices. *Id.* at *2, para. 6. In addition, the Commission specifically sought “comment on how to apply our [all-in] proposal to different types of promotional materials.” *Id.* at *3, para. 9. Several commenters filed comments suggesting various ways to craft the rule to handle promotional rates and discounts, and NCTA responded to some of those arguments in its reply comments. *See, e.g.*, Consumer Reports and Public Knowledge Comments at 12; Local Government Comments at 3 (“Providers should be subject to a requirement similar to the TVPA’s terms with respect to the disclosure of the length of a promotional rate or discount.”); NCTA Reply at 8-10. Therefore, we reject the argument that the *NPRM* did not provide notice that our final rule would address promotional discounts.

¹¹¹ NCTA Comments at 4-6.

¹¹² *See* Local Governments Reply Comments at 1-2 (discussing how “the TVPA requires providers to disclose the total monthly charge for services provided by MVPDs, including the dates discounts will expire and a good faith estimate of any government-imposed tax or fee,” and that “[w]ithin 24 hours of signing up, a provider must send a written disclosure of that information, and” provide ability to cancel without a penalty, “[b]ut the TVPA will not work well if consumers are already confused by marketing and advertising by the time they reach the 48-hour disclosure and cancellation period provided by the TVPA”).

¹¹³ *See supra* Section III.A. *See also* Local Government Comments at 7 (describing “‘teaser’ rates” and how “Fairfax County has received complaints from consumers confused by teaser rates and from cable operator policies that resulted in inconsistent implementation of promotional rates by a cable operator in northern Virginia”).

27. We disagree that applying the “all-in” rule to promotional rates will undermine transparency and potentially discourage the use of promotions altogether.¹¹⁴ We find that knowledge of how a time-limited discounted price will increase to the ultimate price the consumer will be charged for video programming service gives consumers a reliable idea of what they will pay each month that incorporates pricing variables, and does so in a way that is uniform among providers and enables comparison shopping. Compliance with the “all-in” rule therefore includes disclosing the base (or standalone) rate with a subtracted amount (the amount after application of any promotional discount) in a way that enables consumers to know the amount they will be required to pay each month (each billing cycle) during the term of the service agreement.¹¹⁵ If, for example, a promotion or other circumstance includes an introductory offer of free or discounted channels and the “all-in” price will change at the conclusion of the promotional period, then the cable operator or DBS provider must state in promotional materials the current cost of video programming service that the consumer will pay initially and state the “all-in” price that applies following the introductory period or promotion.¹¹⁶ To the extent that a provider subject to this requirement has multiple or graduated roll-off periods, the operator must, at a minimum, provide the initial promotional rate and the final rate after all promotional discounts have expired. Consumers must simply be enabled to know what amount they can expect to find as a charge on their bill, particularly when the amount is scheduled to change due to promotions or other circumstances.

28. *Regional And National Promotional Material.* We conclude that the “all-in” rule applies to regional and national promotions of cable operators and DBS providers. Service providers raise concerns with how an “all-in” pricing requirement would affect regional and national promotional efforts.¹¹⁷ In the *NPRM*, the Commission asked how it should account for national, regional, or local advertisements, where the actual price may not be the same for all consumers receiving the promotional materials due to market-specific price variation.¹¹⁸ DIRECTV argues that the “all-in price proposal cannot account for national advertising.”¹¹⁹ DIRECTV predominantly advertises nationally, but “charges different [regional sports] fees in different markets based on the differing fees it pays for access to those [regional sports networks].”¹²⁰ According to DIRECTV, a single, “all-in” price afforded to everybody could “provide inaccurate information for most subscribers and potential subscribers no matter what price

¹¹⁴ DIRECTV Comments at 12 (noting that if the “ultimate cost of promotions must be included in an ‘all-in’ price,” the pricing would be inaccurate for customers who cancel before the end of the promotional period when channels are offered for free or at a reduced cost); ACA Connects Comments at 8 (The “proposed rule is more likely to have the counterproductive effect of making the costs of cable service less transparent, and making bills and promotions more confusing for consumers.”).

¹¹⁵ As discussed above, this is the rate as calculated at the time it is provided and does not require projections or estimates of what the rate will be at the time the promotional rate expires. *See supra* note 97.

¹¹⁶ *See generally Broadband Transparency Order*, 37 FCC Rcd at 13695, para. 25 (“We agree with those commenters that argue that the label should also clearly disclose either the length of the introductory period or the date on which the introductory period will end.”). We decline to act on other issues, such as the City of Seattle’s contention that cable operators should not be able to increase broadcast TV and regional sports fees during the promotional period, considering our focus on the core issues identified in the record relating to the disclosure of fees. City of Seattle Comments at 6. We find this proposal goes beyond the scope of this proceeding.

¹¹⁷ NCTA Reply Comments at 4 (describing the “all-in” rule as difficult to implement because it “does not account for how any rule would apply to national advertising when fees vary from market to market—as they frequently do”); NCTA Comments at 5 (reporting that an “all-in” rule could “create substantial burdens for companies that offer services across multiple franchise areas but which advertise nationally or regionally”); Cable Company Reply Comments at 6 (arguing that the “all-in” rule will create “substantial burdens for companies that offer services across multiple franchise areas and advertise those services nationally or regionally”).

¹¹⁸ *See NPRM*, 2023 WL 4105426 at *3, para. 9.

¹¹⁹ DIRECTV Comments at 11.

¹²⁰ *Id.*

DIRECTV may choose to provide.”¹²¹ Likewise, NCTA states that there is a potential that the “all-in” requirement “would not give consumers an accurate estimate of the all-in price for video programming services available in their areas given the variation in these fees.”¹²² DIRECTV reports it may have to calculate a price using the most expensive regional sports programming fees, which “could artificially encourage customers and potential customers in markets without [regional sports networks] or with lower-priced [regional sports networks] to take service from one of DIRECTV’s competitors, particularly its unregulated online competitors.”¹²³

29. We find these arguments merely support the need for Commission action. A number of services and commodities are promoted and sold at nationwide or regional prices that include varying local costs, including services of cable operators and DBS providers.¹²⁴ These arguments support our conclusion that the manner in which promotional and billing information is being communicated with consumers currently is susceptible to costly misunderstandings. The separation of programming fees (such as the cost of regional sports programming fees) from the bottom-line, “all-in” price has been described as a leading contributor to customer confusion we seek to address. Costs may vary depending upon franchise area, as the NCTA, DIRECTV, and ACA explain,¹²⁵ but the exclusion of any and all amounts charged to the consumer for video programming leads to significant issues, as described in the record by individuals, organizations, and state and local governments. We disagree, therefore, that programming fees should be excluded from the “all-in” rule for regional or national promotions.¹²⁶

30. To address the fact that certain costs vary by region, our rule requires any advertised price to include all video programming fees that apply to all consumers in the market that the advertisement is targeted to reach. Providers may opt to provide a “starting at” price, or a range of prices that account for the fluctuation in video programming fees in the locations that the advertisement is intended to reach.¹²⁷ In this case, when an aggregate “all-in” price is not stated due to pricing fluctuation that depends on service location, the provider must state where and how consumers may obtain their subscriber-specific “all-in” price (for example, online at the provider’s website or by contacting a customer service or sales representative). At the time the potential consumer provides location information, online or otherwise, then the provider must state the “all-in” price. Providers also may state time-limited introductory prices that are available to all potential customers the advertisement is targeted

¹²¹ *Id.* See also NCTA Reply Comments at 4 (explaining that it would be difficult “[t]o avoid being misleading” when tailoring advertisements to reflect local variations in price because “advertised prices would either have to be geo-targeted to each media market – which is highly impractical ... or reflect a wide range of fees that would be of little use to customers”).

¹²² NCTA Comments at 5.

¹²³ DIRECTV Comments at 11-12.

¹²⁴ See, e.g., Thomas T. Nagle, John E. Hogan, Joseph Zale, *The Strategy and Tactics of Pricing* (5th ed. 2011).

¹²⁵ DIRECTV Comments at 11 (describing issues with advertising nationally while video programming fees it pays to provide service vary by location); NCTA Comments at 5 (discussing issues with “giv[ing] consumers an accurate estimate of the all-in price for video programming services available in their areas given the variation in these fees”); ACA Connects Comments at 14 (discussing how an “all-in” price might vary among the consumers that receive, or are targeted by, the advertisement). See also Consumer Reports and Public Knowledge Comments at 11; NTCA – The Rural Broadband Association Comments at 6.

¹²⁶ NCTA Comments at 5-6 (citing H.R. Rep. No 116-329, at 6).

¹²⁷ See NCTA Comments at 5-6 (explaining that “fees can vary from community to community or from state to state” and that currently “companies calculate and display all-in prices only when a consumer is actively considering purchasing service”); NCTA Reply Comments at 15 (discussing how “fees and charges can vary widely by geographic location”); ACA Comments at 15 (discussing how “there may be earlier stages in the process when the ‘all-in’ price may not be calculable because the consumer has not yet provided sufficient information about their location”).

to reach,¹²⁸ if the advertised price includes the video programming fees that apply to all consumers in the targeted market and the consumer has the ability to obtain an “all-in” price before ordering video programming, as discussed above.¹²⁹ This allows flexibility for service providers to highlight information in promotional and billing material while providing transparency to promotional material that reduces consumer confusion and enables comparison shopping with a budgets in mind. Our goal is to enable consumers to know the amount they will be billed for the service offered.

C. Legal Authority

31. We conclude that the TVPA, section 632 of the Act (covering cable operators), and section 335 of the Act (covering DBS providers), in addition to ancillary authority, provide ample authority for the “all-in” rule.¹³⁰ We also conclude that the “all-in” rule is consistent with the First Amendment. In the *NPRM*, the Commission asked “whether we should consider expanding the requirements of this proceeding to other types of [MVPDs] and on our authority to do so.”¹³¹ We decline to extend the “all-in” rule to other entities at this time given the lack of record evidence concerning the billing and advertising practices of non-cable and non-DBS video services.¹³²

1. Section 642 of the Act, 47 U.S.C. § 562 (Television Viewer Protection Act of 2019 (TVPA))

32. The Commission derives authority for the “all-in” rule from the TVPA requirements as it applies to electronic billing. Section 642 of the Act, as added by the TVPA, requires MVPDs to bill subscribers transparently when the MVPD sends an electronic bill, and specifically requires MVPDs to include in their bills “an itemized statement that breaks down the total amount charged for or relating to the provision of the covered service by the amount charged for the provision of the service itself and the amount of all related taxes, administrative fees, equipment fees, or other charges.”¹³³ As mandated by this statutory directive, the “all-in” rule requires cable operators and DBS providers to provide consumers with the total charge for all video programming and will ensure that consumers are provided complete and accurate information about the “amount charged for the provision of the service itself,” as Congress intended.¹³⁴ Such costs make up the charges for the “provision of the service itself” because broadcast channels, regional sports programming, and other programming track the statutory definition of “video programming” (that is, all are programming provided by, or generally considered comparable to programming provided by, a television broadcast station),¹³⁵ and video programming is, by definition, the

¹²⁸ NCTA Mar. 6 *Ex Parte* at 2.

¹²⁹ See Consumer Reports and Public Knowledge Comments at 2 (discussing issues with prices increased outside of a “locked-in” promotional rate”). See generally *Broadband Transparency Order*, 37 FCC Rcd at 13695, para. 25 (“conclud[ing] that if a provider displays an introductory rate in the label, it must also display the rate that applies following the introductory period”).

¹³⁰ 47 U.S.C. §§ 335, 552.

¹³¹ *NPRM*, 2023 WL 4105426 at *1, para. 3.

¹³² See NCTA Comments at 12; NCTA Reply Comments at 7; ACA Connects Comments at 16; DIRECTV Comments at 10-11.

¹³³ *NPRM*, 2023 WL 4105426 at *7, para. 16; 47 U.S.C. § 562(b)(1), (d)(3) (defining “covered service” as “service provided by a multichannel video programming distributor [sic], to the extent such distributor is acting as a multichannel video programming distributor”); NCTA Reply Comments at 3 (noting that the TVPA addresses transparency of payment by “requiring electronic bills to include an itemized statement that breaks down the total amount charged for or relating to the provision of [video] service”).

¹³⁴ 47 U.S.C. § 562(b)(1).

¹³⁵ *Id.* § 522(20) (“the term ‘video programming’ means programming provided by, or generally considered comparable to programming provided by, a television broadcast station”).

service that an MVPD makes available for purchase.¹³⁶ Listing such costs as below-the-line fees potentially results in confusion for consumers about the “amount charged for the provision of the service itself,” because the word “itself” suggests a single charge for the total service rather than one charge for one portion of the service and then a separate charge for other programming provided. This contravenes Congress’s core purpose for enacting the legislation: to curb MVPDs’ practice of charging “unexpected and confusing fees,” but the record, including recent press reports, suggest that this practice continues.¹³⁷

33. We observe that the TVPA provides for the disclosure of a second group of costs on electronic bills – i.e., “the amount of all related taxes, administrative fees, equipment fees, or other charges.”¹³⁸ Charges and fees relating to video programming (including broadcast channels, regional sports programming, and other programming) do not fall within this category because video programming, by definition, is the service that an MVPD makes available for purchase—in other words, the “service itself.”¹³⁹ Thus, the most reasonable reading of the statute is that the terms “taxes,” “administrative fees,” “equipment fees,” or “other charges” do not include separate charges for various types of video programming (e.g., amounts paid for retransmission consent rights or rights to transmit regional sports programming or any other programming).¹⁴⁰ We accordingly reject NCTA’s argument that programming fees (such as retransmission consent fees) fall within this “second group” of costs on electronic bills.¹⁴¹

2. Section 632 of the Act, 47 U.S.C. § 552 (Cable Operators)

34. We conclude that section 632 of the Act provides us with authority to adopt the “all-in” rule as it will apply to cable operators.¹⁴² Section 632(b) of the Act provides the Commission authority to establish customer service standards regarding billing practices and other communications with subscribers, and the Commission has relied on that authority for decades to regulate in this area.¹⁴³

¹³⁶ *Id.* § 522(13) (“the term ‘multichannel video programming distributor’ means a person such as, but not limited to, a cable operator, a multichannel multipoint distribution service, a direct broadcast satellite service, or a television receive-only satellite program distributor, who makes available for purchase, by subscribers or customers, multiple channels of video programming”).

¹³⁷ Congress expressed specific concern that consumers face “unexpected and confusing fees when purchasing video programming,” including “fees for broadcast TV,” and noted that the practice of charging these fees began in the late 2000s. H.R. Rep 116–329, at 6 (2019). We reject the claim that the “only authority that the TVPA gave the Commission” was to grant MVPDs an additional six months to comply with the statute. State Cable Ass’ns Mar. 5 *Ex Parte* at 4 n.19. The courts have affirmed the Commission’s authority to promulgate rules implementing a section of the Communications Act without an explicit delegation to the Commission to interpret that particular statutory section. *See Alliance for Community Media v. FCC*, 529 F.3d 763, 773 (6th Cir. 2008) (affirming the Commission’s jurisdiction to promulgate rules implementing section 621(a)(1) of the Communications Act even in the absence of an explicit delegation of rulemaking power to the Commission in that statutory section).

¹³⁸ 47 U.S.C. § 562(b)(1).

¹³⁹ *Id.* § 522(13).

¹⁴⁰ The “all-in” rule is explicit that cable operators and DBS providers may list certain discrete costs. 47 U.S.C. § 542(c) (Cable operators may identify, “as a separate line item on each regular bill of each subscriber, ... [t]he amount of the total bill assessed to satisfy any requirements imposed on the cable operator by the franchise agreement to support public, educational, or governmental channels or the use of such channels.”).

¹⁴¹ NCTA Comments at 6-7.

¹⁴² 47 U.S.C. § 552.

¹⁴³ *See, e.g., Cable Service Change Notifications; Modernization of Media Regulation Initiative; Amendment of the Commission’s Rules Related to Retransmission Consent*, MB Docket Nos. 19-347, 17-105, 10-71, Report and Order, 35 FCC Rcd 11052, 11057, para. 8 (2020); *Implementation of Section 8 of the Cable Television Consumer Protection and Competition Act of 1992; Consumer Protection and Customer Service*, MB Docket Nos. 92-263, Report and Order, 8 FCC Rcd 2892, 2906-07, paras. 65-66 (1993).

Section 632(b)(3) also supports the Commission adopting customer service requirements regarding, among other enumerated topics, “communications between the cable operator and the subscriber (including standards governing bills and refunds).”¹⁴⁴ The legislative history of section 632 provides that “[p]roblems with customer service have been at the heart of complaints about cable television,” and indicates Congress’ belief that “strong mandatory requirements are necessary.”¹⁴⁵ Congress expected “the FCC, in establishing customer service standards to provide standards addressing ... billing and collection practices; disclosure of all available service tiers, [and] prices (for those tiers and changes in service) ...”¹⁴⁶ Our “all-in” rule addresses cable operators’ billing practices, i.e., requiring clear, easy-to-understand, and accurate price information in customer bills for video programming service, and, therefore, is a customer service matter within the meaning of section 632(b)(3). In addition, the statute identifies the specific areas for the Commission to act as the “minimum” standards.¹⁴⁷ Thus, by its terms, section 632(b) gives the Commissions broad authority to adopt customer service standards that go beyond those enumerated in the statute.¹⁴⁸ We find that the “all-in” rule is also authorized under our general authority in section 632(b) to establish “customer service” standards. The term “customer service” is not defined in the statute. In 1984, when Congress first enacted section 632 authorizing franchising authorities to establish customer service requirements, the legislative history defined the term “customer service” to mean “in general” “the direct business relation between a cable operator and a subscriber,” and goes on to explain that “customer service requirements include ... the provision to customers (*or potential customers*) of information on billing or services.”¹⁴⁹ In 1992, Congress retained this term when amending section 632 to require the FCC to adopt “customer service” standards.¹⁵⁰ The “all-in” rule imposes requirements on billing information provided to potential customers in promotional materials, which, as reflected in the legislative history, is a customer service matter.¹⁵¹ Accordingly, billing communications in customer bills as well as promotional materials and advertising aimed at potential customers are precisely the type of customer service concerns that Congress meant to address when it enacted section 632.¹⁵² Thus, the “all-in” rule covering bills, advertisements and promotional materials is within the statute’s grant of authority.

¹⁴⁴ 47 U.S.C. § 552(b).

¹⁴⁵ See S.Rep. No. 92, 102nd Cong. 1st Sess. 1991 at 21-22, *reprinted in* 1992 U.S.C.C.A.N. 1133, 1153; City of Local Franchise Authorities Reply Comments at 6 (noting that Congress found that “customer service requirements include requirements related to ... ‘provision[s] to customers (or potential customers) of information on billing services’” (quoting H.R. Rep. No. 98-934, at 79 (1984))).

¹⁴⁶ See S.Rep. No. 92, 102nd Cong. 1st Sess. 1991 at 21-22, *reprinted in* 1992 U.S.C.C.A.N. 1133, 1153.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.* (“The Commission shall ... establish standards by which cable operators may fulfill their customer service requirements”); see, e.g., *Cablevision v. FCC*, 649 F.3d 695, 705-06 (D.C. Cir. 2011) (by requiring mandatory “minimum” regulations, Congress established “a floor rather than a ceiling,” leaving the Commission with authority to issue rules that go beyond those specified in the statute); *NCTA v. FCC*, 567 F.3d 659, 664-65 (D.C. Cir. 2009) (by describing the “minimum contents of regulation” the statutory structure indicates that “Congress had a particular manifestation of a problem in mind, but in no way expressed an unambiguous intent to limit the Commission’s power solely to that version of the problem”).

¹⁴⁹ H.R. Rep. 98-934, at 79 (1984), *reprinted in* 1984 U.S.C.C.A.N. 4655, 4716 (emphasis added).

¹⁵⁰ See S.Rep. No. 92, 102nd Cong. 1st Sess. 1991 at 21-22, *reprinted in* 1992 U.S.C.C.A.N. 1133, 1153.

¹⁵¹ H.R. Rep. 98-934, at 79 (1984), *reprinted in* 1984 U.S.C.C.A.N. 4655, 4716 (emphasis added).

¹⁵² Local Franchise Authorities Comments at 3-4 (“The Commission has statutory authority to establish additional customer service standards for cable operators, including standards for prospective subscribers” under section 632 of the Act, as “[t]he proposed rule fits squarely in this provision with respect to cable operators’ billing standards for current subscribers.”).

35. We thus reject commenters' argument that covering "non-subscribers" or "potential subscribers" under the "all-in" rule renders it a "consumer protection" law under section 632(d) and thus falls "outside" the Commission's authority, as evidenced by section 632's title, which distinguishes between customer service and consumer protection.¹⁵³ As mentioned above, the "all-in" rule, which covers both current and potential subscribers, is a customer service requirement that is authorized under section 632(b). Moreover, section 632(d) does not place any limitation on the Commission's authority; rather it preserves States' and local governments' ability to enact and enforce consumer protection laws and customer service requirements that are not specifically preempted by the Cable Act.¹⁵⁴ We likewise reject commenters' argument that the text of the statute—which "uses the terms 'customer' and 'subscriber', and refers to 'installations, outages, and service calls', and discusses 'bills and refunds'"—indicates that section 632 only addresses "interactions between the cable operators and current and former subscribers" but "not potential subscribers."¹⁵⁵ Those statutory terms are found in subsection (b)'s list of specific areas for the Commission to address—areas the statute makes clear are "minimum" requirements.¹⁵⁶ Commenters' statutory-narrowing argument essentially reads out of the provision the Commission's general grant of authority in subsection (b) to "establish standards by which cable operators may fulfill their customer service requirements."¹⁵⁷ Moreover, we are not persuaded by commenters' argument that the use of the generic term "subscriber" means "actual cable subscribers" and excludes "potential subscribers" from the authority granted under subsection (b).¹⁵⁸ We find that the better reading of the statute is that the term "subscriber" is not limited to current subscribers because "the term [subscriber] is sufficiently ambiguous to include those considering a subscription," as well as current subscribers considering renewal and reviewing promotional material.¹⁵⁹ Indeed, those commenters arguing for a narrow construction concede that the term "subscriber" used in subsection (b) can be read to cover both "current and former subscribers."¹⁶⁰ And their argument ignores the legislative history, which, as discussed above, indicates Congressional intent to cover under subsection (b) billing information provided to both current and *potential* customers.¹⁶¹ This language from the legislative history—including the expectation that the Commission would adopt standards regarding "disclosure of all available service tiers, [and] prices"—suggests that Congress granted the Commission authority over how

¹⁵³ NCTA Reply Comments at 6.

¹⁵⁴ 47 U.S.C. § 552(d).

¹⁵⁵ NCTA Reply Comments at 6; *see also* NCTA Comments at 8-9 (arguing that section 632(b) "gives the Commission **no authority** to adopt rules for advertisements and promotional materials addressed to *prospective subscribers* among the general population, who are plainly not 'subscribers,' have no direct business relationship with the cable operator, and do not receive the 'bills and refunds' mentioned in the text of the statute") (emphasis in original); Cable Company Reply Comments at 4-6 (arguing that section 632(b) does not give the Commission authority to "regulate communications with the general public or 'potential subscribers'"; rather, section 632(b) uses the terms 'customer' and 'subscriber'... all of which only address interactions between cable operators and current and former subscribers").

¹⁵⁶ 47 U.S.C. § 552(b)(1)-(3).

¹⁵⁷ *Id.* § 552(b).

¹⁵⁸ NCTA Comments at 8; NCTA Reply Comments at 6.

¹⁵⁹ Consumer Reports and Public Knowledge Reply Comments at 7-8 (discussing how "the term 'subscriber' need not be limited to current subscribers [and] is sufficiently ambiguous to include those considering a subscription (as well as those who have terminated their subscription)").

¹⁶⁰ NCTA Comments at 8 (emphasis added).

¹⁶¹ H.R. Rep. 98-934, at 79 (1984), *reprinted in* 1984 U.S.C.C.A.N. 4655, 4716.

cable operators disclose their prices to consumers, including prices for services to which consumers may have not yet subscribed.¹⁶²

36. *Section 4(i) of the Act*, 47 U.S.C. § 154(i). Applying the “all-in” rule’s to the promotional materials of cable operators for video programming is also a proper exercise of our authority under section 4(i) of the Act.¹⁶³ The Commission is specifically delegated authority under the Communications Act to adopt standards governing communications between the cable operator and subscriber regarding bills.¹⁶⁴ Extending the “all-in” requirement to promotional material when a price for video programming is offered is necessary to achieve customer service standards in light of issues raised in the record. Otherwise, consumers might be misled by confusing or misleading pricing information from promotional material and enter into long-term contracts with higher charges than understood would be due. This would undermine the very purpose of the “all-in” rule as applied to bills, which aims to ensure consumers receive clear, easy-to-understand, and accurate pricing information.

3. Section 335 of the Act, 47 U.S.C. § 335 (Direct Broadcast Service Providers)

37. Section 335 of the Act provides the Commission with authority to adopt the “all-in” rule as it will apply to direct broadcast satellite (DBS) providers.¹⁶⁵ Our action is supported, specifically, by section 335(a), which provides the Commission with authority to impose “public interest or other requirements for providing video programming” on DBS providers.¹⁶⁶ We conclude that the “all-in” rule is a public interest requirement that falls squarely within our authority under section 335(a).¹⁶⁷

38. The Commission has previously confirmed, and we agree, that the public interest includes consumer access to clear, easy-to-understand, and accurate information about charges for service, which benefits a well-functioning marketplace.¹⁶⁸ The record reveals how promotional and billing materials are critical to a consumer’s understanding of fees and charges relating to video programming, and that misunderstandings from promotional material lead to subscribers going over budget and billing disputes, often while locked into long-term agreements.¹⁶⁹ In addition to billing, we focus on the demonstrated start of the customer’s understanding of the pricing of video services, and adopt the “all-in” rule to ensure consumers have accurate and understandable information about the monthly cost in order to choose an MVPD service that best suits his or her needs.¹⁷⁰

39. DIRECTV’s description of the limits of the Commission’s jurisdiction is inconsistent with the broad authority granted by Congress in section 335(a), which grants authority to impose on DBS providers “public interest or other requirements for providing video programming.”¹⁷¹ We do not read the reference in section 335(a) to adopt requirements for “providing video programming” as limiting our authority to cover only public service carriage or programming requirements on DBS providers, as

¹⁶² See S.Rep. No. 92, 102nd Cong. 1st Sess. 1991 at 21-22, *reprinted in* 1992 U.S.C.C.A.N. 1133, 1153.

¹⁶³ See 47 U.S.C. § 154(i).

¹⁶⁴ See 47 U.S.C. § 552(b)(3).

¹⁶⁵ 47 U.S.C. § 335.

¹⁶⁶ *Id.* § 335(a). See also *id.* § 303(v) (granting the Commission “exclusive jurisdiction to regulate the provision of direct-to-home satellite services”).

¹⁶⁷ See 47 U.S.C. § 335.

¹⁶⁸ See *Broadband Transparency Order*, 37 FCC Rcd at 13687, para. 1.

¹⁶⁹ *NPRM*, 2023 WL 4105426 at *5, para. 13.

¹⁷⁰ See *FCC v. WNCN Listeners Guild*, 450 U.S. 582, 596 (1981) (“[T]he Commission’s judgment regarding how the public interest is best served is entitled to substantial judicial deference.”).

¹⁷¹ 47 U.S.C. § 335(a). See also 47 U.S.C. § 303(v) (granting the Commission “exclusive jurisdiction to regulate the provision of direct-to-home satellite services”).

DIRECTV contends,¹⁷² and we disagree with DIRECTV that our interpretation “is inconsistent with the text, structure and legislative history of the provision.”¹⁷³ Section 335(a) directs the Commission to impose on providers of DBS service “public interest or other requirements for providing video programming.” On its face, this language is broad in scope. And the regulation we are adopting here is precisely the type of regulation covered under the statute, i.e., our rule serves the public interest by requiring DBS operators in “providing video programming” to ensure consumers have clear, easy-to-understand, and accurate information about the charges for service. DIRECTV, on the other hand, argues that what Congress really intended was to grant the Commission limited authority over public interest *carriage* requirements, such as carriage of political advertising, educational programming, and other public service uses.¹⁷⁴ However, there is no “carriage” limitation in the statutory text. Although section 335(a) specifies certain topics that must be addressed by the Commission (including political advertising requirements in sections 312(a)(7) and 315 of the Act), the list is not exhaustive. Because section 335(a) states that the regulations must address these topics “at a minimum,”¹⁷⁵ the Commission has authority to adopt public interest requirements beyond those enumerated in the statute. DIRECTV also argues that reading section 335(a) to authorize the “all-in” rule would render “redundant” the “prices, terms and conditions” provision in section 335(b)(3) covering carriage obligations for noncommercial, educational programming.¹⁷⁶ We reject this argument. Our rule does not impose requirements on “reasonable prices, terms, and conditions,” as directed under section 335(b)(3). Rather our rule is a public interest requirement directed at ensuring DBS providers are *transparent* about the price *they* have chosen to charge for their service. Thus, there is no redundancy.

40. To be sure, the legislative history suggests that when enacting section 335(a), Congress was focused on potential requirements to be placed on DBS providers with respect to public service programming.¹⁷⁷ However, “rarely have [courts] relied on legislative history to constrict the otherwise broad application of a statute indicated by its text.”¹⁷⁸ Contrary to DIRECTV’s assertion,¹⁷⁹ the legislative history cannot overcome the clearest and most common sense reading of the language of the

¹⁷² See 47 U.S.C. § 335.

¹⁷³ DIRECTV Comments at 2. See also DIRECTV Mar. 7 *Ex Parte* at 1-2.

¹⁷⁴ See *id.* at 4.

¹⁷⁵ 47 U.S.C. § 335(a).

¹⁷⁶ DIRECTV Comments at 4-5.

¹⁷⁷ See *id.* at 5 (citing H.R. Rep. No. 102-862, 100 (1992) (Conf. Rep.), reprinted in 1992 U.S.C.C.A.N. 1231, 1282).

¹⁷⁸ *Consumer Electronics Ass’n v. FCC*, 347 F.3d 291, 298 (D.C. Cir. 2003) (citations omitted). The court further noted that “the Supreme Court has consistently instructed that statutes written in broad, sweeping language should be given broad, sweeping application.” *Id.* (citing *New York v. FERC*, 1225 S. Ct. 1012, 1025 (2002) (“where Congress uses broad language, evidence of a specific ‘catalyz[ing] force for the enactment ‘does not define the outer limits of the statute’s coverage’”); *PGA Tour, Inc. v. Martin*, 532 U.S. 661, 689 (2001) (“[T]he fact that a statute can be applied in situations not expressly anticipated by Congress does not demonstrate ambiguity. It demonstrates breadth.”)).

¹⁷⁹ See DIRECTV Comments at 4-5 (arguing that the legislative history of section 335 is specific to educational programming, and not broader authority and discussing the “Conference Report explain[ing] that the purpose ... was to ‘define the obligation of direct broadcast satellite service providers to provide a minimum level of educational programming,’ as well as the ‘capacity to be allotted’ to ‘noncommercial public service uses’” (citing H.R. Rep. No. 102-10-862, 100 (1992) (Conf. Rep.), reprinted in 1992 U.S.C.C.A.N. 1231, 1282)), 5-6 (arguing that necessary ancillary jurisdiction for the Commission to regulate DBS bills and advertising, such jurisdiction would require: (1) the Commission’s general jurisdictional grant under Title I covering the regulated subject; and (2) that the regulations are reasonably ancillary to the Commission’s effective performance of its statutorily mandated responsibilities (citing *American Library Ass’n v. FCC*, 406 F.3d 689, 691-92 (D.C. Cir. 2005)).

statute, which does not limit our authority only to national educational programming.¹⁸⁰ The “all-in” rule is a “public interest or other requirement[]” for providing video programming that we find falls within our jurisdiction under section 335(a).¹⁸¹ The “all-in” rule is not an imposition of “sweeping new authority over DBS,”¹⁸² nor is the Commission “assert[ing] that [section 335(a) of the Act] confers power to regulate virtually all other terms and conditions of service as well,” including general regulation of terms, conditions, and pricing for DBS service.¹⁸³ Our prior invocation of section 335(b) to reserve channel capacity for noncommercial programming of an educational or informational nature does not preclude targeting non-carriage related problems when they arise under section 335(a), as the “all-in” rule does with a specific public interest problem raised in the record.¹⁸⁴ Moreover, the requirement we adopt for DBS providers here as necessary to protect consumers from misleading pricing information, is a proper exercise of the Commission’s other authority in Title III, which courts have found endow the Commission with “expansive powers” and a “comprehensive mandate to ‘encourage the larger and more effective use of radio in the public interest.’”¹⁸⁵

41. DIRECTV analogizes the authority granted to the Commission in section 335 with statutes conferring administration authority to the Department of Health and Human Services (Department) that the D.C. Circuit found did not support its regulation of advertisements of certain pharmaceuticals.¹⁸⁶ The circumstances of that decision are distinguishable. In *Merck & Co.*, the Department argued that its regulation was “‘necessary’ to [a pharmaceutical] programs’ ‘administration,’” and the court found that “the Secretary must demonstrate an actual and discernible nexus between the rule

¹⁸⁰ Consumer Reports and Public Knowledge Reply Comments at 6 (noting legislative history does not accurately reflect Congress’s intent “especially where such an interpretation would mark a radical departure from the general structure of the Act”) (citing *National Petroleum Refiners Ass’n v. FTC*, 482, F.2d 672, 693 (D.C. Cir. 1973); *American Hosp. Ass’n v. NLRB*, 499 U.S. 606, 613-14 (1991)).

¹⁸¹ DIRECTV Comments at 3 (citing the Television Viewer Protection Act of 2019, Pub L. No. 116-94, 133 Stat. 2534 (2019)).

¹⁸² *Id.* at 3-7 (acknowledging that section 335 of the Act confers authority to the Commission to impose public interest or other requirements for providing video programming, while arguing that “[p]roperly understood, the statute confers authority to impose public service carriage or programming requirements on DBS providers but provides no authority to mandate specific terms or conditions of service”); Consumer Reports and Public Knowledge Reply Comments at 8 (arguing that section 335(a) did not create new authority, but obligated the Commission to “use existing authority – with a deadline of 180 days to complete an initial rulemaking”).

¹⁸³ *Id.* at 7.

¹⁸⁴ See 47 U.S.C. § 335. See also DIRECTV Comments at 4 (arguing that section 335 limits the Commission’s authority to “specific public interest carriage requirements (that is, carriage of political advertising, educational programming, and other public service uses), not general regulation of terms and conditions of DBS service”), 7 (“The Commission cannot rely on a single clause in a decades-old provision about carriage requirements to assert sweeping new authority over DBS.”).

¹⁸⁵ *Cellco Partnership v. FCC*, 700 F.3d 534, 542 (D.C. Cir. 2012). Thus, we rely on other delegations of authority in Title III for adoption of the “all-in” rule, including sections 303(b) (which directs the Commission, consistent with the public interest, to “[p]rescribe the nature of the service to be rendered by each class of licensed stations and each station within any class), 303(r) (which supplements the Commission’s ability to carry out its mandates via rulemaking), and 316 (which enables the Commission to alter the term of existing licenses by rulemaking). 47 U.S.C. §§ 303(b), (r), 316. See also Consumer Reports and Public Knowledge Reply, at 5 (“Even if DIRECTV were correct with regard to the limitation of Section 335, the Commission has ample authority to impose the proposed rule under its general authority to set service rules for wireless licensees under Sections 303(b) and 303(r”).

¹⁸⁶ DIRECTV Comments at 8-9 (citing *Merck & Co., Inc. v. U.S. Dep’t of Health & Human Svcs.*, 962 F.3d 531 (D.C. Cir. 2020)).

and the conduct or management of Medicare and Medicaid programs.”¹⁸⁷ The nexus was too attenuated, the court concluded, “stray[ing] far off the path of administration for four reasons.”¹⁸⁸ The authority granted under section 335, on the other hand, does not provide “general administrative authority” to the Commission.¹⁸⁹ Under section 335, a rule must further a “public interest or other requirement[] for providing video programming,” which the “all-in” rule does: it protects the public interest by requiring truth in billing and advertisements for video programming.¹⁹⁰

42. *Section 4(i) of the Act*, 47 U.S.C. § 154(i). In addition, we find authority to extend the “all-in” rule to DBS providers under section 4(i) of the Act.¹⁹¹ The Commission is specifically delegated authority under the Communications Act to adopt standards governing communications between the cable operator and subscriber.¹⁹² Extending the “all-in” requirement imposed on cable operators to DBS is necessary for our exercise of this specifically delegated power. Otherwise, consumers might opt for DBS service based on confusing or misleading pricing information over service offered by cable operators that are required to be transparent about the price they are charging. This would undermine the very purpose of the “all-in” rule that we are imposing on cable operators. Thus, by extending our rule to DBS providers, we will ensure uniformity of regulation between and among cable operators (regulated under Title VI and by various state consumer protection laws and local franchising provisions) and DBS providers (under Title III).¹⁹³

4. Other Federal Statutes

43. Contrary to arguments raised by industry commenters, the TVPA does not preclude the “all-in” rule.¹⁹⁴ We recognize that Congress did not include “language in the original version of the TVPA that would have required all-in pricing in advertisements and other marketing.”¹⁹⁵ The lack of such a requirement in the TVPA, however, does not preclude the Commission from exercising its powers outside the TVPA (i.e., under Titles III, VI and section 4(i)) over promotional materials including

¹⁸⁷ *Merck & Co.*, 962 F.3d at 539.

¹⁸⁸ *Id.* at 539, 541 (“hold[ing] only that no reasonable reading of the Department’s general administrative authority allows the Secretary to command the disclosure to the public at large of pricing information that bears at best a tenuous, confusing, and potentially harmful relationship to the Medicare and Medicaid programs”).

¹⁸⁹ *Merck & Co.*, 962 F.3d 541.

¹⁹⁰ DIRECTV Comments at 3 (citing the Television Viewer Protection Act of 2019, Pub L. No. 116-94, 133 Stat. 2534 (2019)).

¹⁹¹ 47 U.S.C. § 154(i).

¹⁹² 47 U.S.C. § 552.

¹⁹³ *See, e.g., Mobile Comm’ns Corp. v. FCC*, 77 F.3d 1399, 1405-06 (D.C. Cir. 1996) (upholding reliance on 4(i) for the Commission to adjust the terms of preferences to reduce the gulf between recipients of preferences (who would otherwise receive a free license) and other license aspirants (who, under the new auction regime, would have to pay for a license)).

¹⁹⁴ NCTA Comments at 6 (“If anything, the TVPA’s mandate that MVPDs itemize all applicable charges on bills if the MVPDs add them to the price of the package *precludes* the Commission’s proposal to require” an all-in price.), 6 (arguing that “the TVPA provides no authority for the adoption of the proposed rule and in fact militates against adoption”).

¹⁹⁵ *Id.* at 5 (citing the Television Viewer Protection Act of 2019, H.R. 5035, 116th Cong. § 4 (2019)), 6 (arguing “the TVPA’s mandate that MVPDs itemize all applicable charges on bills if the MVPDs add them to the price of the package *precludes* the Commission’s proposal to require” all-in pricing), 9-10 (“The express decision to omit statutory authority to impose an all-in pricing rule for advertising and promotional materials in Congress’ most recent legislative enactment on consumer disclosures strongly suggests that the Commission lacks such authority.”); *See also* State Cable Ass’ns Mar. 5 *Ex Parte* at 3-4.

advertising.¹⁹⁶ With the TVPA, Congress addressed a specific customer service issue, but there is no indication that Congress intended to restrict other authority of the Commission to address these types of issues.¹⁹⁷ First, Congress enacted the TVPA in 2019 to address a specific issue relating to basic protections to consumers when purchasing MVPD services.¹⁹⁸ There is nothing in the TVPA to demonstrate that Congress intended to repeal, supplant or otherwise disturb the Commission’s existing statutory authority over cable customer service provided under section 632 or public interest requirements for DBS providers under section 335. Legislative history also makes clear that the TVPA was “provid[ing] basic protections” targeted at a particular concern of Congress, but nowhere does it suggest Congress’s intent to repeal, supplant or otherwise disturb the Commission’s other existing authority.¹⁹⁹ Second, the TVPA’s focus is on electronic billing, but we do not rely on the TVPA to apply the “all-in” rule to promotional materials. Rather, we rely on other authority (sections 632 (cable operators) of the Act, 335 (DBS providers), and 4(i) (ancillary jurisdiction)²⁰⁰) to implement customer service obligations that are not foreclosed by the TVPA.

5. The First Amendment

44. We affirm the Commission’s tentative conclusion in the *NPRM* that the proposed “all-in” rule is consistent with the First Amendment.²⁰¹ When adopting truth-in-billing, advertising, and labeling rules in similar contexts, the Commission has found that “[c]ommercial speech that is misleading is not protected speech and may be prohibited,” and “commercial speech that is only potentially misleading may be restricted if the restrictions directly advance a substantial governmental interest and are no more extensive than necessary to serve that interest.”²⁰² The same is true here. The speech implicated here is

¹⁹⁶ See Consumer Reports and Public Knowledge Reply Comments at 5 (“Where Congress has not provided direct instruction to the Commission on how to proceed, the Commission may act pursuant to its general rulemaking power and the grant of authority inherent in an ambiguous statute.”) (citing *Alliance for Community Media v. FCC*, 529 F.3d 763, 773-75 (6th Cir. 2008)).

¹⁹⁷ See NCTA Comments at 5 (“The TVPA reflects Congress’s determination that disclosure of the all-in price at the point of sale ensures that consumers are fully informed and do not ‘face unexpected and confusing fees when purchasing video programming’”).

¹⁹⁸ *Id.* at 15 (“Congress specifically addressed truth in billing and related disclosure requirements for MVPDs when it enacted the TVPA, and under that statute left the form of those disclosures up to the provider.”); H.R. Rep 116–329, at 1 (2019) (“The purpose of this legislation is to address two provisions of law expiring at the end of 2019 that facilitate the ability of consumers to view broadcast television stations over [MVPD] services and to provide basic protections to consumers when purchasing MVPD services and certain broadband equipment.”).

¹⁹⁹ H.R. Rep 116–329, at 1 (2019).

²⁰⁰ 47 U.S.C. §§ 552, 335, 154(i).

²⁰¹ *NPRM*, 2023 WL 4105426 at *8, para. 17. See generally *Broadband Transparency Order*, 37 FCC Rcd at 13725, para. 122 (citing *Empowering Consumers to Prevent and Detect Billing for Unauthorized Charges (“Cramming”), Consumer Information and Disclosure, Truth-in-Billing, and Billing Format*, CG Docket Nos. 11-116, 09-158, CC Docket No. 98-170, Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd 4436, 4482-84, paras. 129-35 (2012) (applying *Zauderer v. Office of Disciplinary Counsel*, 471 U.S. 626 (1985); *Central Hudson Gas & Elec. Corp. v. Public Serv. Comm’n of New York*, 447 U.S. 557 (1980); *Restoring Internet Freedom Order*, WC Docket No. 17-108, Declaratory Ruling, Report and Order, and Order, 33 FCC Rcd 311, 448-50, paras. 235-38 (2017) (concluding that the Commission need not resolve whether *Zauderer* or *Central Hudson* applied because the transparency rule satisfied even the *Central Hudson* standard); Local Government Reply Comments at 18 (“Because the extension of First Amendment protection to commercial speech is justified principally by the value to consumers of the information such speech provides, appellant’s constitutionally protected interest in not providing any particular factual information in his advertising is minimal.” (citing *American Meat Inst. v. U.S. Dept. of Agric.*, 760 F.3d 18, 22 (D.C. Cir. 2014) (en banc) (quoting *Zauderer*, 471 U.S. at 650)).

²⁰² See *NPRM*, 2023 WL 4105426 at *8, para. 17 (citing *Truth-in-Billing and Billing Format*, CC Docket No. 98-170, First Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 7492, 7530-31, para. 60

(continued....)

information in bills and promotional materials about the cost of video programming service offered by cable operators and DBS providers, which the record shows consumers currently find misleading.²⁰³ Thus, our proposed rule simply prevents misleading commercial speech, which is afforded no protection under the First Amendment.²⁰⁴

45. In the alternative, even if our “all-in” rule regulates only potentially misleading speech, regulations involving commercial speech²⁰⁵ that require a disclosure of factual information (such as the disclosure of the total cost for video programming service that the “all-in” rule would require) are entitled to more lenient review from courts than regulations that limit speech.²⁰⁶ A speaker’s commercial speech rights are adequately protected as long as disclosure requirements are reasonably related to the government’s interest in preventing deception of consumers.²⁰⁷ We conclude that we have met this standard. As an initial matter, for promotional materials, the rule applies only when the cable or DBS provider chooses to state information about price. The rule we adopt does not mandate pricing information if the cable or DBS provider decides not to state information about price. In those cases where the cable or DBS operator chooses to state information about price, the “all-in” rule requires only that the operator disclose accurate information about the total cost for video programming service, and the disclosure requirement is reasonably related to the government’s interest in preventing an oftentimes costly deception of consumers.²⁰⁸ The rule does not prevent cable operators and DBS providers from conveying any additional information.²⁰⁹ A cable operator’s or DBS provider’s constitutionally protected

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_____ (1999) (citing *Central Hudson*, 447 U.S. at 563-64, 566 (“The government may ban forms of communication more likely to deceive the public than to inform it.”)). See also *Broadband Transparency Order*, 37 FCC Rcd at 13725-26, para. 123; Consumer Reports and Public Knowledge Reply Comments at 9 (“Rules to prohibit advertising and billing practices that mislead and confuse consumers are not constitutionally protected.”).

²⁰³ See, e.g., Colorado Communications and Utility Alliance Reply Comments at 2 (arguing that cable operators and DBS television providers have been using fees associated with broadcast television and regional sports to “obfuscate the true price of cable television services” (citing City of Seattle Comments at 1)); Local Government Reply Comments at 4 (“Like Boston and other Local Government Commenters, other Local Franchise Authority commenters filing in the docket have heard from consumers who easily mistake these charges for government-imposed fees ‘when, in fact, they are operator-imposed charges that have been misleadingly itemized outside the price for cable services.’” (quoting Local Franchise Authorities Comments at 1-2; Truth in Advertising Comments at 2-3 (noting a claim of “Cox Communications misleadingly advertising fees for” video programming (citing TINA.org’s Class Action Tracker: The Fees for “Advanced TV”, <https://truthinadvertising.org/class-action/the-fees-for-advanced-tv/>)).

²⁰⁴ *Central Hudson*, 447 U.S. at 563 (“there can be no constitutional objection to the suppression of commercial messages that do not accurately inform the public about lawful activity” and “[t]he government may ban forms of communication more likely to deceive the public than to inform it”) (citations omitted).

²⁰⁵ *Id.* at 561 (explaining “commercial speech” as “expression related solely to the economic interests of the speaker and its audience”).

²⁰⁶ See *Zauderer*, 471 U.S. at 651-52. See also *Milavetz, Gallop, & Milavetz v. U.S.*, 559 U.S. 229, 249-50 (2010); Consumer Reports and Public Knowledge Reply Comments at 10 (arguing that regulations involving commercial speech that require a disclosure of factual information (like the all-in cost of service) “are entitled to more lenient review from courts than regulations that limit speech”).

²⁰⁷ *Zauderer*, 471 U.S. at 651.

²⁰⁸ See, e.g., Truth in Advertising Comments at 4 (reporting that “[o]n average, the cable industry generates close to \$450 per customer per year from company-imposed fees” and how fees have led to consumers “exceed[ing] their budgets” (citing CR Cable Bill Report 2019)).

²⁰⁹ See *supra* para. 15 (discussing how the “all-in” rule does not prevent the additional disclosure of additional information, such as costs relating to retransmission consent fees).

interest in not providing the cost a subscriber will be charged for video programming service is “minimal.”²¹⁰

46. Further, as the Commission discussed in the *NPRM*, even if our rule is subject to the more stringent test of commercial speech (i.e., intermediate scrutiny), we find that the rule passes that three-prong test that the Supreme Court established in *Central Hudson*: first, the government must assert a substantial interest in support of its regulation; second, the government must demonstrate that the restriction on commercial speech directly and materially advances that interest; and third, the regulation must be “narrowly drawn.”²¹¹ We have a longstanding substantial interest in ensuring that consumers receive sufficient information to understand the full cost of video programming to which they subscribe, and make informed purchasing decisions as they consider competing cable and DBS service options. Our “all-in” rule advances this interest by requiring cable operators and DBS providers to identify the cost for video programming as a clear, easy-to-understand and accurate line-item on consumer bills and promotional materials, allowing consumers to identify the full cost of video programming. Finally, the “all-in” rule is narrowly drawn to focus on misleading (and potentially misleading) information, without effect on other speech.

47. Thus, as we explain above and as stated in the *NPRM*, we believe the “all-in” rule we adopt is consistent with the requirements described in *Zauderer*, as well as *Central Hudson* (assuming arguendo that the *Central Hudson* standard is applicable).²¹² NCTA disagrees, arguing that the “all-in” rule fails under the standard of *Zauderer* and the test for commercial speech articulated in *Central Hudson*.²¹³ According to NCTA, “[h]ere, a mandate to provide an all-in price in advertising and promotional materials would be unduly burdensome, particularly for national companies that offer a national base price but have additional charges that vary by state or locality.”²¹⁴

48. We disagree that requiring clear, easy-to-understand, and accurate information regarding the price of video programming in promotional material and billing imposes an unreasonable burden or comparative disadvantage.²¹⁵ We mitigate potential burdens on cable operators and DBS providers complying with the “all-in” rule by applying it responsively to issues identified in the record (as discussed above). For example, if promotional material is intended for a variety of locations, or is nationwide, our “all-in” price requirement will be satisfied if the promotion includes a range of prices that include the highest “all-in” price a consumer could be charged, or includes more than a single “all-in” price with ability for the consumer to determine his or her “all-in” price.²¹⁶ We also were persuaded to add flexibility for marketing of grandfathered serviced plans.

49. NCTA argues that, with regard to the *Central Hudson* inquiry required by courts, “the Commission’s proposed rule is woefully underinclusive to serve its supposed substantial interest.”²¹⁷ NCTA claims that regulating only cable and DBS providers would hinder consumer choice “given that

²¹⁰ *Zauderer*, 471 U.S. at 651.

²¹¹ *Central Hudson*, 447 U.S. at 564-65 (finding “the First Amendment mandates that speech restrictions be ‘narrowly drawn’”).

²¹² See *Zauderer*, 471 U.S. 626; *Central Hudson*, 447, U.S. 557.

²¹³ NCTA Comments at 10-11.

²¹⁴ *Id.* at 11.

²¹⁵ See *id.* (arguing that the *Zauderer* test is not met because: “The Commission does not offer any explanation for how its proposed rule would apply to national marketing without substantially hobbling it, or without putting national providers at a significant disadvantage with respect to what they can advertise as compared to competitors who are not similarly restricted.”).

²¹⁶ *Id.*

²¹⁷ *Id.* at 11-12 (citing *Nat’l Inst. of Family and Life Advocates v. Becerra*, 138 S. Ct. 2361, 2375 (2018)).

other MVPDs would have greater flexibility in how they present pricing information.”²¹⁸ We disagree that our effort to restrict misleading promotional and billing material contravenes the test of *Central Hudson*, assuming, *arguendo*, *Central Hudson* is applicable. Under authority granted to the Commission to prevent the types of consumer harm identified in the record, the “all-in” rule simply prevents misleading commercial messages that do not accurately inform current and potential subscribers about the price of video programming service, which is afforded no protection under the First Amendment.²¹⁹

D. Existing Consumer Protections

50. We find the “all-in” rule complements existing state, local, and federal laws and regulations and voluntary consumer protections. The promotional and billing information of competing video programming service providers can be subject to different laws and regulations, depending upon how and where the service is promoted and provided. We share bifurcated authority with state and local governments.²²⁰ For most services provided by cable operators and DBS providers, customer service issues are generally addressed by federal and state governments with shared authority under the Act. The Commission sets baseline customer service requirements at the federal level,²²¹ and state and local governments tailor more specific customer service regulations based on their communities’ needs.²²²

²¹⁸ *Id.* at 12; ABC Television Affiliates Association Reply Comments at 7 (“Fair treatment of consumers should not be based on the technology used to deliver video services, but, rather, on the clear risk to consumers posed by manipulative and unfair advertising and billing practices that are pervasive in the market today.”).

²¹⁹ *NPRM*, 2023 WL 4105426 at *8, para. 18 (citing *Central Hudson*, 447 U.S. at 563 (holding “there can be no constitutional objection to the suppression of commercial messages that do not accurately inform the public about lawful activity” and “[t]he government may ban forms of communication more likely to deceive the public than to inform it”) (citations omitted)). One commenter made a passing reference to the possibility of “heightened First Amendment scrutiny” applying because the rule applies only to “certain participants in the video marketplace” thus creating a “speaker-based distinction.” See NCTA Comments at 10. We reject this argument. The all-in rule does not single out cable operators or DBS providers for different treatment based on content or their viewpoint, such that it might be argued we are imposing a content-based regulation of speech. Nor has any commenter shown that to be the case. Rather, the all-in rule applies to cable operators and DBS operators because the record reveals that these operators, which account for the overwhelming majority of MVPD subscribers, have engaged in misleading pricing information leading to consumer confusion. Most available data does not track other providers, including OVS and MMDS. Based on S&P and other available data, we estimate that cable and DBS combined constitute between 96 and 99 percent of all MVPD subscribership. See, e.g., S&P Global, *U.S. Multichannel Industry Benchmarks* (providing data on subscribers to cable, DBS, and total MVPD subscribers); S&P Global, *Q4 ’21 leading US video provider rankings* (Apr. 8, 2022); Brian Bacon, S&P Global, *Consumer Insights: US SVOD user trends and demographics, Q1 ’22* (Apr. 7, 2022); *2022 Communications Marketplace Report*, 37 FCC Rcd 15552, paras. 218 (discussing Multichannel Video Programming Distributors (MVDS) (citing S&P Global, *U.S. Multichannel Industry Benchmarks*), 328 (discussing AVOD (citing Seth Shafer, S&P Global, *Economics of Internet: State of US online video: AVOD 2021* (Nov. 30, 2021))). To the extent information is brought to the Commission’s attention about other entities engaging in misleading pricing practices, we will not hesitate to consider appropriate action.

²²⁰ 47 U.S.C. § 552 (Consumer protection and customer service).

²²¹ 47 U.S.C. § 542. See also *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992*, MB Docket No. 05-311, Second Report and Order, 22 FCC Rcd 19633, 19646, para. 27 (2007) (“The statute’s explicit language [in section 632] makes clear that Commission standards are a floor for customer service requirements, rather than a ceiling, and thus do not preclude [Local Franchise Authorities (LFAs)] from adopting stricter customer service requirements.”). See also Local Government Comments at 8 (discussing “authority to adopt customer service requirements as part of their cable franchise authority, 47 U.S.C. § 552(a), and ... their police power to regulate consumer protection, 47 U.S.C. § 552(d)”; NCTA Comments at 3-4 (citing 47 CFR §§ 76.1602(b), 76.1603(b), 76.1619, 47 U.S.C. § 552(d)(2)).

²²² For example, local franchises often require refunds, prompt credits for service outages, local consumer offices, customer service standards for cable operator personnel, billing practices disclosures, call center hours, response

(continued....)

Aside from legal requirements, we recognize that video programming service providers also “have incentives to provide promotional and billing material clearly to consumers,” which is especially true for subscribers with plans that allow them to cancel at any time.²²³

1. State and Local Requirements

51. We find that the “all-in” rule complements existing consumer protection efforts by targeting issues raised in the comments about consumer confusion due to misleading pricing, and in a way that state and local governments support. In support of the “all-in” rule, the Local Franchise Authorities explain that many cable service bills do not currently meet what they consider to be basic standards of presenting clear, easy-to-understand, and accurate charges, despite the TVPA, existing Commission rules, and other formal and informal consumer protections.²²⁴ The Local Government Commenters explain that state and local governments “that adopt consumer protection rules typically adopt, at a minimum, requirements mandating that cable operators provide advance notice, typically 30 days, to consumers for any price change, or publicly available rate card or schedule outlining current prices.”²²⁵ In Connecticut, for example, the line items that appear to represent retransmission consent fees, the Connecticut Office of State Broadband explains, are often confusing to consumers, and could be difficult to predict or substantiate.²²⁶ The “all-in” rule addresses these issues by complementing state and local requirements to inform consumers of which costs relate specifically to the provision of video programming service.

2. The Television Viewer Protection Act of 2019, 47 U.S.C. § 562 (TVPA) and Other Federal Requirements

52. *The Television Viewer Protection Act of 2019 (TVPA)*, 47 U.S.C. § 562. Contrary to some commenters’ arguments, we find that the Television Viewer Protection Act of 2019 (TVPA) does not render the “all-in” rule unnecessary; rather, we find that the rule complements the TVPA’s consumer protections. Some industry commenters argue that an “all-in” rule is unnecessary because, in addition to other laws and regulations,²²⁷ the TVPA “already requires [MVPDs] to disclose the all-in price for multichannel video programming services, including non-governmental fees and charges, both at the

(Continued from previous page) _____
times to repair calls, and procedures for unresolved complaints, and collect data regarding cable operator responses to customers.” Local Government Comments at 9.

²²³ Verizon Comments at 9 n.21. *See also* ACA Connects Comments at 9, 17. Consumer Reports notes, for example, the Verizon “Mix and Match” plan and YouTube TV’s “no hidden fees” program as “more consumer-friendly and transparent pricing.” Consumer Reports and Public Knowledge Comments at 20. *See also* ACA Connects Comments at 6 (describing efforts of ACA members to increase transparency of the sources of fees and charges).

²²⁴ Local Franchise Authorities Comments at 4, 6 (“More clarity and transparency are needed to help consumers understand their cable bill and make informed decisions about their services”); Colorado Communications and Utility Alliance Reply Comments at 4 (“The proposed [all-in rule] will increase transparency and enable consumers to make more informed choices concerning their options for video programming.”); Local Government Reply Comments at 7 (arguing that requiring clear explanations for “teaser” rates will reduce consumer confusion by eliminating “inconsistent implementation of promotional rates”).

²²⁵ Local Government Comments at 9 (citing Boston/Comcast Cable Television agreement (May 15, 2021), Sections 7.4 7.5, 12, <https://www.boston.gov/sites/default/files/file/2022/03/Comcastlicensesanssides20211005.pdf>; and Fairfax County Code, Chapter 9.2 § 9.2-9-9(b) through (d), <https://www.fairfaxcounty.gov/cableconsumer/sites/cableconsumer/files/assets/documents/pdf/cprd/fairfax-county-code-chapter-9.2.pdf>).

²²⁶ Connecticut Office of State Broadband Comments at 7 (explaining that “the amount itemized on the bill may be an unsubstantiated number . . . [and] neither the Commission nor any state has ever confirmed that the line item is an accurate reflection of what the owners of the local stations collectively charge of any given billing statement”).

²²⁷ NCTA Comments at 4 (citing 15 U.S.C. § 45(a); 16 CFR § 310.3(a)(1)); NCTA Reply Comments at 2.

point of sale and in writing within 24-hours of entering a contract for service, and to provide customers with an opportunity to cancel without penalty.”²²⁸ ACA asserts the TVPA is “working effectively.”²²⁹ Industry also asserts that the TVPA provides flexibility that allows individual cable operators to implement how much video programming costs “in a way that best suits their customers and existing sales and billing systems.”²³⁰

53. According to the industry commenters, consumers greatly benefit from the TVPA and service providers regularly meet and exceed its requirements.²³¹ Members of NCTA and ACA, for example, “disclose in promotional materials that the price for video service may include additional fees, typically dependent on what customers purchase and where they live,”²³² and service providers have “every incentive to provide prospective and existing customers with the best experience possible, including by communicating with them clearly and effectively.”²³³ However, the record also reveals common and widespread frustration from consumers, which reflects that there continue to be significant issues in the marketplace regarding the provision of information about fees and charges associated with video programming.²³⁴

54. We find the “all-in” rule complements how cable operators and DBS providers comply with the TVPA.²³⁵ The TVPA requires certain consumer protection disclosures be made at the point of sale,²³⁶ as NCTA emphasizes, but the record does not support the conclusion “that consumers are fully informed.”²³⁷ We, therefore, disagree that the issues raised by commenters have “already been explicitly

²²⁸ NCTA Comments at 4 (citing 47 U.S.C. § 562(a)); ACA Connects Comments at 8 (describing “robust, existing mechanisms, including sales and billing disclosure requirements enacted as part of the [TVPA] that ensure that consumers signing up for video service understand the rates they will pay”).

²²⁹ See ACA Connects Comments at 11 (“With the TVPA and other safeguards in place, there is no indication of any gap in transparency that the proposed ‘all-in’ price requirement is necessary to fill.”).

²³⁰ NCTA Comments at 1.

²³¹ See NCTA Reply Comments at 3 (characterizing claims that cable operators are not complying “with the law or are otherwise hiding fees from consumers are flatly incorrect and rely either on data from before the enactment of the TVPA or misrepresentations of current industry practices”).

²³² NCTA Comments at 2; ACA Connects Comments at 8 (describing the success with implementing the “robust, existing mechanisms, including sales and billing disclosure requirements enacted as part of the [TVPA] that ensure that consumers signing up for video service understand the rates they will pay”).

²³³ NCTA Comments at 3; Verizon Reply Comments at 8 (describing how many providers, such as Verizon, “have adopted the practice of breaking out retransmission consent fees and other video programming fees on subscriber bills—not to mislead their customers, but to help them understand the root cause of soaring prices for cable service” (quoting ACA Connects Comments at 17)).

²³⁴ See, e.g., NAB Comments at 4-5 (reporting that, even several months after the implementation of the TVPA, certain video program service providers continued to separate out “cleverly-named” fees and “company-imposed fees continue to rise in price,” without the subscriber understanding the source or cause of a billed fee or charge (quoting Consumer Reports and Public Knowledge Reply Comments, MB Docket No. 21-501 (Mar. 7, 2022)).

²³⁵ As Consumer Reports explains, “Sections 642(a)(2) and 642(b) [(the TVPA)] both refer to situations where a consumer has signed a contract with a provider, thus becoming a ‘subscriber,’” and it would be “odd to argue that providers must show the all-in price when the subscriber has the right to cancel within the 24 hour period under Section 642(a), or when a provider provides an electronic bill under Section 642(b), or when a subscriber renews their subscription, but that the provider may lure the consumer into the store or onto its website with a misleading price.” Consumer Reports and Public Knowledge Comments at 7

²³⁶ See 47 U.S.C. § 562.

²³⁷ See NCTA Comments at 5; Local Government Reply Comments at 16 (“A disclosure at the time of purchase will be less effective pursuant to the TVPA if the consumer has already been confused by misleading and inaccurate advertising that led up to a consumer’s decision to subscribe.”).

addressed and resolved by Congress” and that our action implementing the “all-in” rule is “arbitrary and capricious.”²³⁸ Congress, with the TVPA, did not limit the Commission’s ability to address consumer issues that are within the scope of the Act, but beyond the requirements of the TVPA.

55. Notably, the TVPA does not address promotional materials that include a price for video programming, as the “all-in” rule does, which we find will address many issues described in the record.²³⁹ The City of Seattle reports, for example, that in their local experience, “even with the congressional oversight and subsequent *Television Viewer Protection Act of 2019*, the practice of separating obligatory programming costs from the service price, and listing them separately as fees continues making it difficult for consumers to find clear service and pricing information and to compare options within a provider or among other providers,” especially where customers “expect to use websites to find current service and price options.”²⁴⁰ The “all-in” rule addresses this issue in a way the TVPA does not, and enables awareness of programming fees that consumers will find helpful to understand the sources that “are driving up cable bills.”²⁴¹

56. ACA argues that there is the potential for confusion about the “true” “all-in” price because that “is not the all-in price that any subscriber will actually pay.”²⁴² According to ACA, that amount will include programming fees and “also ‘taxes and other fees unrelated to programming,’ including equipment fees.”²⁴³ ACA maintains that in other contexts, the “‘all-in’ price of a communications service would include such taxes and fees.”²⁴⁴ We recognize that other customer service or consumer protections may require disclosure of a total price that includes fees and charges unrelated to video programming, such as taxes. The “all-in” price complements those requirements, including the TVPA, by addressing the source of misunderstandings about the costs of video programming that will be inclusive of the larger, total price, that includes charges and fees unrelated to video programming.

57. *The Federal Trade Commission (FTC)*. DIRECTV argues that compliance with the “all-in” price rule could cause tension with FTC directives, “particularly with nationwide advertisements advertising across localities with different [regional sports programming] fees.”²⁴⁵ DIRECTV complains that seeking to comply with “at least two sets of potentially overlapping and perhaps conflicting regulation (not to mention state-by-state FTC-like regulation) could present “complications” and “challenges” and could result in an “overly clunky advertisement or bill, likely to be both confusing and ineffective.”²⁴⁶ DIRECTV, however, does not identify any actual regulations that overlap or conflict with

²³⁸ NCTA Comments at 5; NCTA Reply Comments 7-8 (arguing that applying the “all-in” rule “just to cable and DBS providers but not to similarly situated competitors in the video marketplace would be all the more legally suspect”).

²³⁹ Consumer Reports and Public Knowledge Reply Comments at 3 (“[T]he TVPA does nothing with respect to the price MVPDs can advertise, preserving the practice of promoting a low teaser rate, with the increasingly expensive raft of fees hidden in the fine print to be revealed later . . . and it does not clear up any confusion about what these fees are and who is charging them.”).

²⁴⁰ City of Seattle Comments at 4-5 (discussing images of prospective subscribers’ chats with customer service agents, who were unable to provide a local rate or price information by providing their zip code), 11-12.

²⁴¹ ACA Connects Comments at 6-7; ABC Television Affiliates Association Reply Comments at 4 (reporting that increases in MVPD rates have risen “more than three times the rate of inflation”).

²⁴² ACA Connects Comments at 15.

²⁴³ *Id.*

²⁴⁴ *Id.*

²⁴⁵ DIRECTV Comments at 13.

²⁴⁶ *Id.*

the “all-in” pricing rule we adopt here.²⁴⁷ In the absence of any evidence of an actual conflict, we decline to refrain from adopting an “all-in” rule based simply on vague, general, and conclusory burden claims. If in the future there arises a concrete conflict, parties can seek clarification or waiver at that time.

E. Competitive Effects

58. We find that the “all-in” rule will increase transparency and enhance competition. As the Commission recently explained, “[c]onsumer access to clear, easy-to-understand, and accurate information is central to a well-functioning marketplace that encourages competition, innovation, low prices, and high-quality services.”²⁴⁸ The record demonstrates that the “all-in” rule will serve consumers and promote competition by giving consumers access to information so they can shop among various video services providers more effectively.²⁴⁹

59. We disagree that competition among service providers has supplanted the need for the “all-in” rule or outweigh its competitive benefits.²⁵⁰ The Commission’s authority in this area is not limited or less beneficial to consumers confronting unexpected charges because the marketplace is now more competitive.²⁵¹ Although we recognize that significant entry into the video marketplace has

²⁴⁷ See *DIRECTV Ex Parte* at 1 (“discuss[ing] the possibility that different sets of rules might require different ‘all-in’ or ‘total’ prices, calculated differently, but each required to be shown prominently”). See Fed. Trade Comm’n, Notice of Proposed Rulemaking; Request For Public Comment, 88 FR 77420 (Jan. 8, 2024), <https://www.federalregister.gov/documents/2023/11/09/2023-24234/trade-regulation-rule-on-unfair-or-deceptive-fees> (proposing to “prohibit unfair or deceptive practices relating to fees for goods or services, specifically, misrepresenting the total costs of goods and services by omitting mandatory fees from advertised prices and misrepresenting the nature and purpose of fees”); Cal. SB 478, Consumers Legal Remedies Act: Advertisements (Cal. Oct. 2023), https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202320240SB478 (“This bill would ... make unlawful advertising, displaying, or offering a price for a good or service that does not include all mandatory fees or charges other than taxes or fees imposed by a government on the transaction, as specified.”); HB24-1151, 74th Gen. Assemb., 2nd Reg. Sess. (Colo. 2024), https://www.statebillinfo.com/bills/bills/24/2024a_1151_01.pdf (“prohibit[ing] a person from advertising a price for a product, good, or service that does not include all mandatory or nondiscretionary fees or charges”); NJ S1225, 221st Leg., 2024 Sess. (NJ 2024), https://www.njleg.state.nj.us/bill-search/2024/S1225/bill-text?f=S1500&n=1225_11 (requiring, for example, a “price advertised to a consumer shall include, but not be limited to, any broadcast programming fee, administrative and service fee, regional sports network fee, or cable television equipment fee per television set, including set-top box and remote rental fee”); NY S07783B, New York Junk Fee Prevention Act (NY Dec. 2023), https://nyassembly.gov/leg/?default_fld=&leg_video=&bn=S07783&term=2023&Summary=Y&Text=Y (requiring disclosure of the “total price” as the full price that a consumer must pay, inclusive of all mandatory fees associated with a transaction); H.B. 1320/S.B. 388, 2024 Gen. Assemb., 2024 Sess., Virginia Consumer Protection Act; Prohibited Practices, Mandatory Fees Disclosure (Va. 2024), <https://lis.virginia.gov/cgi-bin/legp604.exe?241+ful+SB388S1+pdf> (prohibiting, for example, “a supplier in connection with a consumer transaction from advertising, displaying, or offering any pricing information for goods or services without prominently displaying the total price, which shall include all mandatory fees or charges other than taxes imposed”).

²⁴⁸ See *Broadband Transparency Order*, 37 FCC Rcd at 13687, para. 1.

²⁴⁹ See *supra* Section III.A (Need for the “All-In” Rule).

²⁵⁰ Cable Company Reply Comments at 5 (arguing the “all-in” rule is unnecessary, given that consumers have choices from dozens of streaming services); Verizon Comments at 3 (citing *Communications Marketplace Report*, GN Docket No. 22-203, 2022 Communications Marketplace Report, 37 FCC Rcd 15514 (2022) (*2022 Communications Marketplace Report*)), 5 (arguing that “[i]n today’s hypercompetitive video marketplace, the Commission should not introduce new regulations on any video providers’ billing practices” in the interest of regulatory parity to further the goal of maintaining a competitive marketplace); Verizon Reply Comments at 3 (arguing the intense and growing competition among video program service providers “makes it both unnecessary and counterproductive to adopt new far-reaching regulations on billing practices, especially for competitive providers like Verizon” (citing ACA Comments at 9)).

²⁵¹ Verizon Comments at 5-6.

benefited consumers, we do not rely on entry alone, consistent with Congress' directive to protect consumers purchasing services when warranted.²⁵² The authority for the “all-in” rule, on which we rely, was not solely concerned with competition, but with protecting consumers.²⁵³

F. Cost/Benefit Analysis

60. We adopt the “all-in” requirement having considered the costs and benefits associated with adopting the proposal. The purpose of this proceeding is to reduce confusion, in an effective and narrow way that complements current consumer protections, and mitigates the cost of unexpected charges and fees for consumers. No commenter submitted a rigorous economic cost/benefit analysis, but we note that certain commenters argued that an “all-in” rule “would create confusion—not clarity—for consumers, and impose undue burdens on the Companies without any countervailing public benefit.”²⁵⁴ We disagree. The “all-in” rule will address consumer confusion identified in the record that has led to household budget issues, billing disputes, and litigation. Requiring clear, easy-to-understand, and accurate pricing disclosure empowers consumer choice, possibly improving customer satisfaction,²⁵⁵ and increases competition in the video marketplace.

G. Digital Equity and Inclusion

61. The “all-in” rule furthers our continuing effort to advance digital equity for all,²⁵⁶ including people of color, persons with disabilities, persons who live in rural or Tribal areas, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty or inequality. As part of the *NPRM*, the Commission invited “comment on any equity-related considerations²⁵⁷ and benefits (if any) that may be associated with the” “all-in” rule and related issues

²⁵² See, e.g., 47 CFR § 64.2401 (Truth-in-Billing Requirements); *Truth-in-Billing and Billing Format*, CC Docket No. 98-170, Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 7492, 7501, para. 14 (1999) (“We emphasize that one of the fundamental goals of our truth-in-billing principles is to provide consumers with clear, well-organized, and non-misleading information so that they may be able to reap the advantages of competitive markets.”).

²⁵³ Consumer Reports and Public Knowledge Reply Comments at 7 (explaining how, for example, section 632 “protect[s] consumers, and unlike the specific requirements of the program access rules”); Local Franchise Authorities Reply Comments at 3 (contending that the arguments made by NCTA and Verizon are contradicted by the record cited by a large number of commenters (citing Consumer Reports and Public Knowledge Comments at 14-19, and Truth in Advertising Comments at 2-8)).

²⁵⁴ Cable Company Reply Comments at 2; ACA Connects Comments at 7. Cf. ABC Television Affiliates Association Reply Comments at 1 (“The Affiliates Associations fully support the comments of the [NAB], which persuasively explain the public interest benefits that would flow from adoption of new “all-in pricing” requirements.” (citing NAB Comments)); NAB Comments at 1.

²⁵⁵ The American Customer Satisfaction Index 2023 ranked subscription TV series 40th of 43 industries surveyed in terms of customer satisfaction. American Customer Satisfaction Index, *ACSI Telecommunications Study 2022-2023* (June 6, 2023), <https://theacsi.org/news-and-resources/press-releases/2023/06/06/press-release-telecommunications-study-2022-2023/>.

²⁵⁶ Section 1 of the Communications Act of 1934 as amended provides that the FCC “regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex.” 47 U.S.C. § 151.

²⁵⁷ The term “equity” is used here consistent with Executive Order 13985 as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. See Exec. Order No. 13985, 86 Fed. Reg. 7009,

(continued....)

and, specifically, on how the “all-in” rule “may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well the scope of the Commission’s relevant legal authority.”²⁵⁸ We agree with the Local Governments Commenters that the “all-in” rule promotes equity by addressing unexpected fees and charges that disproportionately impact lower-income households.²⁵⁹

IV. PROCEDURAL MATTERS

62. *Regulatory Flexibility Act Analysis.* The Regulatory Flexibility Act of 1980, as amended (RFA),²⁶⁰ requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.”²⁶¹ Accordingly, we have prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the possible impact of rule changes contained in this *Report and Order* on small entities. The FRFA is set forth in Appendix C.

63. *Final Paperwork Reduction Act Analysis.* This document may contain new information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA).²⁶² Any such requirements will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies will be invited to comment on the information collection requirements contained in this proceeding. The Commission will publish a separate document in the *Federal Register* at a later date seeking these comments. In addition, we note that, pursuant to the Small Business Paperwork Relief Act of 2002 (SBPRA),²⁶³ we requested specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees.²⁶⁴

64. *Congressional Review Act.* The Commission has determined, and the Administrator of the Office of Information and Regulatory Affairs, OMB concurs, that these rules are “non-major” under the Congressional Review Act, 5 U.S.C. § 804(2). The Commission will send a copy of the Report and Order to Congress and the Government Accountability Office pursuant to 5 U.S.C. § 801(a)(1)(A).

V. ORDERING CLAUSES

65. Accordingly, **IT IS ORDERED** that, pursuant to the authority found in sections 1, 4(i), 303, 316, 335(a), 632(b), and 642 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 303, 316, 335(a), 552(b), and 562, this Report and Order **IS ADOPTED**, and Part 76 of the Commission’s rules, 47 CFR Part 76, **IS AMENDED** as set forth in Appendix B.

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Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (January 20, 2021).

²⁵⁸ *NPRM*, 2023 WL 4105426 at *9, para. 21.

²⁵⁹ Local Government Comments at 6 (“Equity concerns arise with these undisclosed fees. ... Regardless of whether vulnerable households are more likely to pay junk fees, the same level fee will account for a disproportionate share of a lower-income household’s total funds than that of a higher-income household.”).

²⁶⁰ 5 U.S.C. §§ 601–612. The RFA has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

²⁶¹ 5 U.S.C. § 605(b).

²⁶² The Paperwork Reduction Act of 1995 (PRA), Pub. L. No. 104-13, 109 Stat. 163 (1995) (codified in Chapter 35 of title 44 U.S.C.).

²⁶³ The Small Business Paperwork Relief Act of 2002 (SBPRA), Pub. L. No. 107-198, 116 Stat. 729 (2002) (codified in Chapter 35 of title 44 U.S.C.). See 44 U.S.C. § 3506(c)(4).

²⁶⁴ *NPRM*, 2023 WL 4105426 at *11, para. 26 (“seek[ing] specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees”). No commenter addressed SBPRA.

66. **IT IS FURTHER ORDERED** that this *Report and Order* **SHALL BE EFFECTIVE** thirty (30) days after the date of publication in the Federal Register. Compliance with section 76.310, 47 CFR § 76.310, which may contain new or modified information collection requirements, will not be required until (i) nine months after the release of this *Report and Order* or (ii) after the Office of Management and Budget completes review of any information collection requirements that the Media Bureau determines is required under the Paperwork Reduction Act, whichever is later; with the exception of small cable operators, which will have (i) twelve months after the release of this *Report and Order* or (ii) after the Office of Management and Budget completes review of any information collection requirements that the Media Bureau determines is required under the Paperwork Reduction Act, whichever is later, to come into compliance. The Commission directs the Media Bureau to announce the compliance date for section 76.310 by subsequent Public Notice and to cause section 76.310 to be revised accordingly. The Commission's rules **ARE HEREBY AMENDED** as set forth in Appendix B.

67. **IT IS FURTHER ORDERED** that the Commission's Office of the Secretary **SHALL SEND** a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

68. **IT IS FURTHER ORDERED** that Office of the Managing Director, Performance Program Management, **SHALL SEND** a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A**List of Commenters**Commenters

ACA Connects – America’s Communications Association

Mitchell Bakke

Jonathan Bates

Aaron Challancin

The City of Oklahoma City, Oklahoma; City of Minneapolis, Minnesota; Metropolitan Area Communications Commission; Northwest Suburbs Cable Communications Commission; North Metro Telecommunications Commission; South Washington County Telecommunications Commission; North Suburban Communications Commission; City of Edmond, Oklahoma; City of Coon Rapids, Minnesota; and City of Aumsville, Oregon (collectively, the Local Franchise Authorities))

The City of Seattle

Connecticut Office of Consumer Counsel Connecticut Office of State Broadband

Consumer Reports (with Public Knowledge)

Daniel Drake

DIRECTV, LLC

Kenneth Lubar

Matt Mann

Maureen

M Mondesir

National Association of Broadcasters

NCTA - The Internet & Television Association

NTCA - The Rural Broadband Association

One Ministries, Inc.

The Texas Coalition of Cities For Utility Issues, City of Boston, Massachusetts, the Mt. Hood Cable Regulatory Commission, Fairfax County, Virginia and National Association of Telecommunications Officers and Advisors (NATOA) (collectively, Local Government Commenters)

Truth in Advertising, Inc. (TINA.org)

USTelecom – The Broadband Association

Verizon

Reply Commenters

The ABC Television Affiliates Association, CBS Television Network Affiliates Association, FBC Television Affiliates Association, and NBC Television Affiliates (collectively, the Affiliates Associations)

Charter Communications, Inc., Comcast Corporation, Cox Communications, Inc., Mediacom Communications Corporation, Midcontinent Communications, and TDS Telecommunications Corporation

The City of Oklahoma City, Oklahoma; City of Minneapolis, Minnesota; Metropolitan Area Communications Commission; Northwest Suburbs Cable Communications Commission; North Metro Telecommunications Commission; South Washington County Telecommunications Commission; North Suburban Communications Commission; City of Edmond, Oklahoma; City of Coon Rapids, Minnesota; City of Aumsville, Oregon; and City of Mustang, Oklahoma (collectively, the Local Franchise Authorities)

The Colorado Communications and Utility Alliance (CCUA)

Consumer Reports (CR) and Public Knowledge

NCTA - The Internet & Television Association

NTCA - The Rural Broadband Association

The Texas Coalition of Cities For Utility Issues, City of Boston, Massachusetts, the Mt. Hood Cable Regulatory Commission, Fairfax County, Virginia and National Association of Telecommunications Officers and Advisors (NATOA) (collectively, Local Government Commenters)

USTelecom – The Broadband Association

Verizon

APPENDIX B

Final Rule

1. The authority citation for Part 76 is amended to read as follows:

AUTHORITY: 47 U.S.C. 151, 152, 153, 154, 301, 302, 302a, 303, 303a, 307, 308, 309, 312, 315, 317, 325, 335, 338, 339, 340, 341, 503, 521, 522, 531, 532, 534, 535, 536, 537, 543, 544, 544a, 545, 548, 549, 552, 554, 556, 558, 560, 561, 562, 571, 572, 573.

2. Add § 76.310 to read as follows:

47 CFR § 76.310. Truth in billing and advertising.

- (a) Cable operators and DBS providers shall state an aggregate price for the video programming that they provide as a clear, easy-to-understand, and accurate single line item on subscribers' bills, including on bills for legacy or grandfathered video programming service plans. If a price is introductory or limited in time, cable and DBS providers shall state on subscribers' bills the date the price ends, by disclosing either the length of time that a discounted price will be charged or the date on which a time period will end that will result in a price change for video programming, and the post-promotion rate 60 and 30 days before the end of any introductory period. Cable operators and DBS providers may complement the aggregate line item with an itemized explanation of the elements that compose that single line item.
- (b) Cable operators and DBS providers that communicate a price for video programming in promotional materials shall state the aggregate price for the video programming in a clear, easy-to-understand, and accurate manner. If part of the aggregate price for video programming fluctuates based upon service location, then the provider must state where and how consumers may obtain their subscriber-specific "all-in" price (for example, electronically or by contacting a customer service or sales representative). If part or all of the aggregate price is limited in time, then the provider must state the post-promotion rate, as calculated at that time, and the duration of each rate that will be charged. Cable operators and DBS providers may complement the aggregate price with an itemized explanation of the elements that compose that aggregate price. This requirement shall not apply to the marketing of legacy or grandfathered video programming service plans that are no longer generally available to new customers. For purposes of this section, the term "promotional material" includes communications offering video programming to consumers such as advertising and marketing.
- (c) Compliance with this section will not be required until the later of (i) December 19, 2024, or (ii) after the Office of Management and Budget completes review of any such requirements pursuant to the Paperwork Reduction Act; except that for small cable operators, compliance with this section will not be required until the later of (i) March 19, 2025, or (ii) after the Office of Management and Budget completes review of any such requirements pursuant to the Paperwork Reduction Act. For the purpose of this section, small cable operators are those with annual receipts of \$47 million or less. The Commission will publish a document in the Federal Register announcing the compliance dates and revising this paragraph (c) accordingly.

APPENDIX C

Final Regulatory Flexibility Act Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ an Initial Regulatory Flexibility Act Analysis (IRFA) was incorporated into the *All-In Pricing for Cable and Satellite Television Service, Notice of Proposed Rulemaking (NPRM)* released in June 2023.² The Federal Communications Commission (Commission) sought written public comment on the proposals in the *NPRM*, including comment on the IRFA. No comments were filed addressing the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objectives of, the Report and Order

2. The *Report and Order (Order)* reflects the Commission's effort to enhance pricing transparency by requiring cable operators and direct broadcast service (DBS) providers to provide the "all-in" price for video programming service in their promotional materials and on subscribers' bills. The Commission received comments and *ex parte* filings from individuals, consumer advocates, cable operators, DBS providers, broadcast industry members, trade associations, state and local governments, and franchising authorities. A number of comments describe general consumer frustration with unexpected "fees" (for example, for broadcast television programming and regional sports programming charges listed separately from the monthly subscription rate for video programming service) that are actually charges for the video programming service for which the subscriber pays.

3. The *Order* largely adopts the rule proposed in the *NPRM*, with certain limited exceptions or modifications, in response to comments in the record. In the *Order*, we adopt the proposal in the *NPRM* to require that cable operators and DBS providers provide the "all-in" cost of video programming service as a prominent single line item on subscribers' bills and in promotional materials. We require compliance with the "all-in" rule when the price for video programming increases during the term of the subscriber's service agreement and to national and regional promotional materials where charges to consumers varies by geography. We also acknowledge limitations that apply when the customer has a residential legacy or grandfathered plan, and recognize that how providers comply with the "all-in" rule may vary, if the price for video programming is clear, easy-to-understand, and accurate.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

4. There were no comments filed that specifically addressed the proposed rules and policies presented in the IRFA.

C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration

5. Pursuant to the Small Business Jobs Act of 2010, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.⁴

6. The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

¹ 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See *All-In Pricing for Cable and Satellite Television Service*, MB Docket No. 23-203, FCC 23-52, Notice of Proposed Rulemaking, 2023 WL 4105426 (rel. June 20, 2023) (*NPRM*).

³ 5 U.S.C. § 604.

⁴ *Id.* § 604(a)(3).

D. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply

7. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.⁵ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁶ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act (SBA).⁷ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.⁸

8. The rule adopted in the *Order* will directly affect small cable systems operators and DBS providers. Below, we provide a description of such small entities, as well as an estimate of the number of such small entities, where feasible.

9. *Cable and Other Subscription Programming.* The U.S. Census Bureau defines this industry as establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis.⁹ The broadcast programming is typically narrowcast in nature (e.g., limited format, such as news, sports, education, or youth-oriented). These establishments produce programming in their own facilities or acquire programming from external sources.¹⁰ The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.¹¹ The SBA small business size standard for this industry classifies firms with annual receipts less than \$47 million as small.¹² Based on U.S. Census Bureau data for 2017, 378 firms operated in this industry during that year.¹³ Of that number, 149 firms operated with revenue of less than \$25 million a year and 44 firms operated with revenue of \$25 million or more.¹⁴ Based on this data, the Commission estimates that a majority of firms in this industry are small.

⁵ *Id.* § 604(a)(4).

⁶ *Id.* § 601(6).

⁷ *Id.* § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632(a)(1)). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.” *Id.*

⁸ 15 U.S.C. § 632.

⁹ U.S. Census Bureau, *2017 NAICS Definition, “515210 Cable and Other Subscription Programming,”* <https://www.census.gov/naics/?input=515210&year=2017&details=515210>.

¹⁰ *Id.*

¹¹ *Id.*

¹² 13 CFR § 121.201, NAICS Code 515210 (as of 10/1/22, NAICS Code 516210).

¹³ U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 515210, <https://data.census.gov/cedsci/table?y=2017&n=515210&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>. The US Census Bureau withheld publication of the number of firms that operated for the entire year to avoid disclosing data for individual companies (see Cell Notes for this category).

¹⁴ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in all categories of revenue less than \$500,000 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher than noted herein.

(continued....)

10. *Cable Companies and Systems (Rate Regulation)*. The Commission has developed its own small business size standard for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.¹⁵ Based on industry data, there are about 420 cable companies in the U.S.¹⁶ Of these, only seven have more than 400,000 subscribers.¹⁷ In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.¹⁸ Based on industry data, there are about 4,139 cable systems (headends) in the U.S.¹⁹ Of these, about 639 have more than 15,000 subscribers.²⁰ Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.

11. *Cable System Operators (Telecom Act Standard)*. The Communications Act of 1934, as amended, contains a size standard for a "small cable operator," which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."²¹ For purposes of the Telecom Act Standard, the Commission determined that a cable system operator that serves fewer than 498,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator.²² Based on industry data, only six cable system operators have more than 498,000 subscribers.²³ Accordingly, the Commission estimates that the majority of cable system operators are small under this size standard. We note, however, that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.²⁴ Therefore, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

12. *Direct Broadcast Satellite (DBS) Service*. DBS service is a nationally distributed subscription service that delivers video and audio programming via satellite to a small parabolic "dish" antenna at the subscriber's location. DBS is included in the Wired Telecommunications Carriers industry

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We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

¹⁵ 47 CFR § 76.901(d).

¹⁶ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

¹⁷ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022); S&P Global Market Intelligence, *Multichannel Video Subscriptions, Top 10* (April 2022).

¹⁸ 47 CFR § 76.901(c).

¹⁹ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

²⁰ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022).

²¹ 47 U.S.C. § 543(m)(2).

²² *FCC Announces Updated Subscriber Threshold for the Definition of Small Cable Operator*, Public Notice, DA 23-906 (MB 2023) (2023 *Subscriber Threshold PN*). In this Public Notice, the Commission determined that there were approximately 49.8 million cable subscribers in the United States at that time using the most reliable source publicly available. *Id.* This threshold will remain in effect until the Commission issues a superseding Public Notice. See 47 CFR § 76.901(e)(1).

²³ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 06/23Q* (last visited Sept. 27, 2023); S&P Global Market Intelligence, *Multichannel Video Subscriptions, Top 10* (Apr. 2022).

²⁴ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(e) of the Commission's rules. See 47 CFR § 76.910(b).

which comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks.²⁵ Transmission facilities may be based on a single technology or combination of technologies.²⁶ Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution; and wired broadband internet services.²⁷ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.²⁸

13. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.²⁹ U.S. Census Bureau data for 2017 show that 3,054 firms operated in this industry for the entire year.³⁰ Of this number, 2,964 firms operated with fewer than 250 employees.³¹ Based on this data, the majority of firms in this industry can be considered small under the SBA small business size standard. According to Commission data, however, only two entities provide DBS service - DIRECTV (owned by AT&T) and DISH Network, which require a great deal of capital for operation.³² DIRECTV and DISH Network both exceed the SBA size standard for classification as a small business. Therefore, we must conclude based on internally developed Commission data, in general DBS service is provided only by large firms.

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

14. The *Order* requires cable operators and DBS providers to state the aggregate cost for video programming service in bills and any promotional material that presents a cost for service as clear, easy-to-understand, and accurate information.

15. The “all-in” rule must be fully implemented no later than (i) 9 months after release of the *Report and Order* or (ii) when the Commission announces an effective date in the Federal Register pursuant to the Paperwork Reduction Act, whichever is later; except that compliance with this section is required no later than (i) 12 months after release of the *Report and Order* or (ii) when the Commission announces an effective date in the Federal Register pursuant to the Paperwork Reduction Act, whichever is later, for small cable operators. For the purpose of the rule, small cable operators are defined as those

²⁵ See U.S. Census Bureau, *2017 NAICS Definition, “517311 Wired Telecommunications Carriers,”* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

²⁶ *Id.*

²⁷ See *id.* Included in this industry are: broadband Internet service providers (*e.g.*, cable, DSL); local telephone carriers (wired); cable television distribution services; long-distance telephone carriers (wired); closed-circuit television (CCTV) services; VoIP service providers, using own operated wired telecommunications infrastructure; direct-to-home satellite system (DTH) services; telecommunications carriers (wired); satellite television distribution systems; and multichannel multipoint distribution services (MMDS).

²⁸ *Id.*

²⁹ 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

³⁰ U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIIRM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIIRM&hidePreview=false>.

³¹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

³² See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eighteenth Report*, Table III.A.5, 32 FCC Rcd 568, 595 (Jan. 17, 2017).

with annual receipts of \$47 million or less, consistent with the SBA's small business size standards. We find that this is a reasonable amount to time based upon prior experience with how the industry has implemented TVPA billing requirements.³³ The record does not include a sufficient cost/benefit analysis that would allow us to quantify the costs of compliance for small entities, including whether it will be necessary for small entities to hire professionals to comply with the adopted rules. However, the transparent pricing requirements of the "all-in" rule will benefit competition for small and other video programming providers by providing consumers with more clarity when comparing costs for video programming services.

F. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

16. The RFA requires an agency to provide, "a description of the steps the agency has taken to minimize the significant economic impact on small entities ... including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected."³⁴

17. As explained in the *Order*, the "all-in" rule is necessary to equip consumers to make informed decisions about their service and comparison shop among video programming providers with clear, easy-to-understand, and accurate information about the charges related to video programming.³⁵ This rule includes flexibility that should make it easier for small and other entities to comply. For example, the Commission does not limit compliance with the "all-in" rule to a specific manner to disclose the aggregate price when charges for video programming are part of a bundled service or when video programming is marketed regionally or nationally, other than requiring a clear, easy-to-understand, and accurate "all-in" price. We also considered whether the "all-in" rule should differentiate between residential, small business, and enterprise subscribers, and determined that it should not apply to bulk purchasers of non-residential services or enterprise customers because those are typically customized, individually negotiated pricing plans. We believe the rule will protect consumers from deceptive bills and advertising with minimized costs and burdens on small and other entities. In the absence of evidence to the contrary in the record, the Commission does not expect the adopted requirements to have a significant economic impact on small entities. Finally, we provide small cable operators, defined as those with annual receipts of \$47 million or less, with an additional three months to come into compliance with the rule.

G. Report to Congress

18. The Commission will send a copy of the *Order*, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.³⁶ In addition, the Commission will send a copy of the *Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. The *Order* and FRFA (or summaries thereof) will also be published in the *Federal Register*.³⁷

³³ See Television Viewer Protection Act of 2019, Pub. L. No. 116-94, 133 Stat. 2534 (2019) § 1004(b) (requiring a six month implementation requirement).

³⁴ 5 U.S.C. § 604(a)(6).

³⁵ *Order* at para. 6.

³⁶ 5 U.S.C. § 801(a)(1)(A).

³⁷ *Id.* § 604(b).

**STATEMENT OF
CHAIRWOMAN JESSICA ROSENWORCEL**

Re: *All-In Pricing for Cable and Satellite Television Service*, Report and Order, MB Docket 23-203.

Across the economy, consumers are frustrated with junk fees. They are tired of seeing one advertised price and then paying something different when the bill comes due. They are fed up with special surcharges, line items, and tacked-on costs. That is why nearly four out of five people in this country support federal legislation to crack down on junk fees. This is no surprise because these fees make it hard to contrast like services and can quickly turn what seemed like a good deal into a not-so-good one.

So today at the Federal Communications Commission we are doing something simple to address this problem. We are requiring cable and satellite television providers to state clearly the “all-in” price consumers pay for video services. No one likes surprises on their bill. The advertised price for a service should be the price you pay when your bill arrives. It shouldn’t include a bunch of unexpected junk fees that are separate from the top-line price you were told when you signed up. But right now this isn’t the case. In fact, our record in this proceeding demonstrates that 24 to 33 percent of consumer bills are special fees like “broadcast subscription” and “regional sports assessments.” It is not just annoying; it makes it hard for consumers to compare services in a market that is evolving and has so many new ways to watch.

This effort to cut down junk fees on consumer bills is part of a larger initiative at this agency. In fact, next month, broadband providers will be rolling out new Broadband Nutrition Labels, with easy-to-understand facts about service plans to help improve transparency and increase competition. We have also proposed rules to limit unfair early termination fees, which can restrict consumer choice. On top of that, we have put forward rules to grant prorated credits or rebates for the remaining days in a billing cycle after the cancellation of service.

The bottom line is we do not have to have junk fees. We can have bills that are transparent and fair. This is a step in that direction and that is good news for consumers.

Thank you to the team responsible for this effort, including Holly Saurer, Lori Maarbjerg, Maria Mullarkey, Brendan Murray, and Joseph Price of the Media Bureau; Andrew Wise and Kim Makuch of the Office of Economic Analysis; Susan Aaron and David Konczal of the Office of General Counsel; Joycelyn James of the Office of Communications Business Opportunities; and Cathy Williams of the Office of Managing Director.

**DISSENTING STATEMENT OF
COMMISSIONER BRENDAN CARR**

Re: *All-In Pricing for Cable and Satellite Television Service*, Report and Order, MB Docket 23-203.

In this item, the Commission requires cable operators and direct broadcast satellite (DBS) providers to disclose the “all-in” price of video programming in subscribers’ bills and promotional materials. The disclosure regime covers four scenarios: (1) cable billing, (2) DBS billing, (3) cable advertising, and (4) DBS advertising. Because we lack statutory authority over all but the first, I must dissent from today’s decision.

The text of the item suggests that it is implementing the Television Viewer Protection Act of 2019 (TVPA),¹ which requires multichannel video programming distributors (MVPDs) to disclose, at the point of sale, “the total monthly charge” of the individual or bundled service “selected by the consumer.”² The TVPA also requires an itemized breakdown of MVPD fees in subscriber bills.³ As relevant to this proceeding, the TVPA has two key features. First, the law’s disclosures are limited to the point of sale. The TVPA does not regulate how prices are shown in advertising. In fact, Congress considered and ultimately rejected extending the law to advertisements.⁴ Second, the TVPA speaks for itself. It does not delegate rulemaking power to the Commission.⁵ Congress codified the TVPA outside of the Communications Act, and it has governed MVPDs well before this proceeding started. The FCC thus lacks the power to adopt price disclosure rules without a separate grant of statutory authority.

Only in the case of cable billing does that authority arguably exist. A separate statutory provision allows us to establish “consumer service requirements,” including “communications between the cable operator and the subscriber (including standards governing bills and refunds).”⁶ That language provides the clarity we ordinarily need, and I agree that the Commission may regulate cable bill disclosures, so long as those rules are consistent with the TVPA.

If the item were so limited, I could have supported it. But the item goes further and strays markedly from our statutory authority.

¹ Television Viewer Protection Act of 2019, Pub. L. No. 116-94, 133 Stat. 2534 (2019), *codified at* 47 U.S.C. § 562.

² 47 U.S.C. § 562(a).

³ 47 U.S.C. § 562(b) (requiring “an itemized statement that breaks down the total amount charged for or relating to the provision of the covered service by the amount charged for the provision of the service itself and the amount of all related taxes, administrative fees, equipment fees, or other charges”).

⁴ Compare Television Viewer Protection Act of 2019, H.R. 5035, 116th Cong. § 4 (2019), <https://www.congress.gov/bill/116th-congress/house-bill/5035/text/ih> (original bill introduced in the House of Representatives) (“A provider of a covered service may not advertise the price of the covered service unless the advertised price is the total amount that the provider will charge for or relating to the provision of the covered service, including any related taxes, administrative fees, equipment rental fees, or other charges, to a consumer who accepts the offer made in the advertisement.”).

⁵ The only authority that the TVPA gave the Commission was to extend the compliance date by six months, which the Commission already did. See *Implementation of Section 1004 of the Television Viewer Protection Act of 2019*, Order, MB Docket No. 20-61, DA 20-375 (MB rel. Apr. 3, 2020).

⁶ 47 U.S.C. § 552(b)(3).

For starters, the Commission is powerless to extend its cable billing rules to DBS providers. Nothing gives us authority to regulate what appears on DBS bills, in contrast to our authority to adopt “standards governing [cable] bills.” Nonetheless, the item seeks refuge in Section 335(a), which states:

*The Commission shall, within 180 days after October 5, 1992, initiate a rulemaking proceeding to impose, on providers of direct broadcast satellite service, public interest or other requirements for providing video programming. Any regulations prescribed pursuant to such rulemaking shall, at a minimum, apply the access to broadcast time requirement of section 312(a)(7) of this title and the use of facilities requirements of section 315 of this title to providers of direct broadcast satellite service providing video programming. Such proceeding also shall examine the opportunities that the establishment of direct broadcast satellite service provides for the principle of localism under this chapter, and the methods by which such principle may be served through technological and other developments in, or regulation of, such service.*⁷

Focusing on the first sentence, the Commission claims freestanding authority here to “impose ... public interest or other requirements for providing [DBS] video programming.”⁸

That interpretation is unsupportable. It effectively reads the express limitation—“providing video programming”—out of the statute. If “providing video programming” includes the way prices are presented, then there is no limiting principle on the scope of FCC regulation over DBS. The item does not even try to draw such a line. In fact, Section 335 tells us what “providing video programming” means by listing the specific DBS activities the Commission may regulate. They include access to broadcast time, the use of facilities, and the permissible use of channel capacity for noncommercial purposes.⁹ Tellingly, the statute authorizes us to prescribe “reasonable prices, terms, and conditions” that DBS operators assess on *educational programmers*.¹⁰ But no similar provision covers *DBS subscribers*. Congress was thus clear what it meant. Beyond the text, the Commission concedes that “the legislative history suggests that when enacting section 335(a), Congress was focused on potential requirements to be placed on DBS providers with respect to public service programming.”¹¹ The item does not—and cannot—suggest that Congress intended the expansive authority the Commission gives itself here.

It only gets worse, for the item conjures sweeping new powers to regulate how video prices are advertised.¹² In the cable context, the Commission has authority to enact rules only for the benefit of “subscribers”—think service outages, customer service hours, rate change notifications, consumer contracts, or as noted above, “communications between the cable operator and the subscriber (including standards governing bills and refunds).”¹³ In other words, the statute covers contractual relationships between cable companies and their customers. Advertisements are exactly the opposite. They are directed at *non-subscribers*—people who have *no* contract with the provider. The distinction between subscribers and non-subscribers is no trifling detail. It goes to the very heart of the law. As for DBS, Section 335 is completely silent; it says nothing about subscribers *or* the public at large.¹⁴

⁷ 47 U.S.C. § 335(a) (emphasis added).

⁸ *Report and Order* at para. 37.

⁹ 47 U.S.C. § 335(b).

¹⁰ 47 U.S.C. § 335(b)(3).

¹¹ *Report and Order* at para. 40.

¹² I use “advertisements” interchangeably with “promotional materials.” The latter term is used in the final rule.

¹³ 47 U.S.C. §§ 552(a), (b).

¹⁴ 47 U.S.C. § 335.

Recognizing its predicament when it comes to advertising, the item falls back on the FCC's ancillary jurisdiction under Section 4(i) of the Communications Act.¹⁵ That Hail Mary falls incomplete. As the D.C. Circuit has recognized, Section 4(i) "does not give the FCC unlimited authority to act as it sees fit with respect to all aspects of television transmissions, without regard to the scope of the proposed regulations."¹⁶ Instead, to properly invoke Section 4(i), the FCC must (1) point to a general jurisdictional grant under Title I that covers the regulated subject; and (2) show that the regulations are reasonably ancillary to the FCC's effective performance of statutorily mandated responsibilities.¹⁷

The Commission's claim of ancillary authority falters at both steps. For one, Title I does not give us generalized authority over consumer protection. It would be quite odd if it did, for that is the province of the Federal Trade Commission, which routinely polices unfair and deceptive trade practices¹⁸ and advertising in particular.¹⁹ For another, the item cannot point to an FCC statutory responsibility to which the new advertising rules are ancillary. While the item tries to bootstrap off the TVPA, that law does not speak to advertising (indeed, as noted above, Congress considered whether to extend the law to advertising and ultimately did not), and in any event it gives the FCC no powers or responsibilities. The D.C. Circuit has repeatedly rejected similar FCC attempts of mission creep based on Section 4(i).²⁰

* * *

This item is yet another example of the new normal at the FCC. After three years of restraint, the Commission is now unlawfully arrogating authority over every aspect of a communications provider's business. At this point, only the courts can put an end to this raw assertion of power. I dissent.

¹⁵ *Report and Order* at paras. 36, 42. See 47 U.S.C. § 154(i) ("The Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this chapter, as may be necessary in the execution of its functions.").

¹⁶ *Motion Picture Ass'n of America, Inc. v. FCC*, 309 F.3d 796, 798-99 (D.C. Cir. 2002).

¹⁷ *American Library Ass'n. v. FCC*, 406 F.3d 689, 691-92 (D.C. Cir. 2005).

¹⁸ See 15 U.S.C. § 45(a)(2) (vesting power in the FTC to "prevent," subject to enumerated exemptions, "unfair methods of competition in or affecting commerce and unfair or deceptive acts or practices in or affecting commerce").

¹⁹ In fact, the FTC has an ongoing proceeding to regulate the disclosure of the very category of so-called "junk fees" that the Commission says are at issue here. See *Rule on Unfair or Deceptive Fees*, Notice of Proposed Rulemaking, 88 F.R. 77420 (Nov. 9, 2023), <https://www.federalregister.gov/documents/2023/11/09/2023-24234/trade-regulation-rule-on-unfair-or-deceptive-fees>.

²⁰ See, e.g., *Comcast Corp. v. FCC*, 600 F.3d 642, 661 (D.C. Cir. 2010) (no ancillary authority over network management practices); *American Library Ass'n.*, 406 F.3d at 700-705 (no ancillary authority over broadcast receivers unrelated to signal reception); *Motion Picture Ass'n of America, Inc. v. FCC*, 309 F.3d at 806 (no ancillary authority to issue video description rules); see also *Illinois Citizens Committee for Broadcasting v. FCC*, 467 F.2d 1397 (7th Cir. 1972) (no ancillary authority over the Sears Tower construction as it affected broadcast reception).

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS**

Re: *All-In Pricing for Cable and Satellite Television Service*, Report and Order, MB Docket 23-203.

Today, we take a stand. The hard-to-understand asterisks and fine print that litter advertisements and bills for cable and satellite TV service soon will be extinct. We impose a simple requirement: these ads, and these bills, must include the “all-in” price – the total amount that the consumer will pay for video programming service. This just makes plain sense. In fact, in 2019 Congress passed a law *requiring* cable and satellite providers to provide customers with transparent pricing information, both before the consumer enters into a contract for video service, then in writing within 24 hours of the consumer entering into that contract, and then monthly on the consumer’s electronic bill.

And yet, the record shows that many consumers are still confused. Deeply confused. Providers split out programming fees so as to make them appear optional, when in reality they charge the “broadcast television fee” to all subscribers.¹ Too many families are surprised by the bottom-line price they pay for video service on a monthly basis. Too many experience bill shock, and have their monthly budgets blown by unexpected line-item fees. That’s not fair.

Generally, providers may choose to charge whatever price they believe the market will bear. But to keep that market robust and equitable, consumers must have the ability to make informed choices. By adopting the all-in rule today, we are ensuring that they do. We are empowering them to more easily comparison shop and choose the plan that is right for them. We are making certain that consumers may trust that the deal they believe they’re entering into is the one they’ll actually get. And that trust benefits consumers and providers alike.

I want to thank the Commission staff for their good work on this item, and their continued work on our pending consumer protection-focused items in this space. The all-in rule has my full support.

¹ These fees may be substantial. See Jon Brodtkin, “Comcast’s sneaky Broadcast TV fee hits \$27, making a mockery of advertised rates,” *Ars Technica* (Nov. 28, 2022), <https://arstechnica.com/tech-policy/2022/11/comcasts-sneaky-broadcast-tv-fee-hits-27-making-a-mockery-of-advertised-rates/>.

**DISSENTING STATEMENT OF
COMMISSIONER NATHAN SIMINGTON**

Re: *All-In Pricing for Cable and Satellite Television Service*, Report and Order, MB Docket 23-203.

Americans deserve to know what they are paying for their products. On that issue, I am aligned with my colleagues today who are voting to approve this item. Indeed, I asked my colleagues to implement a targeted edit to this item that I believe would have paved the way to a unanimous vote while still taking action to implement all-in pricing for cable billing. Leadership rejected that edit in favor of the item presented today. Permit me to explain my thinking on my vote to dissent.

Think of this item as a two by two matrix for pricing disclosure requirements. At the top, you have billing and promotional materials. On the side, you have cable and satellite video providers. The Commission's authority today only even arguably covers one of the four "quadrants" of this matrix: that is, cable billing. Satellite billing is a harder lift, and cable and satellite promotional material pricing disclosure requirements are fully without authority. While I would have had reservations with the particular *way* in which the item implements cable billing pricing requirements, at least we *can* do so under the TVPA. I am happy to concede that point. Section 642 empowers the Commission to act on cable billing practices, including to regulate how pricing is denominated therein. While I do not agree with the particular approach in today's item in implementing the all-in pricing disclosure requirement, at least our authority over some aspects of cable billing is clear.

The rest of the item, however—the rest of our toy management consultant matrix—is just analytical error. We lack authority under Section 335(a) to require satellite operators to change their bills to reflect these new disclosures, but much more distressingly: there is no world in which Section 335(a), Section 632 or Section 642 empower the Commission to regulate price formatting on promotional materials. It just is not there.

Section 632 relates to customer service rules for cable operators. While I will discuss why I am skeptical of Section 632 authority as it relates to billing in a moment, there is clearly no language indicating that Section 632 can extend to non-subscribers, as most of those targeted by promotional materials are. Nor could a promotional material plausibly be read to be a “communication between the cable operator and the subscriber” within the meaning of Section 632, which relates to already-extant relationships between cable operators and their subscribers. While some subscribers will, inevitably, see promotions for service from their current video provider, those are not *communications* within the meaning of Section 632, which clearly relates to the sorts of communications appurtenant to the *specific* and *existing* relationship between a cable operator and customer. It strains the tensile strength of ‘communication’, when read in the context of the whole of Section 632, to suggest otherwise. And the argument provided in the item—that there is some kind of “general grant” of authority under Section 632 for the Commission to establish customer service requirements for cable operators that is “read out” when the language is “narrowed” so as to apply to cable *customers*—is an absurdity. There is no “general grant” of authority under Section 632 that was ever intended to govern the relationship between a cable operator and a non-customer. So there is no authority as it relates to promotional materials in this Section.

Section 335(a) relates essentially to the provision of political programming. While my colleagues rely on the sentence empowering the Commission to impose “public interest or other requirements for video programming” on satellite video providers, the very next sentence indicates that “[a]ny regulations prescribed pursuant to such rulemaking shall, at a minimum, apply to [access to advertising time for candidates for political office].” This would seem to indicate the domain to which our “public interest” regulations were intended to apply, and the rest of the Section does nothing to undercut the basic principle that the thrust of the Section is about public service programming carriage. The bare existence of the term “public interest” does not entitle a reading that is fully contrary to context. Indeed, the item suggests

that its reading of this Section is “clear and common sense.” Yet, just as had Congress intended to extend Section 335(a) to cover how satellite providers advertise their prices or bill their customers, they presumably we have said so by any words other than “public interest.” Even one additional word. It is in no way clear, nor is it common sense—at least to me—that the Commission is entitled to impute meaning into a statute that Congress clearly could have included, but legislative history makes clear that it elected not to include.

And then there is the TVPA. As recently as 2019, Congress considered and explicitly rejected extending Commission authority to regulate promotional materials when passing the TVPA. Ought that not to be a clear indicator as to what clarity and common sense demand when reading Congressional intent as to what the Act says in Sections passed years earlier? Had the Commission authority to act today under Sections 335(a) or Section 632 to act as it relates to cable or satellite billing or promotional materials, for what purpose was the TVPA passed? It would seem to me that the very existence of the TVPA indicates clearly the precise boundaries Congress intended to draw as it relates to linear video billing and pricing disclosures and the Commission's authority to act thereon.

What is left to implement these requirements? The authority of the gunslinger: Section 4(i) ancillary authority. Suffice it to say, I do not find the exercise of Section 4(i) authority in any way related to the effective performance of our statutorily-mandated responsibilities, since this item is purely voluntary on the Commission's part. The full rejection of ancillary authority I will leave as an exercise for the litigant.

So our authority to act is weak where it exists at all, but is today's item a good idea? Well, in some respects, sure! Okay, all-in video pricing on my bill. Great, in some respects: now instead of a few lines on my monthly bill, I have one. Maybe I am a young and savvy consumer who was on the fence about cord-cutting. Maybe this revision looks a little tech-y, or the all-in price is a punchy serif font or something. At any rate, I appreciate the aesthetics of a single line item for my video package. Maybe I stay an additional year, because that single line item helps me do a little back-of-the-envelope comparison shopping, and I determine I'm actually doing all right with my traditional provider by comparison to a bundle of streaming services. This probably isn't so bad.

Yet the new rules are less great in other respects, like when instead of a few lines on my monthly bill, I have one. And I'm an older consumer with a legacy plan that has provided me a bill in the same format for the last decade. And now it looks like I'm being charged more. And now I'm calling my cable company or my grandchild to explain. This probably isn't so good.

And then not good at all, of course, is that we are yet again adding additional regulatory burden and complexity on an industry that is shedding customers by the millions. Traditional linear video is on the way out, but we don't have to shoo them away like the last guest who hasn't gotten the hint that the party's over. For every mote of regulatory complexity we add to legacy providers, unregulated online video providers become more nimble by comparison.

While an argument can be made for consumer benefit for all-in pricing on billing (although, if I were to guess, I think it will largely wind up being a push), we lack the authority to do most of what we did in this item, and we have no hope of prevailing on promotional materials if challenged. For those reasons, and for the general good of the order—in the hopes that we one day soon stop treating media regulation like a term paper word count minimum we have to meet—I dissent.

the lower 45 megahertz for unlicensed use.⁹ 5GAA, through its petition, seeks reconsideration of the unlicensed device out-of-band emissions (OOBE) limits into the upper 30 megahertz retained for ITS operations.¹⁰ For the reasons discussed below, we deny the petitions and affirm the Commission's decision to repurpose spectrum previously designated for ITS services to provide more flexibility for unlicensed device uses to help meet the burgeoning demand for wireless broadband in the United States.

II. BACKGROUND

2. In 1999, in consultation with the Department of Transportation (DOT), the Commission designated 75 megahertz of spectrum in the 5.9 GHz band for Dedicated Short Range Communications (DSRC) systems in the ITS radio service, setting forth the rules and protocols for the radio systems designed to enable transportation and vehicle safety-related communications.¹¹ A subsequent order in 2003 established licensing and service rules for DSRC operations.¹² Under the adopted service rules, DSRC licensees shared the 5.9 GHz band with several other services, including amateur radio service and fixed-satellite service (for uplinks) as well as with federal radiolocation service (radar) systems.¹³ When the Commission designated the 5.9 GHz band for ITS, it was expected that the band would support widespread deployment of systems that would improve efficiency and promote safety within the nation's transportation infrastructure.¹⁴ However, in the time since the Commission designated the 5.9 GHz band for ITS service, DSRC deployment was minimal. Many automotive safety functions originally contemplated for the 5.9 GHz band over 20 years ago—such as alerting drivers to vehicles or other objects, lane-merging alerts, and emergency braking—are being met in other spectrum bands (e.g., 76-81 GHz¹⁵) or by other technologies like radar, light detection and ranging (LiDAR), cameras, and other sensors.¹⁶

3. Given the technological shift for delivering automotive safety functions and the public interest benefits that would be gained by repurposing spectrum lying fallow, the Commission adopted the *First Report and Order*, wherein it removed the lower 45 megahertz from ITS use and adopted rules

⁹ Auto Innovators Petition at 1.

¹⁰ 5GAA Petition at 2.

¹¹ *Amendment of Parts 2 and 90 of the Commission's Rules to Allocate the 5.850-5.925 GHz Band to the Mobile Service for Dedicated Short Range Communications of Intelligent Transportation Services*, ET Docket No. 98-95, Report and Order, 14 FCC Rcd 18221 (1999) (*DSRC Report and Order*); 47 CFR § 90.371(a) (2020 Edition). In the 1998 Transportation Equity Act for the 21st Century (Transportation Equity Act or TEA), Pub. L. No. 105-178, 112 Stat. 107, Congress instructed the Commission to “consider, in consultation with the Secretary [of Transportation], spectrum needs for the operation of intelligent transportation systems” by January 1, 2000. 23 U.S.C. § 502 note § 5206(f); Congress instructed the DOT to “develop and maintain a national” intelligent transportation system to decrease accidents and improve overall travel efficiency. 23 U.S.C. § 517(a)(1).

¹² *Amendment of the Commission's Rules Regarding Dedicated Short Range Communications Services in the 5.850-5.925 GHz Band (5.9 GHz Band)*, WT Docket No. 01-90; *Amendment of Parts 2 and 90 of the Commission's Rules to Allocate the 5.850-5.925 GHz Band to the Mobile Service for Dedicated Short Range Communications of Intelligent Transportation Services*, ET Docket No. 98-95, Report and Order, ET Docket No. 98-95, 19 FCC Rcd 2458, 2466-68, paras. 13-16 (2003) (*DSRC Service Rules Order*).

¹³ 47 CFR § 2.106.

¹⁴ *DSRC Report and Order*, 14 FCC Rcd at 18225, para. 9 (designating the 5.9 GHz band for DSRC based on a finding that “DSRC applications are a key element in meeting the nation's transportation needs into the next century and in improving the safety of our nation's highways”).

¹⁵ See *First Report and Order*, 35 FCC Rcd at 13456, para. 38 & n.103 (citing *Amendment of Parts 1, 2, 15, 90 and 95 of the Commission's Rules to Permit Radar Services in the 76-81 GHz Band*, ET Docket No. 15-26, Report and Order, 32 FCC Rcd 8822 (2017)).

¹⁶ *First Report and Order*, 35 FCC Rcd at 13456-57, para. 38.

expanding unlicensed national information infrastructure (U-NII) operations¹⁷ such as Wi-Fi into that spectrum.¹⁸ The Commission made this decision partially because the DSRC services once contemplated for the 5.9 GHz band had not come to fruition in the 20 years since it allocated the spectrum for the ITS service. It concluded that rather than reserving the entire 75 megahertz of the 5.9 GHz band for vehicle-safety features that can be or are already being provided using other spectrum bands or alternative technology, 30 megahertz would be sufficient for ITS licensees to effectively use the spectrum for vehicle safety-related applications.¹⁹ The Commission found unconvincing claims about future plans for advanced DSRC-based ITS services and indicated that the future ITS services were too uncertain or remote to justify retaining the full 75 megahertz of the 5.9 GHz for ITS.²⁰ Accordingly, the Commission concluded that reserving the entire 5.9 GHz band for possible additional ITS services would not be the most efficient or effective use of that band, nor in the public interest to continue to do so.²¹

4. The Commission determined that its action modifying all existing ITS authorizations to transition such operations to only the upper 30 megahertz was well within the Commission's statutory authority under section 316 of the Communications Act of 1934, as amended, consistent with prior Commission practice, and furthers the promotion of the public interest, convenience, and necessity.²² The Commission found that this modification was manifestly in the public interest because it would make room for additional valuable unlicensed use in the lower 45 megahertz of the band, while allowing existing ITS operations sufficient spectrum to continue to provide substantially the same basic vehicular safety services.²³ The Commission also found that its decision to repurpose the lower 45 megahertz to provide more flexible unlicensed use was not in conflict with any role assigned to it by Congress.²⁴

5. In making the lower 45 megahertz available for more flexible unlicensed use, the Commission found that, when added to U-NII spectrum in the adjacent 5.725-5.850 GHz (denoted as U-NII-3) band, the 45 megahertz of spectrum from the 5.850-5.895 GHz (denoted as U-NII-4) band would provide for increased high-throughput broadband applications in spectrum that is a core component of today's unlicensed ecosystem, thereby providing the American public with the most efficient and effective use of this valuable mid-band spectrum.²⁵ At the same time, the Commission recognized the

¹⁷ Unlicensed national information infrastructure (U-NII) devices are intentional radiators operating in mid-band spectrum that use wideband digital modulation techniques and provide a wide array of high data rate mobile and fixed communications for individuals, businesses, and institutions. 47 CFR § 15.403 Definitions. U-NII devices operate in the 5 GHz and 6 GHz spectrum bands, part of the larger mid-band spectrum (a designation generally applied to spectrum between 2.5 GHz and 24 GHz). Mid-band spectrum has become highly desirable as a key component for future 5G buildout because of its balanced coverage and capacity characteristics. See, e.g., The FCC's 5G FAST Plan (Sept. 28, 2018), <https://www.fcc.gov/document/fccs-5g-fast-plan>.

¹⁸ *First Report and Order*, 35 FCC Rcd at 13449, para. 20. Wi-Fi is a family of wireless network protocols, based on the IEEE 802.11 set of standards, which are commonly used for local area networking of devices and Internet access. Wi-Fi has become indispensable for providing low-cost wireless connectivity in countless products used by American consumers. *Id.* at 13441 & n.2. Mobile operators routinely use spectrum on an unlicensed basis for network offloading and mobile carriers have widely implemented Wi-Fi calling. *Id.* at 13446-47, paras. 15-16.

¹⁹ *First Report and Order*, 35 FCC Rcd at 13456, paras. 36-37.

²⁰ *Id.* at 13488, para. 120.

²¹ *Id.* at 13451, para. 27.

²² *Id.* at 13463, para. 52 (citing 47 U.S.C. § 316).

²³ *Id.* at 13486-87, para. 117.

²⁴ *Id.* at 13489-90, paras. 123-124. In the TEA, Congress instructed the DOT to “develop and maintain a national” intelligent transportation system to decrease accidents and improve overall travel efficiency. 23 U.S.C. § 517(a)(1); Congress instructed the Commission to “consider, in consultation with the Secretary [of Transportation], spectrum needs for the operation of intelligent transportation systems” by January 1, 2000. 23 U.S.C. § 502 note § 5206(f).

²⁵ *First Report and Order*, 35 FCC Rcd at 13441, para. 2; 13446, para. 14; 13449, para. 20.

importance of maintaining some spectrum to support ITS applications, even though DSRC had sparsely been deployed and failed to become ubiquitously used for the broad range of traffic safety applications that were originally anticipated in the 5.9 GHz band.²⁶ The Commission designated the upper 30 megahertz to improve automotive safety through ITS applications, and required that, within one year of the effective date of the *First Report and Order*, ITS licensees must cease operations on channels in the lower 45 megahertz and move to channels in the upper 30 megahertz.²⁷ To help enhance the roll-out of ITS services and promote the most efficient and effective use of this ITS spectrum, the Commission updated the associated service rules for vehicular communications in the upper 30 megahertz to transition from the original DSRC protocol adopted in 1999 to a wireless technology-based protocol known as Cellular Vehicle To Everything (C-V2X),²⁸ at the end of a transition period to be determined through the record generated by the *FNPRM* in this proceeding.²⁹

6. To protect incumbent 5.9 GHz band services, including federal incumbents and ITS operations, from potential harmful interference by unlicensed operations, the Commission imposed stringent power limits and operating requirements on unlicensed devices (i.e., access points, subordinate devices, and client devices) operating in the lower 45 megahertz, restricting unlicensed use of the lower 45 megahertz to indoor locations.³⁰ In addition, to protect the ITS operations during and after their transition to the upper 30 megahertz, the Commission set OOB limits allowed in the upper 30 megahertz for indoor unlicensed operations in the lower 45 megahertz based on, but not identical to, the previously-affirmed OOB limits for unlicensed operations in the 5.725-5.850 GHz (U-NII-3) band.³¹ Since the Commission restricted unlicensed use of the lower 45 megahertz to indoor use only, the Commission took advantage of building attenuation, as well as other factors such as path loss, to increase the OOB limits allowed in the upper 30 megahertz from the indoor unlicensed operations by an additional 20 dB as

²⁶ *Id.* at 13441-42, para. 3, 13443, para. 7; 13451, paras. 26-28.

²⁷ *Id.* at 13462, para. 49, 13484-85, para. 110.

²⁸ C-V2X standards development began in 2015 when the 3rd Generation Partnership Project (3GPP) specified C-V2X features based on the 4G LTE-Pro system in 3GPP Release 14. Recently, C-V2X-based technology has gained momentum as a means of providing transportation and vehicle safety-related communications. *First Report and Order*, 35 FCC Rcd at 13443-44, para. 8 & nn.11, 14.

²⁹ *First Report and Order*, 35 FCC Rcd at 13479, para. 95; *FNPRM*, 35 FCC Rcd at 13500-08, paras. 146-168.

³⁰ *First Report and Order*, 35 FCC Rcd at 13466-76, paras. 61-79. 47 CFR § 15.407(a)(3)(ii)-(v). A U-NII access point operates either as a bridge in a peer-to-peer connection or as a connector between the wired and wireless segments of the network, or as a relay between wireless network segments. A U-NII subordinate device operates in the 5.850-5.895 GHz or in the 5.925-7.125 GHz band under the control of an indoor access point. A U-NII client device transmits generally under the control of an access point and is not capable of initiating a network. An indoor access point or subordinate device is supplied power from the wired connection, has an integrated antenna, is not battery powered, and does not have a weatherized enclosure. Access points that operate in the 5.850-5.895 GHz band are restricted to indoor use; subordinate devices and client devices that operate in the 5.850-5.895 GHz band must operate under the control of an indoor access point. 47 CFR §§ 15.403, 15.407(a)(3)(ii)-(v). In the *FNPRM* in this proceeding, there are pending proposals to establish rules permitting outdoor use of unlicensed devices in the 5.850-5.895 GHz band. See *FNPRM*, 35 FCC Rcd at 13508-14, paras. 169-185.

³¹ See *First Report and Order*, 35 FCC Rcd at 13475-76, para. 83 (citing *Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*, *First Report and Order*, 29 FCC Rcd 4127 (2014), *recon. denied*, Memorandum Opinion and Order, 31 FCC Rcd 2317 (2016) (*U-NII 5 GHz MO&O*)). Under the Commission's current rules, out-of-band emissions from unlicensed transmitters operating in the 5.725-5.850 GHz (U-NII-3) band are limited to -27 dBm/MHz at 75 megahertz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 megahertz above or below the band edge, and from 25 megahertz above or below the band edge increasing linearly to 15.6 dBm/MHz at 5 megahertz above or below the band edge, and from 5 megahertz above or below the band edge increasing linearly to 27 dBm/MHz at the band edge. 47 CFR § 15.407(b)(4)(i). These specifications result in OOB limits of -5 dBm/MHz at 5.895 GHz, decreasing linearly to -27 dBm/MHz at 5.925 GHz.

compared to the 5.725-5.850 GHz (U-NII-3) band OOB limits.³² The Commission found these OOB limits from indoor unlicensed operations mirror the OOB limits for unlicensed operations in the 5.725-5.850 GHz (U-NII-3) band after accounting for building attenuation.³³ The Commission also permitted a root mean square (RMS) detector, instead of requiring a peak detector, to be used to conduct all 5.9 GHz band unlicensed device OOB measurements. The Commission found that RMS measurement is more appropriate for ensuring that the potential for U-NII devices to cause harmful interference to adjacent-band operations is minimized because RMS measurements represent the continuous power being generated from a device, as opposed to peak power, which may only be reached occasionally and for short periods of time.³⁴

7. *Petitions.* In response to the *First Report and Order*, Auto Innovators and 5GAA filed petitions for reconsideration on June 2, 2021.³⁵ In its Petition for Reconsideration, Auto Innovators asks the Commission to reconsider its designation of the lower 45 megahertz for unlicensed uses and restore that portion of the 5.9 GHz band for ITS.³⁶ In its Petition for Partial Reconsideration, 5GAA asks the Commission to reduce the OOB limits permitted in the upper 30 megahertz designated for ITS services from indoor unlicensed access points, subordinate devices, and client devices operating in the lower 45 megahertz.³⁷ Notice of the filing of the petitions was published in the Federal Register on July 7, 2021.³⁸

8. *ITS America v. FCC.* While the reconsideration process remained pending, the Intelligent Transportation Society of America (ITS America) and the American Association of State Highway and Transportation Officials (AASHTO) petitioned the United States Court of Appeals for the D.C. Circuit to vacate the part of the *First Report and Order* repurposing the lower 45 megahertz for unlicensed operations.³⁹ The Amateur Radio Emergency Data Network (AREDN) filed a separate petition asking the court to vacate the entire *First Report and Order*.⁴⁰ As discussed below, many of the arguments presented by the reconsiderations petitioners overlap with the court petitioners' arguments. The D.C. Circuit

³² Specifically, for indoor unlicensed access point or subordinate devices operating solely in the 5.850-5.895 GHz (U-NII-4) band or on a channel that spans across 5.725-5.895 GHz (U-NII-3 and U-NII-4), all emissions at or above 5.895 GHz must not exceed an equivalent isotropically radiated power (EIRP) of 15 dBm/MHz at 5.895 GHz, decreasing linearly to 7 dBm/MHz at or above 5.925 GHz. *First Report and Order*, 35 FCC Rcd at 13475-76, para. 83; 47 CFR § 15.407(b)(5)(i). For client devices operating solely in the 5.850-5.895 GHz (U-NII-4) band or on a channel that spans across 5.725-5.895 GHz (U-NII-3 and U-NII-4), all emissions at or above 5.895 GHz must not exceed an EIRP of -5 dBm/MHz and decrease linearly to an EIRP of -27 dBm/MHz at or above 5.925 GHz. 47 CFR § 15.407(b)(5)(ii).

³³ *First Report and Order*, 35 FCC Rcd at 13475-76, para. 83.

³⁴ *Id.* at 13476-77, paras. 84-85.

³⁵ See Petitions for Reconsideration of Action in Proceedings, Public Notice, Report No. 3176 (June 16, 2021). The Amateur Radio Emergency Data Network (AREDN) submitted a reconsideration petition (filed May 3, 2021), which it subsequently withdrew. See Petitions for Reconsideration of Action in Proceedings, Public Notice, Report No. 3176 – CORRECTION (July 7, 2021). 5GAA and AREDN also petitioned the Commission to stay the effective date of the rules set forth in the *First Report and Order*. The rules became effective without Commission action.

³⁶ Auto Innovators Petition at 1-2.

³⁷ 5GAA Petition at 2, 7, 11.

³⁸ See Petitions for Reconsideration of Action in Rulemaking Proceeding, 86 FR 35700 (July 7, 2021). See Appendix for the record generated by this Federal Register notice.

³⁹ *ITS America v. FCC*, 45 F.4th at 411.

⁴⁰ *Id.*

rejected each of those arguments and affirmed the Commission's decisions in the *First Report and Order*.⁴¹

III. DISCUSSION

A. Redesignation of the 5.850-5.895 GHz Band for Unlicensed Use

9. In its Petition for Reconsideration, Auto Innovators asks the Commission to reconsider its decision to redesignate the lower 45 megahertz for unlicensed uses and to restore the lower 45 megahertz block to the ITS service.⁴² Auto Innovators contends the Commission exceeded its legal authority in issuing the *First Report and Order* “over the objection of DOT [the Department of Transportation]... , particularly in light of Congress’s grant of authority to DOT to administer a nationwide ITS program.”⁴³ Auto Innovators argues in the alternative that the *First Report and Order* merits reconsideration because the DOT and Congressional interests under the Biden Administration continue to express support for maintaining the entire 5.9 GHz band for automotive safety applications, as they did under the previous administration.⁴⁴ Auto Innovators also claims that the entire 75 megahertz of the 5.9 GHz band is needed to facilitate the future of transportation (e.g., automated driving, 5G technologies, advanced vehicle-to-everything (V2X) applications).⁴⁵

10. In *ITS America v. FCC*, the D.C. Circuit considered each of these arguments in upholding the Commission's *First Report and Order*. First, the court rejected the arguments that the Commission exceeded its legal authority by repurposing the lower 45 megahertz for unlicensed use. The court recognized that allocating spectrum among competing needs “is a difficult, highly technical task,” that “figuring out how much of the spectrum is needed to support a particular activity is exactly what the FCC does,” and that “the FCC is entitled to great deference when predicting the likelihood of [future] developments.”⁴⁶ As the court explained, the Transportation Equity Act “did not transfer away from the FCC its broad authority to manage the spectrum related to [ITS],” but instead “simply required the FCC to account for the [DOT]’s views and the needs of [ITS] when it does so,” which is what the Commission did.⁴⁷

11. Second, the court rejected the argument that the change in administration requires the Commission to revisit its decision. Specifically, the court stated that “the Department of Transportation’s concerns with the FCC’s order are no longer espoused by the Executive Branch” and in fact, “through the Department of Justice, the Executive Branch—which of course includes the Department of

⁴¹ *Id.* at 409, 411, 415. The D.C. Circuit also denied AREDN’s emergency motion for a judicial stay. *See* Intelligent Transportation Society of America v. FCC, Case No. 21-1130 (consolidated with 21-1131, 21-1141), Order (July 2, 2021).

⁴² Auto Innovators Petition.

⁴³ Auto Innovators Petition at 2. *But see* NCTA Opposition to Petitions at 7-8; Wi-Fi Alliance Opposition to Petitions at 3-6.

⁴⁴ Auto Innovators Petition at 2-5. *See also* Auto Innovators Reply at 2-5; IAFC Support Comments to Auto Innovators Petition at 2-4. *But see* NCTA Opposition to Petitions at 4-7; New America’s OTI and PK Opposition to Petitions at 16-19; Wi-Fi Alliance Opposition to Petitions at 4; WISPA Opposition to Auto Innovators Petition at 2-4.

⁴⁵ Auto Innovators Petition at 6-9. *See also* Auto Innovators Reply at 6-10; 5GAA Comments on Auto Innovators Petition at 2; Lucid Reply to Petitions at 2-3; MEMA Reply to Petitions at 1; T-Mobile Reply to Petitions at 4-5; Continental Reply to Auto Innovators Petition at 5-8. *But see* NCTA Opposition to Petitions at 8-10; New America’s OTI and PK Opposition to Petitions at 19-23; Wi-Fi Alliance Opposition to Petitions at 5-6; WISPA Opposition to Auto Innovators Petition at 5-7.

⁴⁶ *ITS America v. FCC*, 45 F.4th at 411, 413, 414.

⁴⁷ *Id.* at 412.

Transportation—joined the FCC’s brief defending the FCC’s order.”⁴⁸ Finally, the court also upheld the Commission’s conclusion that retaining the upper 30 megahertz for ITS will be adequate to serve transportation safety needs. It agreed with the Commission that “other [non-5.9 GHz] technologies have alleviated the need for all 75 megahertz of the [5.9 GHz band] to remain dedicated to [ITS].”⁴⁹ In addition, the court refused to require the Commission to hold additional spectrum in reserve for “yet-to-arrive technologies” that the Commission found “too uncertain and remote to warrant the further reservation of spectrum.”⁵⁰ We affirm our decision to repurpose the lower 45 megahertz for the reasons discussed in the *First Report and Order*, including the cost-benefit analysis therein,⁵¹ because nothing in the petition by Auto Innovators persuades us otherwise. Moreover, the D.C. Circuit Court’s decision makes clear that the decision to repurpose that spectrum was well within the Commission’s authority.

B. Out-of-Band Emissions Limits Permitted in the 5.895-5.925 GHz Band from Unlicensed Operations in the 5.850-5.895 GHz Band

12. In its Petition for Partial Reconsideration, 5GAA asks the Commission to reconsider “the unwanted emission limits permitted from new indoor unlicensed access points and client devices operating in the [lower 45 megahertz]” to better protect ITS operations in the upper 30 megahertz.⁵² Specifically, 5GAA asks the Commission to protect ITS operating in the upper 30 megahertz by “afford[ing] C-V2X an additional 20 dB of protection from these [5.850-5.895 GHz] U-NII-4 emissions.”⁵³ 5GAA objects to the Commission’s decision to base the OOB limits for unlicensed devices operating in the 5.850-5.895 GHz (U-NII-4) band on the existing OOB limits for unlicensed devices in the 5.725-5.850 GHz (U-NII-3) band, as “the technical realities of [5.850-5.895 GHz] U-NII-4 operations necessitate greater protection levels than afforded from [5.725-5.850 GHz] U-NII-3 operations.”⁵⁴ 5GAA rejects the Commission’s assumption of 20 dB building attenuation loss for all indoor access points, contending that “[w]hile many unlicensed access points will experience some building attenuation loss, a 20 dB loss cannot be assumed in every instance.”⁵⁵ Further, 5GAA claims the Commission’s choice of RMS measurement, rather than peak measurement, results in an additional 10-20 dB of unwanted emissions into the C-V2X frequencies.⁵⁶ 5GAA concludes that, combined, these decisions permit an unwanted emission limit into the upper 30 megahertz that is 30-40 dB more relaxed

⁴⁸ *Id.* at 411.

⁴⁹ *Id.* at 413.

⁵⁰ *Id.* at 414 (quoting *First Report and Order*, 36 FCC Rcd at 1444, para. 120).

⁵¹ See *First Report and Order*, 35 FCC Rcd at 13490-99, paras. 125-143.

⁵² 5GAA Petition at 2.

⁵³ *Id.*; 5GAA Reply at 2-4. See also Auto Innovators Comments at 2-6; FCA Comments in Support at 2-3; Ford Comments in Support at 1-3; Lucid Reply to Petitions at 3-4; MEMA Reply to Petitions at 1-3; Qualcomm Comments in Support at 2-7; Applied Information, Inc. *Ex Parte* at 1; Wyoming Department of Transportation *Ex Parte* at 1; Spoke Safety, LLC *Ex Parte* at 1 (February 28, 2024); Cohda Wireless Pty Ltd *Ex Parte* at 1 (February 29, 2024) (filed under Paul Gray); Jaguar Land Rover *Ex Parte* at 1 (February 29, 2024); The University of Michigan Transportation Research Institute *Ex Parte* at 1 (February 29, 2024); Georgia Department of Transportation *Ex Parte* at 1 (March 4, 2024); Panasonic Corporation of North America *Ex Parte* at 1 (March 11, 2024). But see NCTA Opposition to Petitions at 10-25; NCTA Reply at 1-4; New America’s OTI and PK Opposition to Petitions at 4-9; Wi-Fi Alliance Opposition to Petitions at 8-11. T-Mobile would prefer the Commission take “a more comprehensive approach to OOB limits and not finalize the OOB limits for indoor operations without fully considering outstanding issues raised in both the *Further Notice* and the Petitions.” T-Mobile Reply to Petitions at 3.

⁵⁴ 5GAA Petition at 3-4.

⁵⁵ *Id.* at 4.

⁵⁶ *Id.*

than the 5.725-5.850 GHz (U-NII-3) band limit.⁵⁷ 5GAA asserts that its suggestion to reduce the allowed 5.850-5.895 GHz (U-NII-4) band OOB limits by 20 dB “would provide necessary protection for critical safety services” in the upper 30 megahertz, while “still provid[ing] for robust indoor unlicensed operations.”⁵⁸

13. 5GAA also contends that the Commission’s choice of acceptable 5.850-5.895 GHz (U-NII-4) band OOB limits based on the existing OOB limits for unlicensed devices in the 5.725-5.850 GHz (U-NII-3) band is arbitrary and capricious as it fails to satisfy the Administrative Procedure Act (APA)⁵⁹ obligation to fully consider the relevant facts underlying its assumptions and articulate a reasoned explanation to support its decision.⁶⁰ 5GAA argues that C-V2X will have a “much more robust deployment” than the “thinly deployed” DSRC,⁶¹ while the “heavy use of the [5.850-5.895 GHz] U-NII-4 band will result in longer sustained periods of interference” to the upper 30 megahertz.⁶² Therefore, 5GAA claims that the more extensive C-V2X operations warrant greater protections than those provided from 5.725-5.850 GHz (U-NII-3) band operations.⁶³ 5GAA also contends that the Commission’s choice of the RMS measurement standard is arbitrary and capricious because the *First Report and Order* offers “no meaningful analysis of whether C-V2X operations will be able to tolerate the additional unwanted emissions that the RMS measurement approach will permit.”⁶⁴ 5GAA further states that the Commission does not explain why the RMS measurement technique approved to evaluate the indoor unlicensed operations’ OOB levels “is more suitable for assessing the impact of unwanted emissions on C-V2X services” than the peak measurement approach.⁶⁵

14. In its Petition, 5GAA incorporates by reference a study submitted with its comments on the *FNPRM*, which we refer to as “5GAA’s Coexistence Analysis.”⁶⁶ 5GAA claims this study demonstrates the Commission’s OOB limits adopted in the *First Report and Order* are detrimental to C-V2X, i.e., that the adopted OOB levels for unlicensed operations “significantly reduce C-V2X’s communications range by more than 50% when compared against 5GAA’s preferred approach.”⁶⁷ 5GAA argues that “permitting excessive unwanted emissions could raise concerns about the viability of safety services in the [upper 30 megahertz], delaying or even denying the network effects policymakers and transportation stakeholders hope and expect to achieve.”⁶⁸

15. 5GAA’s Coexistence Analysis does not convince us to reconsider the OOB limits decision for indoor unlicensed operations adopted in the *First Report and Order*. First, 5GAA’s Coexistence

⁵⁷ *Id.* at 4-5.

⁵⁸ *Id.* at 2-3.

⁵⁹ 5 U.S.C. §§ 551-559.

⁶⁰ 5GAA Petition at 8; 5GAA Reply at 7-9. *See also* Auto Innovators Comments in Support at 6-9; Ford Comments in Support at 2; MEMA Reply to Petitions at 3-4; *cf.* MEMA Reply to Petitions at 4-5 (arguing that the Commission failed to provide adequate notice for the adopted OOB limits). *But see* New America’s OTI and PK Opposition to Petitions at 9-15.

⁶¹ 5GAA Petition at 9.

⁶² *Id.* at n.28.

⁶³ *Id.* at 9.

⁶⁴ *Id.* at 11.

⁶⁵ *Id.*

⁶⁶ *See* 5GAA Petition at 5-6 & n.17 (incorporating by reference 5GAA, Analysis of Coexistence Between [5.850-5.895 GHz] U-NII-4 Devices and C-V2X Under 2020 5.9 GHz R&O and *FNPRM* (June 2021) (“5GAA’s Coexistence Analysis”), attached as Exhibit C to 5GAA Comments to the *FNPRM* (filed June 2, 2021)).

⁶⁷ *See* 5GAA Petition at 5.

⁶⁸ *Id.* at 7.

Analysis assumes an average activity factor (also known as duty cycle) of 2 percent for the percentage of time when an individual indoor unlicensed device is transmitting in the lower 45 megahertz, i.e., adjacent to the lower edge of the upper 30 megahertz.⁶⁹ In contrast, in the *6 GHz First Report and Order* (expanding unlicensed operations in 6 GHz U-NII bands, i.e., adjacent to the upper edge of the upper 30 megahertz), the Commission assessed the potential for Low Power Indoor unlicensed devices operating in the 6 GHz U-NII bands to cause harmful interference and determined that the appropriate activity factor per unlicensed device is only 0.4%.⁷⁰ That activity factor was based on measurement data for 5 GHz U-NII routers.⁷¹ Therefore, unlicensed 5.850-5.895 GHz (U-NII-4) band devices operating in the lower 45 megahertz can be assumed to operate with that same activity factor in determining 5.850-5.895 GHz (U-NII-4) devices' potential to cause harmful interference to ITS operations in the upper 30 megahertz. Thus, 5GAA's assumption leads to approximately 7 dB over-estimation in the average duty cycle power per unlicensed device's transmissions over time.⁷²

16. Second, 5GAA's Coexistence Analysis uses a relatively low 20 dBm (100 mW) on-board unit (OBU) transmit power,⁷³ where under our current rules, it could have used a higher OBU transmit power limit as currently permitted in the section 95.3189 OBU technical standards.⁷⁴ Section 95.3189 currently requires compliance with the Institute of Electrical and Electronics Engineers (IEEE) 802.11p-2010 standard: Amendment 6: Wireless Access in Vehicular Environments.⁷⁵ Under the IEEE standard, OBUs operated by entities other than state and local governments are allowed up to 33 dBm EIRP, i.e., 20 times as strong as 5GAA used in the Coexistence Study.⁷⁶ By using 20 dBm in its analysis, 5GAA artificially sets the OBU EIRP at a level that significantly increases the potential for 5.850-5.895 GHz (U-NII-4) band OOB to cause harmful interference to ITS operations in the upper 30 megahertz.⁷⁷

⁶⁹ See 5GAA's Coexistence Analysis at 18.

⁷⁰ See *Unlicensed Use of the 6 GHz Band, Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, ET Docket No. 18-295, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 3852, 3889, para. 101 (2020) (*6 GHz Order*). In recently adopted rules for a new class of unlicensed devices in the 6 GHz band (5.925-7.125 GHz) called very low power (VLP) devices, the Commission relied on two computer simulations conducted by proponents of VLP devices that assumed activity factors of 2% and 1.5%. *Unlicensed Use of the 6 GHz Band, Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, ET Docket No. 18-295, Second Report and Order, Second Further Notice of Proposed Rulemaking, and Memorandum Opinion and Order, FCC 23-86 at paras. 35-36 (adopted Oct. 19, 2023) (citing Apple Inc., Broadcom Inc. *et al.* Feb. 28, 2023 *Ex Parte*, ET Docket No. 18-295, at 9; Apple Inc. Sept. 14, 2023 *Ex Parte*, ET Docket No. 18-295, at 7). These activity factors were assumptions for a class of unlicensed devices that are not yet available. The 0.4% activity factor the Commission found appropriate in the *6 GHz Order* was based on measured data from 500,000 Wi-Fi access points. See *6 GHz Order*, 35 FCC Rcd at 3894, para. 117.

⁷¹ *Ex Parte* of CableLabs in ET Docket No. 18-295 at 1 and attached Coexistence Study at 5 (Dec. 20, 2019).

⁷² See also NCTA Opposition to Petitions at 21-22. For reference, a 3 dB increase in power is twice as much power, a 6 dB increase is 4 times as much power, and so on, where the power is doubled for every 3 dB increase.

⁷³ See 5GAA's Coexistence Analysis at 20.

⁷⁴ See 47 CFR § 95.3189.

⁷⁵ See 802.11p-2010, IEEE Standard for Information technology – Local and metropolitan area networks – Specific requirements – Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications Amendment 6: Wireless Access in Vehicular Environments (2010).

⁷⁶ See *id.* at 31, Table I.5a.

⁷⁷ Recently, the Commission granted waivers to parties requesting to deploy C-V2X operations in the upper 30 megahertz prior to the adoption of final rules, permitting OBUs to operate with an EIRP of 33 dBm. See *Request for Waiver of 5.9 GHz Band Rules to Permit Initial Deployment of Cellular Vehicle-to-Everything Technology*, ET Docket No. 19-138, Order, DA 23-343 (rel. April 24, 2023); *Request to Modify April 24, 2023 Waiver Order of the 5.9 GHz Band Rules to Permit Initial Deployment of Cellular Vehicle-to-Everything Technology*, ET Docket No. 19-

(continued....)

17. 5GAA's claims that while "there may be 20 dB [of building] attenuation in some cases, [] there exist other situations where very little attenuation would lead to harmful interference to C-V2X operations" do not persuade us to reconsider the OOB limits adopted in the *First Report and Order*.⁷⁸ 5GAA concedes that 20 dB of building attenuation as compared to the 5.725-5.850 GHz (U-NII-3) OOB limits is appropriate "in some cases." 5GAA does not take into account other factors the Commission considered that would accommodate cases with less building attenuation, such as the path loss due to the separation distance between indoor unlicensed devices and C-V2X receivers.⁷⁹ 5GAA's Coexistence Analysis also fails to adequately consider the reduction in antenna gain caused by the directionality of C-V2X receiving antennas. 5GAA assumes the randomness of peaks and nulls in the real antenna gain patterns of both unlicensed devices and C-V2X devices to have a zero dB average.⁸⁰ However, C-V2X antennas are typically horizontal in nature in front of and behind vehicles and positioned to maximize coverage along road surfaces. This orientation generally will provide some measure of isolation between unlicensed devices' transmissions and OBU receivers and help reduce unlicensed devices' OOB levels received by a C-V2X device in the upper 30 megahertz. Because the antenna patterns and coverage requirements differ between unlicensed and C-V2X operations, the assumption of a zero dB average gain is incorrect. C-V2X transmissions received by an OBU from other OBUs is more likely to occur in or near the main lobe of the OBU receiving antenna, which will result in a higher average gain for the reception of C-V2X transmissions than the zero dB average assumed in 5GAA's Coexistence Analysis. In sum, building attenuation, coupled with attenuation due to path loss and the C-V2X OBU receiving antenna angular discrimination, sufficiently support the Commission's decision that its adopted 5.850-5.895 GHz (U-NII-4) band OOB limits that fall in the upper 30 megahertz will not cause harmful interference to C-V2X operations.

18. 5GAA notes that in 2016, the Commission adopted relaxed OOB limits for 5.725-5.850 GHz (U-NII-3) band (which form the basis of the 5.850-5.895 GHz (U-NII-4) band OOB limits adopted in the *First Report and Order*) to accommodate unlicensed fixed point-to-point antennas in that band; since 5.850-5.895 GHz (U-NII-4) indoor unlicensed access points do not use such antennas, the Commission should not have established even more relaxed 5.850-5.895 GHz (U-NII-4) band OOB limits than those for 5.725-5.850 GHz (U-NII-3).⁸¹ However, in 2016, the Commission chose to provide "a single, consistent OOB requirement for all equipment" that operates in the 5.725-5.850 GHz (U-NII-3) band rather than "apply different OOB requirements based on a variety of situations."⁸² As such, 5GAA's distinction between types of unlicensed equipment in this case is inapplicable and thus, the Commission's decision to base OOB limits for the 5.850-5.895 GHz (U-NII-4) band equipment on the OOB limits for the 5.725-5.850 GHz (U-NII-3) band was appropriate.

19. We disagree with 5GAA's assertion that RMS measurement of unlicensed devices' OOB power, as opposed to peak measurement, permits more power from these OOB in the adjacent band, resulting in the receipt of an additional 10-20 dB of unwanted OOB on the C-V2X frequencies in the upper 30 megahertz.⁸³ Measurements of infrequent worst-case peak OOB of short duration are not an

138, DA 23-586 (rel. July 5, 2023); *Requests for Waiver of 5.9 GHz Band Rules to Permit Initial Deployment of Cellular Vehicle-to-Everything Technology*, ET Docket No. 19-138, Letter (rel. Aug. 16, 2023).

⁷⁸ See, e.g., Letter from 5GAA to Marlene H. Dortch, Secretary, FCC, ET Docket No. 19-138, at 2 (filed Dec. 18, 2023) (5GAA Dec. 18, 2023 *Ex Parte*).

⁷⁹ *First Report and Order*, 35 FCC Rcd at 13475-76, para. 83.

⁸⁰ See 5GAA's Coexistence Analysis at 11.

⁸¹ See, e.g., 5GAA Dec. 18, 2023 *Ex Parte* at 1-2 (citing *U-NII 5 GHz MO&O*, 31 FCC Rcd at 2322, para. 15).

⁸² *U-NII 5 GHz MO&O*, 31 FCC Rcd at 2322, para. 15.

⁸³ See 5GAA Petition at 10-11.

accurate or realistic assessment of the potential for a device to cause harmful interference.⁸⁴ As the Commission explained in the *First Report and Order*, instances of peak OOB power in an unlicensed device's transmitted signal only occur occasionally and are of limited duration; RMS measurement of OOB will provide a more accurate assessment of an unlicensed device's potential to cause harmful interference because RMS measurements represent the continuous power being generated from a device.⁸⁵

20. We also disagree with 5GAA's assertion that the Commission "traditionally" uses a peak measurement for assessing 5 GHz U-NII OOB.⁸⁶ As a general rule, we establish OOB measurement procedures based on the technical and operational characteristics of the equipment operating in the specific band under consideration and the design characteristics of equipment used in adjacent bands.⁸⁷ Peak measurements may be required when the Commission determines that peak emissions would have significant interference effects, as was the case for compliance testing of 5.725-5.850 GHz (U-NII-3) band devices' unwanted emissions to protect federal terminal Doppler weather radars in the 5.470-5.725 GHz (denoted as U-NII-2C) band.⁸⁸ In contrast, in the *6 GHz Order*, the Commission adopted OOB levels based on RMS measurement (as well as other appropriate techniques for measuring average power) to protect ITS operations in the 5.9 GHz band from the OOB of unlicensed operations in the adjacent 5.925-6.425 GHz (denoted as U-NII-5) band.⁸⁹ Compliance testing of 5.850-5.895 GHz (U-NII-4) band devices' unwanted emissions to protect ITS operations above the 5.850-5.895 GHz (U-NII-4) band is comparable to compliance testing of 5.925-6.425 GHz (U-NII-5) band devices' unwanted emissions to protect ITS operations below the 5.925-6.425 GHz (U-NII-5) band, and thus, RMS detection is appropriate in the case of measuring 5.850-5.895 GHz (U-NII-4) band OOB levels.⁹⁰ Moreover, allowing the flexible RMS measurement technique will help promote shared spectrum technologies and drive greater productivity and efficiency in spectrum usage.⁹¹

21. Accounting for the above-noted weaknesses in 5GAA's Coexistence Analysis, as well as considering the restriction on unlicensed use of the lower 45 megahertz to indoor locations and the requirement for RMS measurements for analyzing the potential impact of the adopted unlicensed device OOB limits, we conclude that the indoor unlicensed device OOB limits the Commission adopted in the *First Report and Order* will sufficiently protect C-V2X communications in the upper 30 megahertz from

⁸⁴ See, e.g., Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band, GN Docket No. 12-354, Order on Reconsideration and Second Report and Order, 31 FCC Rcd 5011, 5040, para. 105 (2016) (*3.5 GHz Order on Recon*). This approach is inconsistent with the Commission's "oft-stated rejection of worst case approaches to measurements and interference protection analysis." *Id.*

⁸⁵ See *First Report and Order*, 35 FCC Rcd at 13476, para. 85. See also Wi-Fi Alliance Opposition to Petitions at 11.

⁸⁶ 5GAA Petition at 10.

⁸⁷ Indeed, in some cases, the Commission has concluded that emission power measurements may be performed using either RMS-detection or peak-detection. See *3.5 GHz Order on Recon*, 31 FCC Rcd at 5039, para. 103.

⁸⁸ The Commission's Office of Engineering and Technology's Laboratory Division specified a peak measurement guideline for compliance testing of 5.725-5.850 GHz (U-NII-3) band devices' unwanted emissions, see KDB Publication No. 789033, available at <https://apps.fcc.gov/oetcf/kdb/> (query on publication No. 789033), to mitigate a known interference issue with the federal radars in the 5.470-5.725 GHz (U-NII-2C) band that are not present in the 5.9 GHz band. See *First Report and Order*, 35 FCC Rcd at 13477, para. 85. See also *6 GHz Order*, 35 FCC Rcd at 3926, para. 198; Wi-Fi Alliance Opposition to Petitions at 11.

⁸⁹ See *6 GHz Order*, 35 FCC Rcd at 3926, para. 198.

⁹⁰ See *First Report and Order*, 35 FCC Rcd at 13476, para. 85.

⁹¹ See also *3.5 GHz Order on Recon*, 31 FCC Rcd at 5041, para. 108 (a comparable analysis of the interference potential, in this case, between and among Citizens Broadband Radio Service users and incumbent users).

harmful interference. Consequently, we would not expect that C-V2X operations will experience reduced communications range from unlicensed OOB falling within the ITS band.⁹²

22. In response to 5GAA's claim that the Commission's choices of acceptable OOB limits and RMS measurement of OOB levels are arbitrary and capricious,⁹³ we note that in *ITS America v. FCC*, the U.S. Court of Appeals for the District of Columbia Circuit determined that the Commission was not acting arbitrarily and capriciously when it implemented "restrictions on unlicensed devices using the lower 45 megahertz—such as emissions limits and indoor-use-only rules—to keep those devices from interfering with intelligent transportation systems in the upper 30 megahertz."⁹⁴ The court reiterated its inclination to "uphold the Commission if it makes a technical judgment that is supported with even a modicum of reasoned analysis, absent highly persuasive evidence to the contrary."⁹⁵ The Commission has explained in detail its technical judgment that the adopted restrictions will minimize the potential for harmful interference to the extent appropriate in this context and 5GAA has not provided highly persuasive evidence to refute the Commission's judgment.⁹⁶ 5GAA's argument that the Commission was arbitrary and capricious by not increasing OOB protections of C-V2X in anticipation of possible heavier uses of both the lower 45 megahertz by unlicensed operations and the upper 30 megahertz via C-V2X deployment is speculative and similarly fails. Therefore, we reject 5GAA's claim that the Commission's decisions regarding protecting ITS operations in the upper 30 megahertz from unlicensed devices' OOB are arbitrary and capricious, and we decline to reconsider the indoor unlicensed device OOB limits adopted in the *First Report and Order*.

IV. PROCEDURAL MATTERS

23. *Paperwork Reduction Act Analysis*. This Order on Reconsideration does not contain any new or modified information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104-13. Thus, it does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. § 3506(c)(4).

24. *Congressional Review Act*. The Commission will not send a copy of this Order on Reconsideration to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. § 801(a)(1)(A), because no rule was adopted or amended.

25. *Regulatory Flexibility Act Analysis*. In this present Order on Reconsideration, the Commission promulgates no additional final rules. Our present action is, therefore, not an RFA matter.

⁹² As a reminder, under part 15 of the Commission's rules, unlicensed devices operate on the condition of not causing harmful interference to authorized stations. 47 CFR § 15.5(b)-(c). See also NCTA Opposition to Petitions at 14-15.

⁹³ See 5GAA Petition at 8-11.

⁹⁴ *ITS America v. FCC*, 45 F.4th at 415.

⁹⁵ *Id.* (citing *Mobile Relay Associates v. FCC*, 457 F.3d 1, 8 (D.C. Cir. 2006)).

⁹⁶ *First Report and Order*, 35 FCC Rcd at 13474-77, paras. 80-86.

V. ORDERING CLAUSES

26. Accordingly, IT IS ORDERED that pursuant to Section 1.429 of the Commission's rules, 47 CFR § 1.429, the Petition for Reconsideration filed on June 2, 2021 by Auto Innovators and the Petition for Partial Reconsideration filed on June 2, 2021 by 5GAA ARE DENIED.

Federal Communications Commission

Marlene H. Dortch
Secretary

Appendix**Record on the Auto Innovators Petition**

5GAA Comments
Wireless Internet Service Providers Association (WISPA) Opposition
Continental Automotive Systems Reply in Support
International Association of Fire Chiefs (IAFC) Support Comments
Auto Innovators Reply

Record on the 5GAA Petition

Auto Innovators Comments in Support
FCA US LLC Comments in Support
Ford Motor Company Comments in Support
Qualcomm Comments in Support
NCTA Reply (to Qualcomm's Comments)
Qualcomm Response to NCTA

Record on Both Petitions**Oppositions**

NCTA—The Internet & Television Association (NCTA) Opposition
New America's Open Technology Institute and Public Knowledge (New America's OTI and PK)
Opposition
Wi-Fi Alliance Opposition

Replies

5GAA Reply
Lucid Group Reply
Motor & Equipment Manufacturers Association (MEMA) Reply
T-Mobile Reply

***Ex Parte* Comments**

NCTA (Sept. 16, 2021)
Auto Innovators (June 1, 2022)
5GAA (Dec. 6, 2023; Dec. 18, 2023 (3); Feb. 2, 2024; Feb. 9, 2024; Feb 13, 2024; Feb 22, 2024)
Applied Information Inc. (February 27, 2024)
The Wyoming Department of Transportation (February 27, 2024)
Spoke Safety, LLC (February 28, 2024)
Cohda Wireless Pty Ltd (February 29, 2024) (filed under Paul Gray)
Jaguar Land Rover (February 29, 2024)
The University of Michigan Transportation Research Institute (February 29, 2024)
Georgia Department of Transportation (March 4, 2024)
Panasonic Corporation of North America (March 11, 2024)

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
UPM Technology, Inc.,
Complainant,
v.
Unigestion Holding, S.A., d/b/a/ Digicel Haiti,
Defendant.
Proceeding Number 23-64
Bureau ID Number EB-23-MD-001

MEMORANDUM OPINION AND ORDER

Adopted: March 19, 2024

Released: March 19, 2024

By the Commission:

I. INTRODUCTION

1. This Memorandum Opinion and Order resolves a formal complaint that UPM Technology, Inc. (UPM), a provider of international telecommunications services, filed against Unigestion Holding, S.A., d/b/a Digicel Haiti (Digicel Haiti), a Haitian mobile carrier. UPM alleges that Digicel Haiti violated sections 201(b) and 202(a) of the Communications Act of 1934, as amended (Act), by deactivating thousands of Subscriber Identity Module (SIM) cards that UPM purchased through third-party contractors in Haiti and shipped to the United States to access a Digicel Haiti discount roaming plan. Digicel Haiti marketed and sold the SIM cards exclusively in Haiti so that its customers could make calls in Haiti and when traveling abroad, although Digicel Haiti itself did not transport any calls between the United States and Haiti. UPM used the Digicel Haiti SIM cards to terminate large volumes of wholesale traffic from its carrier customers to Haiti, disguised as calls from individual Digicel Haiti customers.

2. As explained below, for the period prior to December 2014—the relevant time for this Complaint—we find that Digicel Haiti did not offer a common carrier or telecommunications service in the United States and thus is not subject to sections 201(b), 202(a), or 208 of the Act or the Commission’s jurisdiction with regard to the claims in UPM’s Complaint. Accordingly, we lack jurisdiction and dismiss UPM’s claims with prejudice. As an independent and alternative basis for our decision, even assuming jurisdiction exists, we find that UPM’s claims lack merit and therefore deny them.

1 Complaint, Proceeding Number 23-64, Bureau ID Number EB-23-MD-001 (filed Feb. 21, 2023) (Complaint).

2 47 U.S.C. §§ 201(b), 202(a).

3 Id. §§ 201(b), 202(a), 208.

II. BACKGROUND

A. The Parties

3. UPM is an Oregon corporation possessing a Commission authorization under section 214 of the Act to provide international telecommunications services on a facilities and resale basis.⁴ UPM has no licenses or other authorizations from the Haitian government to provide telecommunications services in Haiti.⁵ Digicel Haiti is a corporation organized under Haitian law.⁶ It offers mobile voice and broadband services in Haiti.⁷ It is not licensed under section 214 of the Act to provide international common carrier service in the United States.⁸ As explained below, Digicel Haiti does not itself transport calls between the United States and Haiti, but it has entered into various agreements, including roaming agreements, with several carriers to transport calls of Digicel Haiti customers who were traveling in the United States to Haiti.⁹

B. SIM Cards

4. SIM is an acronym for Subscriber Identity Module.¹⁰ A SIM card is a small circuit board that includes unique information that the mobile device uses to identify a specific subscriber to a particular mobile network. Thus, a mobile network generally will not permit a mobile phone to operate on the network without a valid SIM card.¹¹ The SIM card identifies a telephone number, account information, and subscription for a mobile network, stores user information required for authentication of the SIM card's subscription, and links the physical device with the subscriber's account, making it possible to route calls to the right device and allowing carriers to accurately measure usage and charge

⁴ Joint Statement, Proceeding Number 23-64, Bureau ID Number EB-23-MD-001 (filed Apr. 24, 2023) (Joint Statement) at 1, Stipulated Fact No. 1. *See* 47 U.S.C. § 214(a) (stating that carriers constructing or extending lines, or operating or engaging in transmission over lines, must first obtain from the Commission a certificate that the public convenience and necessity requires such conduct). The Commission granted UPM Marketing, Inc. an authorization to provide international facilities-based service and resale service in accordance with section 63.18(e)(1), (2) of the Commission's rules, 47 CFR § 63.18(e)(1), (2). *See* File No. ITC-214-20081120-00511, International Authorizations Granted, Report No. TEL-01357, Public Notice, 24 FCC Rcd 5376, 5376 (IB 2009). UPM Marketing, Inc. changed its name to UPM Technology, Inc. on November 18, 2014. *See* File No. ITC-214-20150316-00068, International Authorizations Granted, Report No. TEL-01786, Public Notice, 31 FCC Rcd 3572, 3574 (IB 2016).

⁵ Joint Statement at 1, Stipulated Fact No. 4.

⁶ *Id.* at 1, Stipulated Fact No. 2.

⁷ *Id.* at 1, Stipulated Fact No. 3.

⁸ *See* 47 U.S.C. § 214; 47 CFR § 63.18 (requiring authorization to construct or operate a new line "between the United States, its territories or possessions, and a foreign point"); International Communications Filing System, FCC International Section 214 Current Authorizations List File Number Report WR029 (Nov. 24, 2023), https://licensing.fcc.gov/cgi-bin/ws.exe/prod/ib/forms/reports/swr029b.htm?as_subsystem_code=ITC/INTERNATIONAL+SECTION+214&column=V_SITE_ANTENNA_FREQ.file_numberC/FILE+NUMBER&fstate=1/CURRENT&prepare=.

⁹ These carriers are authorized under section 214 to provide international and domestic common carrier service in the United States. *See infra* paras. 5 and 6 and citations therein.

¹⁰ Joint Statement, *supra* note 4, at 1-2, Stipulated Fact Nos. 3, 5; Complaint, *supra* note 1, at 2, n.9; Answer, Proceeding Number 23-64, Bureau ID Number EB-23-MD-001 (filed Mar. 23, 2023) (Answer) at 1, para. 11; Complaint Exh. 3, Item 17, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Amended Joint Stipulations (D. Or. Nov. 13, 2022) (ECF 508) (Trial Stipulations) at 4, Stipulation No. 4 (Bates No. 000479).

¹¹ *See Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Amended Joint Stipulations (Glossary) (D. Or. Nov. 13, 2022) (ECF 509) at 1.

their customers for their service.¹² In short, a SIM card is necessary for a mobile phone to connect with a network to make calls and for the network to track the phone's usage.¹³

C. Digicel Haiti's Pre-Paid Wireless Services

5. Digicel Haiti is a foreign carrier that sells prepaid mobile wireless services in Haiti.¹⁴ It does not have any telecommunications facilities or network operations in the United States.¹⁵ Digicel Haiti provided the services at issue in this dispute via Digicel Haiti SIM cards, which Digicel Haiti sold solely in Haiti and not in the United States.¹⁶ Digicel Haiti SIM cards allowed its customers to access Digicel Haiti's network and Digicel Haiti to charge for communications made from cellular devices containing its SIM cards.¹⁷

6. Digicel Haiti marketed and sold its SIM cards in Haiti at retail stores, authorized points of sale, and Digicel Haiti-operated stores; it also sold SIM cards to distributors in Haiti for resale to the Haitian public.¹⁸ A prepaid Digicel Haiti SIM card holder could make calls only if there were sufficient funds in the account associated with the SIM card.¹⁹ Digicel Haiti SIM cards enabled Digicel Haiti

¹² Joint Statement, *supra* note 4, at 2, Stipulated Fact No. 5; *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, 305 F. Supp.3d 1134, 1141 (D. Or. 2018) (*Digicel Haiti Opinion and Order*). See Russell Ware, *What is a SIM Card?*, Lifewire, <https://www.lifewire.com/what-are-sim-cards-577532> (updated May 21, 2021) (accessed Jan. 4, 2024); Tammy Xu, *What is a SIM Card and How Does it Work?*, <https://builtin.com/hardware/what-is-a-sim-card> (updated Oct. 18, 2022) (accessed Jan. 4, 2024).

¹³ See *supra* notes 11 and 12.

¹⁴ Joint Statement, *supra* note 4, at 2, Stipulated Fact No. 8; Answer, *supra* note 10, at 1-2, paras. 12, 13; Complaint Exh. 3, Item 31, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Transcript of Proceedings (D. Or. Nov. 17, 2022) (Trial Transcript, Volume 4, Testimony of M. Boute, Chairman and CEO of Digicel Haiti (Boute Testimony) at 922 (Bates No. 002463).

¹⁵ Complaint Exh. 3, Item 1, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Third Amended Complaint (D. Or. Oct. 29, 2019) (ECF 200) at 4, para. 15 (Bates No. 000005) (“Digicel Haiti operates solely within Haiti. It does not have any operations within the United States.”); *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Plaintiff Unigestion Holding’ Cross Motion for Summary Judgment on Defendant UPM Technology, Inc.’s Communications Act Counterclaims and Response in Opposition to Defendant UPM Technology, Inc.’s Motion for Summary Judgment – Communications Act (D. Or. Aug. 30, 2022) (ECF 397) at 14 (“UPM admits that Digicel Haiti’s physical wireless network is entirely located in Haiti, so the operation of that network occurs solely in Haiti.”) (citing UPM’s Response to Digicel Haiti’s Second Request for Admissions, No. 9); UPM’s Reply, Proceeding Number 23-64, Bureau ID Number EB-23-MD-001 (filed Apr. 3, 2023) (Reply) at 25, n.85 (same).

¹⁶ See Joint Statement, *supra* note 4, at 2, Stipulated Facts No. 6 (“Digicel Haiti distributed SIM cards for its network by selling them to distributors for resale to the public in Haiti.”); Answer, *supra* note 10, at 1-2, para. 12 (“Digicel Haiti offers mobile voice and broadband services in Haiti, not outside of Haiti. Digicel Haiti marketed and distributed SIM cards in Haiti by selling them to dealers or distributors for sale to the public in Haiti.”); *Digicel Haiti Opinion and Order*, 305 F. Supp.3d at 1141-42 (Digicel Haiti “operates solely within Haiti.”).

¹⁷ *Digicel Haiti Opinion and Order*, *supra* note 12, at 1141.

¹⁸ Complaint Exh. 3, Item 15, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Unigestion Holding, S.A.’s Answers and Objections to First (Revised) Interrogatories to Plaintiff (D. Or. Feb. 28, 2020) (Digicel Haiti Interrogatory Responses), at 17, Interrogatory No. 23 (Bates No. 000455); Joint Statement, *supra* note 4, at 2, Stipulated Fact No. 6; Complaint, *supra* note 1, at 8-9, paras. 19, 21; Answer, *supra* note 10, at 1-2, para. 12, 42, responding to Complaint, *supra* note 1, at 8, para. 19.

¹⁹ Joint Statement, *supra* note 4, at 2, Stipulated Fact No. 8. Digicel Haiti customers could add credits, in the form of minutes, to SIM cards by using, among other methods, vouchers and online “top-ups.” *Digicel Haiti Opinion and Order*, *supra* note 12, at 1141. See also Joint Statement, *supra* note 4, at 2, Stipulated Fact No. 9 (“Adding money to a prepaid SIM card is called ‘recharging’ or ‘topping up’ the SIM card or prepaid account.”). Digicel Haiti customers could use their phones anytime and anywhere to “recharge” or “top up” their SIM card accounts or to add
(continued....)

customers to make calls while in Haiti and to make “roaming” calls while outside Haiti, in countries where Digicel Haiti had mobile roaming arrangements with “host” carriers.²⁰ In the United States, the host carriers for Digicel Haiti’s roaming service were AT&T and T-Mobile.²¹ Through these roaming arrangements, AT&T’s and T-Mobile’s networks (in conjunction with Digicel Haiti’s network in Haiti) allowed Digicel Haiti’s customers traveling in the United States to make calls using their Digicel Haiti SIM cards.²²

7. Digicel Haiti’s SIM cards were pre-activated for use in Haiti and for roaming services outside Haiti.²³ Card purchasers who inserted a Digicel Haiti SIM card into a phone could make calls on Digicel Haiti’s network without establishing any additional relationship with Digicel Haiti (or with a host carrier).²⁴ Each time a prepaid customer used the phone, however, Digicel Haiti’s network authenticated the SIM as being a valid Digicel Haiti SIM card with sufficient funds to make a call.²⁵ If the caller was in Haiti, the entirely electronic authentication process occurred when the card purchaser made a call.²⁶ If the

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individual-minute and block-of-minutes plans to their accounts. Answer, *supra* note 10, at 3, para. 16; Complaint Exh. 3, Item 5, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Defendant’s Answer, Affirmative Defenses and Counterclaims to Plaintiff’s Third Amended Complaint and Demand for Jury Trial (D. Or. Sept. 7, 2021) (ECF 244) (UPM Answer to Third Amended Complaint and Counterclaims) at 42, para. 298 (Bates No. 000214); Complaint Exh. 3, Item 15, Digicel Haiti Interrogatory Responses, at 7-8, Interrogatory No. 11 (Bates Nos. 000445-46).

²⁰ See Answer, *supra* note 10, at 1, 3, paras. 12, 15; Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 922-23, 925-28 (Bates Nos. 002463-69); Complaint Exh. 3, Item 28, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Transcript of Proceedings (D. Or. Nov. 14, 2022) (Trial Transcript, Volume 1), Testimony of G. Laborde, Legal and Regulatory Director, Digicel Haiti (Laborde Testimony) at 123-126 (Bates No. 001541-44); Complaint Exh. 3, Item 4, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Defendant’s Answer, Affirmative Defenses and Counterclaims to Plaintiff’s Amended Complaint and Demand for Jury Trial (D. Or. Sept. 7, 2021) (ECF 244) (UPM Answer to Amended Complaint and Counterclaims) at 28-29, paras. 219-20 (Bates Nos. 000156-57); Joint Statement, *supra* note 4, at 1-2, Stipulated Fact Nos. 3, 10.

²¹ See Complaint, *supra* note 1, at 10, para. 23; Answer, *supra* note 10, at 3, para. 15, 32, responding to Complaint, *supra* note 1, at 10, para. 23; Joint Statement, *supra* note 4, at 2, Stipulated Fact No. 10.

²² See Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 922-26 (Bates Nos. 002463-69); Complaint Exh. 3, Item 17, Trial Stipulations, *supra* note 10, at 5, Stipulation No. 8 (Bates No. 000480). AT&T and T-Mobile transported calls made by Digicel Haiti customers roaming in the United States to one of the switching gateways operated by Digicel USA in New York or Florida. Digicel USA, a company separate from Digicel Haiti, transported the calls from its switching gateways to Haiti, where Digicel Haiti terminated the calls on its network. *Digicel Haiti Opinion and Order*, *supra* note 12, at 1141-42; Complaint Exh. 3, Item 17, Trial Stipulations, *supra* note 10, at 5-6, Stipulations Nos. 18, 20-24.

²³ Complaint Exh. 3, Item 28, Trial Transcript, Volume 1, Laborde Testimony at 123-26 (Bates Nos. 001541-44); Complaint Exh. 3, Item 31, Trial Transcript Volume 4, *supra* note 14, Boute Testimony at 922-23, 925-26 (Bates Nos. 002463-67).

²⁴ See *Digicel Haiti Opinion and Order*, *supra* note 12, at 1141 (noting that SIM card customers can access Digicel Haiti’s network when they place the card in a cellular telephone). See also Complaint Exh. 3, Item 15, *supra* note 18, Digicel Haiti Interrogatory Responses, *supra* note 18, at 7-8, Interrogatory No. 11 (Bates Nos. 000445-46) (noting that SIM card purchasers could pay for calls on an individual per-minute basis).

²⁵ This process involved the exchange of a series of technical codes once a SIM card connected to Digicel Haiti’s network. Complaint Exh. 3, Item 28, Trial Transcript, Volume 1, Laborde Testimony at 123-28 (Bates Nos. 001541-46); Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 923-25 (Bates No. 002464-66); see Answer *supra* note 10, at 3, para. 16.

²⁶ Complaint Exh. 3, Item 28, Trial Transcript, Volume 1, *supra* note 20, Laborde Testimony at 123-24 (Bates Nos. 001541-42); Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 923-25

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caller was outside Haiti, a similar electronic authentication process occurred but involved Digicel Haiti's roaming partner.²⁷ Specifically, when a customer with a phone using a Digicel Haiti SIM card traveled in the United States and turned on the phone, the phone connected to AT&T's or T-Mobile's network, and the customer received a welcome message from the host carrier welcoming the customer to the United States and to the host carrier's network.²⁸ AT&T or T-Mobile then completed the call after confirming with Digicel Haiti's network systems that the SIM card was valid and had available funds.²⁹

8. In a traditional roaming scenario, i.e., without reduced rates or a discount rate plan, Digicel Haiti customers paid for international roaming calls at a rate in excess of the equivalent of \$1.99 per minute.³⁰ Alternatively, Digicel Haiti customers could register their SIM cards for a discount rate plan called "Roam Like You're Home" (RLYH), which afforded limited-duration discount pricing for their existing roaming service.³¹ Digicel Haiti customers could opt for RLYH pricing for either a seven- or 30-day period.³² After paying an enrollment fee,³³ Digicel Haiti charged RLYH customers the equivalent of \$0.09 per minute for roaming calls to Haiti, which was the rate charged for local calls in Haiti.³⁴ Digicel Haiti customers could add RLYH to their Digicel Haiti SIM card accounts at anytime

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(Bates No. 002464-66); Joint Statement, *supra* note 4, at 4-5, Stipulated Fact No. 16; Complaint Exh. 3, Item 8, UPM Witness Statements at 12-13, para. v (Bates Nos. 000298-99).

²⁷ Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 923 (Bates No. 002464); Complaint Exh. 3, Item 28, Trial Transcript, Volume 1, *supra* note 20, Laborde Testimony at 123-26 (Bates Nos. 001541-44).

²⁸ Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 923-24 (Bates Nos. 002464-65).

²⁹ Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 923-26 (Bates No. 002464-67); Complaint Exh. 3, Item 28, Trial Transcript, Volume 1, *supra* note 20, Testimony of G. Laborde, Legal and Regulatory Director, Digicel Haiti at 128-29 (Bates No. 001546-47); Complaint Exh. 3, Item 13, Deposition of M. Boute as Rule 30(b)(6) Witness for Digicel Haiti at 77-79 (Bates Nos. 000403-04); Joint Statement, *supra* note 4, at 4, Stipulated Fact No. 16(a).

³⁰ *Digicel Haiti Opinion and Order*, *supra* note 12, at 1141; Complaint Exh. 3, Item 4, *supra* note 20, UPM Answer to Amended Complaint and Counterclaims at 28, para. 219 (Bates No. 000156); Complaint Exh. 3, Item 5, *supra* note 19, UPM Answer to Third Amended Complaint and Counterclaims at 40, para. 286 (Bates No. 000212). See Complaint Exh. 3, Item 29, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Transcript of Proceedings (D. Or. Nov. 15, 2022) (Trial Transcript, Volume 2), Laborde Testimony at 210 (Bates No. 001659) (testifying that Digicel Haiti's rates are expressed in Haitian gourdes); Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Testimony of Bruce Tran, CEO of UPM Technology, Inc. (Tran Testimony) at 772 (Bates No. 002313) (describing Digicel Haiti's prices being specified in Haitian gourdes).

³¹ See Answer, *supra* note 10, at 2, para. 14; Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 925 (Bates No. 002466); Complaint Exh. 3, Item 17, Trial Stipulations, *supra* note 10, at 5, Stipulation No. 8; Complaint Exh. 3, Item 4, *supra* note 20, UPM Answer to Amended Complaint and Counterclaims at 28-29, para. 220 (Bates Nos. 000156-57). See also *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, 580 F. Supp.3d 932, 938 (D. Or. 2022) (*Digicel Haiti Summary Judgment Order*); *Digicel Haiti Opinion and Order*, *supra* note 12, at 1141-42.

³² Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 925 (Bates No. 002466).

³³ *Digicel Haiti Summary Judgment Order*, 580 F.Supp.3d at 945; *Digicel Haiti Opinion and Order*, *supra* note 12, at 1141-42; Joint Statement, *supra* note 4, at 4, Stipulated Fact No. 16(a).

³⁴ Joint Statement, *supra* note 4, at 4, Stipulated Fact No. 15; Complaint Exh. 3, Item 4, *supra* note 20, UPM Answer to Amended Complaint and Counterclaims at 28-29, paras. 219-20 (Bates No. 000156-57). The fact that the discounted per-minute roaming rate mirrored the rate for calls made within Haiti is why the service was called "Roam Like You're Home." Joint Statement, *supra* note 4, at 4, Stipulated Fact No. 15.

from anywhere.³⁵ The steps to obtain RLYH pricing were generally the same whether the customer was in Haiti or traveling abroad.³⁶ If a customer enrolled outside Haiti, however, the customer had to make a call on the host carrier's network in order to connect to Digicel Haiti's network in Haiti.³⁷

D. UPM's Call Termination Business

9. UPM "participated in the spot market for international voice service to identify wholesale carriers that had traffic for termination in other countries, including Haiti, that would be interested in using UPM's services."³⁸ At its core, UPM's business model involved exploiting arbitrage opportunities that enabled it to charge its carrier customers for terminating international calls at rates lower than those of the destination country carrier.³⁹ All of UPM's customers were wholesale buyers, not retail customers.⁴⁰

10. Prior to October or November 2014, UPM offered an in-country bypass service using Digicel Haiti's SIM cards that had the effect of concealing the originating location of the calls, by making international calls appear to the destination country carrier (such as Digicel Haiti) to be local calls originated on its wireless network.⁴¹ UPM experienced a number of challenges with this in-country

³⁵ Joint Statement, *supra* note 4, at 4, Stipulated Fact No. 16(c) ("enrollment could be accomplished at any time"); Complaint Exh. 3, Item 15, *supra* note 18, Digicel Haiti Interrogatory Responses, *supra* note 18, at 10-11, Interrogatory No. 15 (describing the process to add RLYH to an account by entering a code "into the phone at any time") (Bates Nos. 000448-49); Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 924-25 (Bates Nos. 002465-66) (describing the use of Digicel Haiti's mobile app to subscribe to RLYH).

³⁶ An authenticated Digicel Haiti SIM card with sufficient funds in its account exchanged a series of codes with Digicel Haiti's network to enroll in RLYH for a designated period. At that time, Digicel Haiti deducted the appropriate enrollment fee from the SIM card account. See Joint Statement, *supra* note 4, at 4-5, Stipulated Fact No. 16.

³⁷ See Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 924 (Bates No. 002465); Complaint Exh. 3, Item 28, Trial Transcript, Volume 1, *supra* note 20, Laborde Testimony at 125-26 (Bates Nos. 001543-44); Joint Statement *supra* note 4, at 4, Stipulated Fact No. 16(b). If a SIM card's connection through a host carrier's network was that SIM card's first appearance in the United States, it received a welcome message to the host carrier's network followed by a message about enrolling in the RLYH rate plan. *Id.* at 4, Stipulated Fact No. 16(c).

³⁸ Joint Statement, *supra* note 4, at 3, Stipulated Fact No. 12.

³⁹ Complaint Exh. 3, Item 7, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Declaration of Bruce Tran as Chief Executive Officer of UPM Technology, Inc. in Support of UPM Technology, Inc.'s Motion for Summary Judgment (D. Or. Nov. 11, 2021) (ECF 256) (Tran Declaration) at 2, para. 4 (Bates No. 000275); Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 2-3, paras. A.2.a.i-iii (Bates Nos. 000288-89).

⁴⁰ Complaint Exh. 3, Item 30, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185-SI, Transcript of Proceedings (D. Or. Nov. 16, 2022) (Trial Transcript, Volume 3), Testimony of Bruce Tran, CEO of UPM (Tran Testimony) at 446 (Bates No. 001939).

⁴¹ The service worked as follows: (1) UPM's carrier customers sent traffic to UPM via the Internet, connecting at UPM's "softswitch"; (2) UPM delivered the calls via the Internet to the destination country; (3) using "Gateway" radio systems it installed in the destination country, UPM authenticated SIM cards for the destination country carrier's network; (4) the Gateways initiated wireless calls to the destination telephone numbers on the destination country carrier's network as local calls using the authenticated SIM cards; and (5) the UPM's Gateways connected the original calls (from UPM's third-party carrier customers) to the newly-initiated wireless calls. See Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 4, para. A.2.d (Bates No. 000290); Complaint Exh. 3, Item 7, *supra* note 39, Tran Declaration at 2-3, paras. 4-6 (Bates Nos. 000275-76); Complaint Exh. 3, Item 17, Trial Stipulations, *supra* note 10, at 5, Stipulation No. 7 (Bates No. 000480); Joint Statement, *supra* note 4, at 3, Stipulated Fact Nos. 12-13; Answer, *supra* note 10, at 4, para. 19. See also *Digicel Haiti Summary Judgment Order*, (continued....)

bypass operation.⁴² In addition, destination country carriers actively monitored SIM card usage to identify cards that seemingly were not being used by their customers, and they deauthorized cards used to route third-party calls onto the carriers' networks.⁴³ These challenges led UPM to cease its in-country bypass business model in Haiti in March 2012.⁴⁴

11. In April 2014, however, UPM resumed sending calls to Haiti, this time primarily using Digicel Haiti's roaming services and the discounted rates available with RLYH to terminate calls from its wholesale carrier customers.⁴⁵ UPM did not seek a business relationship with Digicel Haiti.⁴⁶ It did not have an interconnection agreement with Digicel Haiti, nor did it pursue a wholesale agreement with Digicel Haiti to resell Digicel Haiti's prepaid wireless services or to purchase SIM cards directly from Digicel Haiti.⁴⁷ Rather, UPM paid contractors in Haiti to purchase approximately 8,000 Digicel Haiti SIM cards from third-party vendors in Haiti and to ship the SIM cards to UPM in Oregon.⁴⁸ There, UPM loaded the SIM cards into a "SIM Unit."⁴⁹ Calls from UPM's wholesale customers traveled as follows:

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supra note 31, at 938, 942-43, 945, 951. A "softswitch" is a specialized computer program running on computer servers connected to the Internet. *Id.* at 942.

⁴² Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 10, para. A.2.o (Bates No. 000296). These challenges included unreliable electrical power, inconsistent Internet service, overheating of equipment, and inadequate cellular networks. Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 4, para. A.2.c (Bates No. 000290); Complaint Exh. 3, Item 30, Trial Transcript, Volume 3, Tran Testimony at 626-34 (Bates Nos. 002119-27).

⁴³ Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 5, para. A.2.e (Bates No. 000291).

⁴⁴ Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 10, para. A.2.o (Bates No. 000296); *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 944.

⁴⁵ See *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 945; Complaint Exh. 3, Item 7, *supra* note 39, Tran Declaration at 7, para. 25; Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 11, para. A.2.q (Bates No. 000297). UPM ceased sending traffic to Haiti in December 2014. See *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 944; Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 12, para. A.2.s (Bates No. 000298).

⁴⁶ See Complaint Exh. 3, Item 7, *supra* note 39, Tran Declaration at 8, paras. 29-30 (Bates No. 000281).

⁴⁷ See *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 944 (describing that UPM did not deal directly with Digicel Haiti), 952 (stating "there is no evidence that UPM and Digicel Haiti ever had an express contractual relationship between them"); Complaint Exh. 3, Item 30, Trial Transcript, Volume 3, *supra* note 40, Tran Testimony at 444 (Bates No. 001937) (confirming that UPM had no direct communication with Digicel Haiti and never entered into any form of written agreement with Digicel Haiti); Joint Statement, *supra* note 4, at 5, Stipulated Fact No. 17 ("UPM did not purchase any SIM cards directly from Digicel Haiti").

⁴⁸ *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 944; Complaint, *supra* note 1, at 8, para. 19; Complaint Exh. 3, Item 7, *supra* note 39, Tran Declaration at 6, paras. 20-21 (Bates No. 000279); Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 12, paras. A.2. u (Bates No. 000298); Answer Exh. 1, Deposition of Bruce Tran, CEO of UPM Technology, Inc. at 106-10 (Bates No. 000049-53) (describing upfront payments, purchase, and shipment of cards); Complaint Exh. 3, Item 14, Deposition of Bruce Tran, CEO of UPM Technology, Inc. at 448-9 (Bates Nos. 000433-34) (stating that UPM had an inventory of 8,000 SIM cards). The contractors charged UPM a mark-up over the retail cost of the SIM cards as part of their compensation. Complaint, *supra* note 1, at 8, para. 19; Complaint Exh. 3, Item 7, *supra* note 39, Tran Declaration at 6, para. 20 (Bates No. 000279). UPM also paid third-party vendors to recharge its SIM cards. UPM provided the third-party vendors with the telephone numbers of the SIM card accounts that UPM wanted to add funds to along with the appropriate funds, and the third-party vendors then transferred the funds to Digicel Haiti to be credited to the appropriate SIM card accounts. *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 943.

⁴⁹ A SIM Unit is a device that can read information contained on SIM cards. It utilizes software that randomly authenticates and activates SIM cards from a pool of cards and manages the data flow for calls to be accepted by the destination carrier. See Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 6, paras. A.2.g-h

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The call was routed via the Internet to UPM's softswitch and then directed via the Internet to UPM's Gateway in Oregon, which connected to the wireless network of a Digicel Haiti roaming partner in the United States.⁵⁰ Using a SIM card that UPM had registered with Digicel Haiti for the RLYH rate plan, the UPM Gateway sent authentication data for the SIM card to Digicel Haiti through Digicel Haiti's roaming partner, initiated a wireless call on the roaming partner's network, and linked that call to the original call from the UPM carrier customer.⁵¹ The roaming partner—AT&T or T-Mobile—then transported the call to Digicel Haiti's international switching partner in Miami or New York City.⁵² The international switching partners delivered the call to Digicel Haiti in Haiti where it was treated as a discounted RLYH call from a roaming Digicel Haiti subscriber.⁵³ During this process, UPM passed through to Digicel Haiti the phone number associated with one of the SIM cards UPM had shipped from Haiti, which was not the telephone number of the person actually making the call.⁵⁴ In this way, UPM's SIM Unit masked both the identity and location of the caller.⁵⁵

12. As with UPM's in-country bypass services, Digicel Haiti was ultimately able to identify and deactivate the SIM cards that UPM used to support its business operations.⁵⁶ As a result, by late 2014, UPM's business model using RLYH was no longer economically viable to terminate international

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(Bates No. 000292). See *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 938-39, 946-48; Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 7, para. A.2.i (Bates No. 000293). The SIM Unit at issue here also utilized "human behavior" technology, which allowed a pool of SIM cards to mimic calling patterns of individual SIM card holders, rather than exhibit patterns associated with wholesale carrier bypass services using Digicel Haiti's SIM cards. See *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 945, 947-48, 953-54 (describing testimony of UPM corporate representative that UPM had specifically designed proprietary software, called "Call Simulator," that was meant to be used with SIM cards to make them simulate normal human call usage); Complaint Exh. 3, Item 7, *supra* note 39, Tran Declaration at 7, para. 27 (Bates No. 000280).

⁵⁰ See *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 945-46. The record does not show whether either UPM's wholesale carrier customers or the actual callers were located or licensed in the United States or whether the calls they forwarded to UPM via the Internet originated in the United States. Because we find that Digicel Haiti did not offer a telecommunications service in the United States, we do not reach the question of whether the Act applies to specific calls from UPM's carrier customers. See 47 U.S.C. § 152(a) ("The provisions of this chapter shall apply to all interstate and foreign communication . . . which originates and/or is received within the United States. . .").

⁵¹ Complaint Exh. 3, Item 17, Trial Stipulations, *supra* note 10, at 5, Stipulation No. 8 (Bates No. 000480); Joint Statement, *supra* note 4, at 3, Stipulated Fact Nos. 12-13; Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 12-14, paras. A.2.u-aa (Bates Nos. 000298-300); Complaint Exh. 3, Item 7, *supra* note 39, Tran Declaration at 7-8, paras. 25-27 (Bates No. 000280); *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 945-46, 951.

⁵² See *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 942; Joint Statement, *supra* note 4, at 3-4, Stipulated Fact No. 14; Complaint, *supra* note 1, at 11-12, para. 28, 14, para. 37.

⁵³ Joint Statement, *supra* note 4, at 3-4, Stipulated Fact Nos. 13-15; see Complaint Exh. 3, Item 7, *supra* note 39, Tran Declaration at 7, paras. 25, 27 (Bates No. 000280); *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 938, 941-42, 945; Complaint, *supra* note 1, at 14, para. 37.

⁵⁴ See Joint Statement, *supra* note 4, at 3, Stipulated Fact No. 13; *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 945.

⁵⁵ Commission rules require United States carriers to transmit "the telephone number received from or assigned to the calling party to the next provider in the path from the originating provider to the terminating provider." See 47 CFR § 64.1601(a)(1). The telephone number of a Digicel Haiti SIM card was associated with calls made using the SIM card, and that number was transmitted along the call path to the terminating carrier. When UPM used Digicel Haiti's SIM cards in its SIM Unit, however, UPM could not transmit the actual telephone number of the calling party, as required by rule 64.1601(a)(1). See *supra* note 54.

⁵⁶ Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 12, para. A.2.r (Bates No. 000298); Joint Statement, *supra* note 4, at 5, Stipulated Fact Nos. 18, 21.

calls in Haiti, and, in December 2014, UPM entirely exited the business of terminating calls onto Digicel Haiti's network.⁵⁷

E. The Parties' Dispute

13. On February 2, 2015, Digicel Haiti sued UPM in the United States District Court for the District of Oregon (Court), alleging various counts, including a claim for fraud by concealment.⁵⁸ UPM filed numerous counterclaims against Digicel Haiti, including claims arising under the Act.⁵⁹ Prior to the jury trial on Digicel Haiti's fraud by concealment claim, Digicel Haiti filed a motion requesting that the Court stay UPM's Communications Act counterclaims and refer questions relating to them to the Commission pursuant to the primary jurisdiction doctrine.⁶⁰ On October 4, 2022, the Court granted Digicel Haiti's motion and stayed UPM's counterclaims pending their resolution at the Commission.⁶¹ The Court allowed Digicel Haiti's fraud by concealment claim to proceed to trial, and a jury unanimously found by clear and convincing evidence that UPM and its Chief Executive Officer had engaged in fraud by concealment in furtherance of UPM's in-country bypass and RLYH bypass programs.⁶²

14. To effectuate the primary jurisdiction referral, and in accordance with section 1.739 of the Commission's rules, UPM filed the instant Complaint.⁶³ UPM asks the Commission to issue an order finding that (a) "beginning no later than June 2014, Digicel Haiti is a common carrier and a telecommunications carrier subject to the Act with respect to its RLYH service;" (b) as such, Digicel Haiti violated sections 201(b) and 202(a) of the Act by "cutting off the SIM cards that UPM was using to resell RLYH service"; and (c) Digicel Haiti is liable to UPM for damages and attorneys' fees under Section 206 of the Act.⁶⁴ Digicel Haiti filed an Answer on March 23, 2023, denying UPM's allegations, and UPM filed a Reply on April 3, 2023.⁶⁵

III. DISCUSSION

15. Even though a jury found that UPM engaged in fraud by concealment when it routed calls to Digicel Haiti, UPM alleges that its actions properly sought to undercut Digicel Haiti's rates, and

⁵⁷ *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 944; Complaint Exh. 3, Item 7, *supra* note 39, Tran Declaration at 2, 9 paras. 3, 33-34 (Bates Nos. 000275, 000282). Complaint Exh. 3, Item 8, *supra* note 26, UPM Witness Statements at 12, para. A.2.s (Bates No. 000298).

⁵⁸ Complaint Exh. 3, Item 2, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185, Complaint (D. Or. Feb. 2, 2015) (ECF 1) (Digicel Haiti Court Complaint) (Bates Nos. 000041-94); Complaint, *supra* note 1, at 5-6, paras. 12-14.

⁵⁹ See Complaint Exh. 3, Item 4, *supra* note 20, UPM Answer to Amended Complaint and Counterclaims at 33-42, paras. 238-87 (Bates Nos. 000161-70); Item 5, *supra* note 19, UPM Answer to Third Amended Complaint and Counterclaims at 48-58, paras. 326-74 (Bates Nos. 000193-230).

⁶⁰ See Complaint Exh. 3, Item 11, *Unigestion Holding, S.A. v. UPM Technology, Inc.*, Case No. 3:15-CV-00185-SI, Order (D. Or. Oct. 4, 2022) (ECF 442) (*Referral Order*) at 1 (Bates No. 000352-59).

⁶¹ See *id.* at 5-7 (Bates Nos. 000357-59).

⁶² See *id.*; Answer Exh. 1, *Unigestion Holding, S.A. v. UPM Technology, Inc. et al.*, Case No. 3:15-CV-00185, Special Verdict (D. Or. Nov. 21, 2022) (ECF 526) (Special Verdict) (Bates Nos. DH-000001-03). In this proceeding, UPM does not dispute these findings. Reply, *supra* note 15, at 2.

⁶³ 47 CFR § 1.739. See Complaint Exh. 1, Letter from Lisa B. Griffin, Deputy Chief, Market Disputes Resolution Division, FCC Enforcement Bureau, to Kent Bressie, Counsel for Digicel Haiti, and Christopher W. Savage, Counsel for UPM, Proceeding No. 22-172, Bureau ID No. EB-22-MD-002 (dated Dec. 9, 2022) (*December 9th Letter Ruling*) (setting forth the process to be followed to effectuate the Court's referral).

⁶⁴ Complaint, *supra* note 1, at 42, para. 91. UPM intends to seek damages in the underlying court proceeding. See Complaint at 42, para. 91; *December 9th Letter Ruling* at 2.

⁶⁵ Answer, *supra* note 10; Reply, *supra* note 15.

that Digicel Haiti violated the Act when Digicel Haiti deactivated the SIM cards that UPM obtained and used to send wholesale calls to Haiti. In order to hold in favor of UPM, we must find that (1) Digicel Haiti is a common carrier subject to the Commission's jurisdiction, and (2) Digicel Haiti's conduct was unjust or unreasonable under section 201(b) and/or unjustly or unreasonably discriminatory under section 202(a). Based on this record, UPM—which, as the complainant, bears the burden of proof—has established neither claim.

A. Digicel Haiti Is Not Subject to the Commission's Jurisdiction Because It Does Not Offer a Common Carrier or Telecommunications Service in the United States

16. UPM portrays its litigation with Digicel Haiti as a “carrier-to-carrier dispute about interconnection and intercarrier compensation for international calls,” focusing specifically on its ability to “resell” RLYH to support its international wholesale call termination business.⁶⁶ UPM maintains that Digicel Haiti should have permitted the resale of RLYH, because Digicel Haiti is a “common carrier” subject to jurisdiction under the Act. According to UPM, Digicel Haiti offers RLYH in the United States because (1) any purchaser of a Digicel Haiti SIM card sold in Haiti may bring the SIM card to the United States, and (2) anyone in the United States with a Digicel Haiti SIM card may use Digicel Haiti's remote account management features to add money to the account associated with the card or enroll in RLYH.⁶⁷ UPM further argues that, by “cutting off” UPM's use of the SIM cards, Digicel Haiti violated the Commission's ban on prohibiting or restricting the resale of common carrier services.⁶⁸ We disagree with UPM. RLYH is not itself a telecommunications service, nor is it even telecommunications. Rather, it is a limited-duration pricing plan that reduces the rates for international roaming preactivated on Digicel Haiti's SIM cards sold exclusively in Haiti. Because Digicel Haiti did not offer telecommunications for a fee to the public in the United States, it is not a provider of telecommunications services under the Act, is thus not a telecommunications carrier under the Act, and, consequently, is not subject to regulation as a common carrier under the Act.

17. We begin with the Act's definitions. A “common carrier” or “carrier” under the Act means, in pertinent part, “any person engaged as a common carrier for hire, in interstate or foreign communication by wire or radio or interstate or foreign radio transmission of energy.”⁶⁹ The Act defines a “telecommunications carrier” as “any provider of telecommunications services,” and states that “[a] telecommunications carrier shall be treated as a common carrier . . . only to the extent that it is engaged in providing telecommunications services.”⁷⁰ “Telecommunications service” means “the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively

⁶⁶ Complaint, *supra* note 1, at 6, para. 15; Reply, *supra* note 15, at 1. UPM did not have an interconnection or intercarrier compensation agreement with Digicel Haiti. See *supra* note 47.

⁶⁷ Complaint, *supra* note 1, at 2-3, paras. 6-8, 22-25, paras. 52-59; Reply, *supra* note 15, at 22-38.

⁶⁸ Complaint, *supra* note 1, at 26-33, paras. 60-74; Reply, *supra* note 15, at 6-7.

⁶⁹ 47 U.S.C. § 153(11).

⁷⁰ *Id.* § 153(51) (unrelated exceptions omitted). The Commission has interpreted the term “telecommunications carrier” to mean “essentially” the same thing as “common carrier,” and the D.C. Circuit upheld that interpretation as reasonable. See *Virgin Islands Tel. Corp. v. FCC*, 198 F.3d 921, 922 (D.C. Cir. 1999). See also *Business Data Services in an Internet Protocol Environment; Technology Transitions; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Report and Order, 32 FCC Red 3459, 3567-68, para. 269 (2017) (“Because telecommunications services meet the standard for common carriage, providers of telecommunications services—i.e., telecommunications carriers—are acting as common carriers to the extent that they are providing such services.”), *pets. for rev. granted in part, otherwise den.*, *Citizens Telecommunications Company of Minnesota, LLC v. FCC*, 901 F.3d 991 (8th Cir. 2018). We note that this general framework is applicable to commercial mobile services. See 47 U.S.C. § 332(c)(1)(A) (“A person engaged in the provision of a service that is a commercial mobile service shall, insofar as such person is so engaged, be treated as a common carrier”).

available directly to the public, regardless of the facilities used.”⁷¹

18. Although section 3 of the Act does not identify the location where a common carrier must be “engaged . . . for hire” or define the location of the “public” to which telecommunications must be offered for a fee by a telecommunications carrier, it is evident from other provisions of the Act, as well as the statute’s stated purpose and application, that its scope excludes offers of service made exclusively outside the United States.⁷² Section 1 of the Act explains that the Commission was established “so as to make available, so far as possible, *to all the people of the United States*” communications networks and capabilities advancing various Congressionally defined policies.⁷³ Against that backdrop, we find it most sensible to consider whether the “engage[ment] . . . for hire” of a possible common carrier and the offer of service to the “public” by a possible telecommunications carrier occurs within—or exclusively outside—the United States. Where that conduct, i.e., the engagement for hire and offer for service, occurs exclusively outside the United States, the focus of section 1 of the Act persuades us that the best view is that such offerings would fall outside the scope of the Commission’s jurisdiction over a common carrier or telecommunications carrier under the Act.

19. Section 2(a) of the Act points us in the same direction. Section 2(a) makes clear that the provisions of Chapter 5 of the Act “apply to all interstate and foreign communication by wire or radio . . . which originates and/or is received within the United States, *and to all persons engaged within the United States in such communication.*”⁷⁴ In determining whether a provider is engaged in interstate or foreign communications within the United States when applying the “common carrier” and “telecommunications carrier” definitions, we take our cues from the wording and focus of those statutory definitions themselves—which mirror the language of section 2(a) in key ways. As noted above, a common carrier is defined in pertinent part as “any person engaged as a common carrier for hire.”⁷⁵ In applying the statutory definition of “common carrier” consistent with section 2(a) of the Act, we think it makes most sense to consider the location where the provider is “engaged . . . for hire” in that provision of communications services. Independently, a telecommunications carrier shall be treated as a common carrier “only to the extent that it is engaged in providing telecommunications services,” which, in turn, requires the offering of telecommunications for a fee to the public.⁷⁶ As with our application of the “common carrier” definition, we find the relevant “engage[ment]” for purposes of section 2(a) to be the location where the provider makes its offer to provide the relevant communications services. Where the offer of the relevant services occurs exclusively outside the United States, that is best understood as falling outside our jurisdiction over common carriers and telecommunications carriers under the Act.

20. As the foregoing indicates, key questions for us to decide are *what* service Digicel Haiti offered and *where* it offered that service. Our analysis of whether the Act’s common carriage requirements apply begins and ultimately ends with those determinations. As explained below, we find that the service Digicel Haiti offered was prepaid wireless service (including international roaming), which customers could access only through the purchase of a Digicel Haiti SIM card, and that Digicel Haiti offered the service exclusively in Haiti, not to the public in the United States.⁷⁷

⁷¹ 47 U.S.C. § 153(53). The Act defines “telecommunications” as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.” 47 U.S.C. § 153(50).

⁷² *Id.* § 153(11), (51), (53).

⁷³ *Id.* § 151 (emphasis added).

⁷⁴ *Id.* § 152(a) (emphasis added).

⁷⁵ *Id.* § 153(11).

⁷⁶ *Id.* § 153(50), (51).

⁷⁷ Although it maintains differently (*see Reply, supra* note 15, at 5), UPM in effect asks the Commission to exercise jurisdiction over foreign carriers offering roaming services to their home country customers when those customers

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21. As described above, Digicel Haiti SIM card holders could place international roaming calls when they purchased a SIM card.⁷⁸ They did not need first to subscribe to any separate or additional plan, including RLYH.⁷⁹ The cards were pre-activated for use in Haiti and for roaming services outside Haiti, and card holders who inserted a Digicel Haiti SIM card into a phone could access Digicel Haiti's network.⁸⁰ Once Digicel Haiti's network authenticated the SIM card (i.e., confirmed that the card was a valid Digicel Haiti SIM card) and determined that the associated account contained sufficient funds to make calls, Digicel Haiti customers could, as a practical matter, avail themselves of the service arrangement they purchased in Haiti.⁸¹ Although this entirely electronic authentication process occurred whether the caller was in Haiti or in a country where Digicel Haiti had a roaming partner,⁸² we conclude on this record that it was the original offer of the SIM card that represented the entire offer of prepaid wireless service on the part of Digicel Haiti, and the purchase of that SIM card from Digicel Haiti that represented the purchase of that service on the part of customers.

22. Digicel Haiti offered its prepaid wireless services exclusively through the sale of its SIM cards, and it sold its SIM cards exclusively in Haiti.⁸³ There is no evidence (and UPM does not contend) that Digicel Haiti sold its SIM cards in the United States. Digicel Haiti's SIM cards found their way to the United States because UPM paid contractors to purchase thousands of the cards in Haiti and ship them to UPM in Oregon.⁸⁴ In Oregon, UPM loaded the cards into its SIM Unit, which then made calls, masking both the identity and location of the caller.⁸⁵

23. UPM discounts the importance of the sale of the SIM cards occurring exclusively in Haiti, characterizing them as mere "physical objects" that Digicel Haiti had "no further control over, or legal interest in, or even business interest in" after they were sold.⁸⁶ In UPM's view, SIM cards cannot be "conflated" with the service Digicel Haiti provides, because they are "not part of Digicel service."⁸⁷ Not so.⁸⁸ To begin, the purchase of a Digicel Haiti SIM card established a subscription for Digicel Haiti's

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travel to the United States and utilize telecommunications services provided by the host carriers (here, AT&T and T-Mobile). Complaint, *supra* note 1, at 18-21, paras. 44-48; Reply, *supra* note 15, at 14-22. But the Commission has never taken such action, and we decline to do so here. The *Parts 1 & 63 Order*, on which UPM relies, modified the rules and procedures governing the provision of international telecommunications service by *United States carriers* and clarified rules governing the provision of international roaming by *U.S.-CMRS carriers*. See *In the Matter of Amendment to Parts 1 and 63 of the Commission's Rules*, Report and Order, 22 FCC Rcd 11398 (2007) (*Parts 1 & 63 Order*). The *Parts 1 & 63 Order* did not address international roaming offered by foreign carriers to their customers. *Id.* at 11404-06, paras. 18-23.

⁷⁸ See *supra* para. 7 and citations therein.

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

⁸³ See *supra* note 16.

⁸⁴ See *supra* note 48.

⁸⁵ See *supra* notes 49, 54.

⁸⁶ Reply, *supra* note 15, at 28-29.

⁸⁷ *Id.* at 29, n.92.

⁸⁸ UPM acknowledges that a Digicel Haiti SIM card (purchased exclusively in Haiti) was essential to obtaining the RLYH discounted roaming rate. See Joint Statement, *supra* note 4, at 2-3, Stipulated Fact Nos. 6-8, 11, 13; Complaint, *supra* note 1, at 18, para. 45, 22, para. 52, 27-28, paras. 63-64, 33, para. 74, 37, para. 82, 38, para. 84, 40, para. 87, 41, para. 89, 42, para. 91. The gravamen of UPM's case is that Digicel Haiti acted unlawfully by

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prepaid wireless service on its network that included a telephone number and billing account.⁸⁹ They were essential to enable Digicel Haiti's customers to access Digicel Haiti's network and Digicel Haiti to charge for communications made from cellular devices containing its SIM cards.⁹⁰ What's more, as explained above, the SIM cards were preactivated, ready to provide service to customers who had only to insert them into their phones.⁹¹ To be sure, someone could opt (as UPM posits) to put their card in a drawer,⁹² but Digicel Haiti was obligated to provide service the moment the card holder decided to use it because the card had been preactivated in Haiti at the time of purchase. Moreover, contrary to UPM's assertion,⁹³ Digicel Haiti retained a significant degree of control over the cards, as evidenced by the fact that it could—and did—deactivate cards upon learning that they were being used in bypass operations.⁹⁴ And Digicel Haiti most certainly had a legal interest in the cards and how they were used.⁹⁵ Otherwise, it would not have brought the underlying Oregon case challenging UPM's use of SIM cards in “bypass fraud.”⁹⁶ Digicel Haiti's protection of its legal/business interests relating to use of its SIM cards resulted in a multimillion-dollar damages verdict against UPM.⁹⁷

24. UPM contends that this case is “only and entirely” about RLYH.⁹⁸ RLYH, however, was not necessary to make roaming calls. RLYH is a pricing plan, affording a limited-duration change in the rates charged for international roaming.⁹⁹ It is not in itself “telecommunications” under the Act,¹⁰⁰ and thus even if the RLYH discount pricing plan had been offered to the public in the United States, such offering does not constitute telecommunications service under the Act.¹⁰¹ Thus, where a subscriber opted to enroll in the RLYH pricing plan is immaterial.¹⁰² A subscriber could enroll in RLYH at any time—

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“cutting off” the SIM cards. If the SIM cards are not part of the service, as UPM suggests, then it is not clear how Digicel Haiti's conduct relating to the use of its SIM cards results in a cognizable claim under the Act.

⁸⁹ See Joint Statement, *supra* note 4, at 2, Stipulated Fact Nos. 5, 7; Complaint Exh. 3, Item 7, *supra* note 39, Tran Declaration at 4, para. 13 (Bates Nos. 000277-78); Complaint Exh. 3, Item 17, Trial Stipulations, *supra* note 10, at 4-5, 7, Stipulation Nos. 4, 5, 12 (Bates Nos. 000479-80, 000482); Complaint, *supra* note 1, at 8, para. 20; Answer, *supra* note 10, at 42, responding to Complaint, *supra* note 1, para. 20.

⁹⁰ *Digicel Haiti Opinion and Order*, *supra* note 12, at 1141.

⁹¹ See *supra* paragraphs 4 and 7 and citations therein.

⁹² Reply, *supra* note 15, at 28-29.

⁹³ *Id.* at 28.

⁹⁴ See, e.g., *Digicel Haiti Summary Judgment Order*, *supra* note 31, at 939, 946, 951.

⁹⁵ See Reply, *supra* note 15, at 28.

⁹⁶ See, e.g., Complaint Exh. 3, Item 2, *supra* note 58, Digicel Haiti Court Complaint at 11, para. 41 (Bates No. 000049).

⁹⁷ See Answer Exh. 1, Special Verdict, *supra* note 62, at 1 (Bates Nos. DH-000001-03).

⁹⁸ Reply, *supra* note 15, at 5.

⁹⁹ Complaint Exh. 3, Item 4, *supra* note 20, UPM Answer to Amended Complaint and Counterclaims at 33-42, para. 220 (Bates Nos. 000156-57) (calling RLYH a “rate plan” that alters the price of making international roaming calls and explaining that “if a customer pays a flat rate of approximately \$20 to \$25 . . . a SIM card will permit calls from the United States to Haiti to be made for the same approximately \$0.09 per minute rate applicable to calls within Haiti”); Digicel Haiti FCC Answer, *supra* note 10, at 2, para. 13 (describing RLYH as a “temporary discount program”).

¹⁰⁰ See 47 U.S.C. § 153(50).

¹⁰¹ See *id.* § 153(53).

¹⁰² UPM's focus on where a customer enrolled in RLYH is beside the point. See, e.g., Complaint, *supra* note 1, at 21-25, paras. 45-59; Reply, *supra* note 15, at 23-27 (using an implied-in-fact contract theory and analogizing the

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while in Haiti before the subscriber traveled or while on travel.¹⁰³ However, the subscription to Digicel Haiti's prepaid wireless service (including roaming service) always occurred in Haiti, because that is where Digicel Haiti sold, and customers paid for, the Digicel Haiti SIM cards.¹⁰⁴ Consistent with our statutory analysis above, the relevant statutory obligations (i.e., sections 201 and 202 of the Act), therefore, did not apply to Digicel Haiti because it did not offer a telecommunications service in the United States.¹⁰⁵

25. As relevant here, Digicel Haiti is not “engaged within the United States” in the provision of common carrier services within the meaning of section 2(a) of the Act,¹⁰⁶ and consistent with our analysis above, is not subject to the obligations imposed on common carriers under sections 201 and 202 of the Act. We reject UPM's arguments to the contrary. For example, UPM asserts that “Digicel-Haiti became a carrier subject to the Commission's authority by selling telephone calls from the United States to Haiti via its RLYH service.”¹⁰⁷ However, UPM's argument oversimplifies how international calls are sold and completed, which typically “requires the cooperation of several telephone companies in different countries.”¹⁰⁸ In this case, for example, the calls at issue were routed when UPM linked its customers' incoming calls with outgoing calls to the roaming partner (AT&T or T-Mobile), which transported the calls to Digicel Haiti's international switching partners in Miami or New York, and then the switching partners—not Digicel Haiti—delivered the calls to Haiti and to Digicel Haiti.¹⁰⁹

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purchase of RLYH to the purchase of a candy bar from a vending machine); Reply, *supra* note 15, at 27-31 (arguing that the ability to remotely top off and manage online a prepaid wireless SIM card account that was established in Haiti constitutes the “offer of telecommunications” in the United States when a SIM card owner utilizes those account management features in the United States).

¹⁰³ See Complaint Exh. 3, Item 15, Digicel Haiti Interrogatory Responses, *supra* note 18, at 10-11, Interrogatory No. 15 (describing the process to add RLYH to an account by entering a code “into the phone at any time”).

¹⁰⁴ We further disagree with the contention that Digicel Haiti's subjective intent about how its cards were to be used is irrelevant to our analysis, and that Digicel Haiti's failure to set up its systems in advance to prevent someone like UPM from using Digicel Haiti's SIM cards in a manner for which they were not intended unwittingly makes Digicel Haiti—a foreign carrier—into a common carrier subject to the Act. See Reply, *supra* note 15, at 29, n.92 (arguing that, because of the way Digicel Haiti “has set up its systems,” it makes a “public offering” of RYLH every time a SIM card holder remotely accesses the SIM card account in the United States). Among other things, it was UPM's actions—not Digicel Haiti's—to use an individual retail service purchased in Haiti with an account established at the time of purchase in a wholesale call termination arbitrage business in the United States. Thus, we are not convinced under the facts of this case that Digicel Haiti offered telecommunications in the United States.

¹⁰⁵ See *supra* paras. 17-19; cf. *American Tel. and Tel. Co., Long Lines Department, Revisions to Tariff FCC Nos. 258 and 260 (Series 5000) — Termination of TelPak Service, Transmittal No. 12714*, Memorandum Opinion and Order, 64 FCC 2d 959, 965, para. 18 (1977), *aff'd sub nom. Aeronautical Radio v. FCC*, 642 F.2d at 1233 (agreeing with the Commission's decision that section 214 did not apply in that case because the carrier's actions “constituted a tariff change rather than the discontinuance of a service” and only “eliminate[d] a rate discount, thereby effectuating a rate increase”). We need not linger over UPM's implied-in-fact contract argument (see Complaint, *supra* note 1, at 21-24, paras. 45-59; Reply, *supra* note 15, at 23-27), because we disagree with UPM that Digicel Haiti's offer of service occurred in the United States (i.e., when UPM first used Digicel Haiti's SIM card). As discussed above, Digicel Haiti offered international roaming in Haiti where it sold its SIM cards.

¹⁰⁶ 47 U.S.C. § 152(a).

¹⁰⁷ Complaint, *supra* note 1, at 17, para. 43.

¹⁰⁸ *Cable & Wireless PLC v. FCC*, 166 F.3d 1224, 1226 (D.C. Cir. 1999) (*Cable & Wireless v. FCC*) (“When a U.S. caller places a call to Japan, for example, the call is first connected to a local telephone company, such as Bell Atlantic, which then passes it to a domestic long-distance carrier, such as AT&T or MCI, which in turn passes it to a Japanese telephone company, which then completes or “terminates” the call to its recipient. The foreign carrier terminates the call pursuant to an operating agreement with the domestic carrier”).

¹⁰⁹ See *supra* paragraphs 5-7, 11 (describing multiple providers involved in routing the calls).

26. International calls, including the calls at issue in this proceeding, consist of a “foreign communication” under the Act, i.e., they are routed from “any place in the United States to . . . a foreign country,”¹¹⁰ but that does not mean that the Commission has particular statutory authority under sections 201 and 202 of the Act to regulate all aspects and all entities involved in the routing of such calls. To the contrary, the Commission does not have authority under sections 201 or 202 to regulate, and does not directly regulate, the foreign carriers that merely receive international calls and route them within the foreign country.¹¹¹ Instead, the Commission has clear authority to regulate, and does regulate, the U.S.-based carriers involved in such international calls, and it also regulates and requires authorization under section 214 for any carriers that “engage in transmission” of such calls “between the United States, its territories or possessions, and a foreign point.”¹¹² The Commission thus lacks jurisdiction over UPM’s complaint under section 208.

27. For these reasons, we reject UPM’s contentions that (a) Digicel Haiti’s actions on the calls at issue make it subject to our formal complaint rules and (b) Digicel Haiti has engaged in providing foreign communication under the Act due to its international roaming features or its RLYH plan.¹¹³ Like the foreign carriers that receive international calls from the United States, Digicel Haiti’s actions and operations on the roaming calls at issue are outside the United States, and the Commission’s direct authority relevant here extends only to the U.S.-based carriers and the carriers that transport calls between

¹¹⁰ 47 U.S.C. § 152(a).

¹¹¹ See, e.g., *Cable & Wireless v. FCC*, 166 F.3d at 1229-30 (holding that the Commission’s benchmark rate regulations for international calls do “not regulate foreign carriers or foreign telecommunications services and therefore do[] not violate the Communications Act.”); *FTC v. Verity Int’l Ltd.*, 443 F.3d 48, 59-60 (2d Cir. 2006) (“As indicated by the ‘engaged within the United States’ limitation [in section 152(a)], the Communications Act does not apply to foreign terminating carriers.”); *RCA Commc’ns Inc. v. U.S.*, 43 F. Supp. 851, 854 (S.D.N.Y. 1943) (order limiting amounts that a United States carrier could pay to a foreign carrier “falls directly within the terms of the statute,” and the contention that the order is impermissibly “directed against foreign countries or their nationals is unfounded”); *In re FTC*, No. MJG-1-mc-524, 2014 WL 3829947 at **2-3 (D. Md. 2014) (Canadian wireless company was not a common carrier subject to the Act because it was not providing interstate or foreign communication service); *AT&T Corp., MCI Telecommunications Corp.: Petitions for Waiver of the International Settlements Policy to Change the Accounting Rate for Switched Voice Service with Various Countries*, Order on Review, 13 FCC Rcd 23924, 23934-35, para. 20 (1998) (order on international settlements did not “amount to an assertion of jurisdiction over the foreign end of a telephone call”). The Commission has also recognized these limitations in other contexts, such as regulation of foreign providers that send robocalls into the United States. The Commission directly regulates U.S.-based providers and gateway providers, but not the foreign providers. See, e.g., *Advanced Methods to Target and Eliminate Unlawful Robocalls Call Authentication Trust Anchor*, Sixth Report and Order, 37 FCC Rcd 6865, 6866, para. 1, 6869, para. 7 (2022) (although robocalls from foreign-based providers “pose a significant problem, our jurisdiction does not directly apply to foreign entities”).

¹¹² 47 CFR § 63.18; see also *id.* §§ 63.09-63.23 (setting forth other regulations applicable to United States carriers and carriers providing service between the United States and foreign countries); *International Settlements Policy Reform*, Report and Order, 27 FCC Rcd 15521 (2012) (*2012 ISP Reform Order*) (discussing regulation of international calling). The Commission’s “regulatory action” over these carriers can have permissible “extraterritorial consequences” that indirectly affect foreign carriers, see *Cable & Wireless v. FCC*, *supra* note 108, at 1230, but adjudication of a formal complaint against a foreign carrier goes well beyond such indirect regulation permitted by the Act.

¹¹³ Complaint, *supra* note 1, at 2-3, paras. 6-7, 17-21, paras. 43, 44-48; Reply, *supra* note 15, at 5, 7-9. UPM’s reliance on *APCC Servs., Inc. v. Intelco Commc’ns, Inc.*, Memorandum Opinion and Order, 28 FCC Rcd 1911 (EB 2013); see Reply, *supra* note 15, at 33-34, is also unavailing. That case involved a defendant carrier that failed to appear or to deny virtually any of the allegations in the complaint, and the Commission proceeded to assert jurisdiction under section 208 because the record established that the defendant, while asserting that it was incorporated in Canada, “provided interexchange telecommunications service in the United States.” *Id.* at para. 3. The facts of *APCC* are thus quite different from those in this proceeding.

the United States and Haiti.¹¹⁴

28. Although the text of the Act constrains the Commission's authority, we independently also believe that the result here is sensible policy. A ruling that the Commission can adjudicate complaints against a foreign wireless carrier offering international roaming to its customers outside the United States, even where it does not transmit calls to and from the United States or offer its services (such as by selling SIM cards) in the United States, would put the Commission in the position of directly regulating many foreign carriers, potentially resulting in unnecessary conflicts with foreign regulators.¹¹⁵ Further, we note that U.S.-based carriers also offer their United States customers international roaming when traveling abroad, including pricing plans that, like RLYH, provide international roaming at the same rate as domestic calls.¹¹⁶ Direct regulation by the Commission of foreign carriers' international roaming features could be seen as an invitation for foreign regulators to adjudicate complaints against the international roaming plans offered by U.S.-based carriers, and we seek to avoid such outcomes.¹¹⁷

29. In sum, Digicel Haiti is not subject to the Commission's jurisdiction because it does not offer a common carrier or telecommunications service in the United States. Accordingly, we dismiss UPM's claims against Digicel Haiti with prejudice.

B. Even Assuming Jurisdiction Exists, Digicel Haiti's Conduct Was Not Unjust or Unreasonable, or Unjustly or Unreasonably Discriminatory

30. Even assuming *arguendo* that jurisdiction exists over Digicel Haiti as a common carrier, UPM independently has failed to demonstrate that Digicel Haiti's deactivation of SIM cards was unjust or unreasonable, or unjustly or unreasonably discriminatory. Citing a 1976 Commission order that addressed wireline services, UPM asserts that "[r]estrictions on resale constitute unreasonable practices in

¹¹⁴ The Commission "has long sought to protect U.S. carriers and U.S. consumers from the monopoly power wielded by foreign telephone companies in the international telecommunications market." *Cable & Wireless v. FCC*, *supra* note 108, at 1227. The Commission remains committed to those goals, *see 2012 ISP Reform Order*, 27 FCC Rcd at 15322-24, paras. 1-3 & n.5, and nothing in this Order should be read otherwise. The Commission, however, has already instituted a variety of regulatory tools aimed at reducing foreign carriers' market power, *see id.* at 15322-27, paras. 1-9, and we do not believe Congress provided the Commission with the additional authority to address that problem by way of formal complaints under section 208 against foreign carriers that are not within section 152(a).

¹¹⁵ *See Answer*, *supra* note 10, at 34-35, paras. 80-81 (noting that, even though many large foreign phone companies offer international roaming, they do not hold section 214 authorizations to do so).

¹¹⁶ *See, e.g.*, <https://www.verizon.com/business/products/plans/international/travel/> (accessed Jan. 4, 2024) (promoting "Travel Pass," which allows a customer to "[u]se your phone while traveling internationally just like you do in the U.S. for a daily fee").

¹¹⁷ The sale of the SIM cards in Haiti allowed subscribers that later traveled to the United States to place calls back to Haiti, and Digicel Haiti took steps to facilitate such international roaming. Nevertheless, the international roaming features that were part of Digicel Haiti's prepaid wireless services did not mean that Digicel Haiti was offering common carrier services in the United States. First, UPM cites to no precedents in which the Commission has regulated international roaming offered by foreign carriers via the sale of wireless services exclusively in a foreign country, and we are aware of none. *See supra* note 77. Second, although UPM seeks to equate international roaming to resale of the host carriers' U.S.-based services, *see Reply*, *supra* note 15, at 14-16, for the reasons explained above, the more apt analogy is to traditional international calls, and on those calls, the Commission lacks direct authority to regulate foreign carriers terminating such calls. *See supra* paragraphs 25-26. The arrangements and operating agreements made by these foreign carriers to allow their subscribers to receive U.S.-originated international calls have never been deemed sufficient to subject the foreign carriers to the Commission's direct authority, *see Cable & Wireless v. FCC*, *supra* note 108, at 1226, 1230, and for similar reasons, the steps Digicel Haiti took to facilitate its roaming subscribers' use of the host carriers' U.S.-based services are likewise not enough to confer jurisdiction on the record here.

violation of Section 201(b) and unreasonable discrimination in violation of Section 202(a).¹¹⁸ UPM further argues that “[o]ver the next 15 years, the Commission confirmed this broad holding by expressly applying it to a wide range of services,” including wireless service.¹¹⁹ We disagree with UPM that the Commission orders it cites (all of which predate 1996) created a blanket prohibition of CMRS resale restrictions that continued in 2014—the relevant time period for this Complaint—and still exists today.¹²⁰ In 1996, the Commission addressed the resale obligations of CMRS providers by promulgating a rule prohibiting certain restrictions on CMRS resale.¹²¹ That rule sunsetted on November 24, 2002, however,¹²² twelve years before the period relevant to this complaint.¹²³ Nevertheless, the Commission did not entirely foreclose the complaint process to CMRS resellers, noting generally that “resellers may still be able to file complaints under section 208 of the Act alleging that certain restrictions on the resale of interstate CMRS violate Sections 201(b) and 202(a).”¹²⁴ The question here, therefore, is whether UPM has demonstrated that a CMRS provider deactivating SIM cards used in a fraudulent scheme such as UPM’s violates the Act. UPM has failed to meet this burden.

31. It is well established that, in a formal complaint proceeding brought under section 208 of the Act, the complainant bears the burden of proof to demonstrate that the carrier has violated the Act or

¹¹⁸ Complaint, *supra* note 1, at 26, para. 60 (citing *Regulatory Policies Concerning Resale and Shared Use of Common Carrier Services and Facilities*, Report and Order, 60 F.C.C.2d 261, 265, para. 8, 321, para. 130 (1976) (*1976 Resale Order*)).

¹¹⁹ Complaint, *supra* note 1, at 28, para. 65 & n.111 (citing *Regulatory Policies Concerning Resale and Shared Use of Common Carrier Domestic Public Switched Network Services*, Report and Order, 83 F.C.C.2d 167, (1980), *aff’d*, *Nat’l Ass’n of Regulatory Util. Comm’rs v. FCC*, 746 F.2d 1492 (D.C. Cir. 1984); *An Inquiry Into the Use of the Bands 825-845 MHz and 870-890 MHz for Cellular Communications Systems; and Amendment of Parts 2 and 22 of the Commission’s Rules Relative to Cellular Communications Systems*, Report and Order, 86 F.C.C.2d 469 (1981); *Regulatory Policies Concerning Resale and Shared Use of Common Carrier International Communications Services*, Notice of Proposed Rulemaking, 77 F.C.C.2d 831 (1980); Regulation of International Accounting Rates, First Report and Order, 7 FCC Rcd 559 (1991)).

¹²⁰ See Complaint, *supra* note 1, at 26, para. 60.

¹²¹ 47 CFR § 20.12(b)(3). See *Interconnection & Resale Obligations Pertaining to Com. Mobile Radio Servs.*, Report and Order, 11 FCC Rcd 18455, 18462-63, para. 12 (1996) (*1996 Resale Order*) (finding that “an explicit ban on resale is unlawful, as are practices that effectively (i.e., indirectly) restrict resale, unless they are justified as reasonable”).

¹²² *1996 Resale Order*, 11 FCC Rcd at 18472, para. 33 (extending resale requirements to broadband PCS and certain SMR providers and establishing a sunset date for the resale rule five years after the Commission awarded the last group of initial licenses for allocated broadband PCS spectrum); *Interconnection & Resale Obligations Pertaining to Com. Mobile Radio Servs.*, Memorandum Opinion and Order on Reconsideration, 14 FCC Rcd 16340 (1999) (*CMRS Interconnection & Resale Obligations Order*) (upholding the 1996 decision to sunset the resale rule). UPM attempts to shoehorn post-2002 precedent addressing non-CMRS services into its CMRS resale discussion. See Complaint, *supra* note 1, at 27, para. 62 (citing *Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601 (2015)). But since the sunset of the CMRS resale rule, the Commission has rejected attempts to reimpose it, including efforts to conflate roaming and resale. See *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 15817, 15836, para. 51 (2007) (“[A]utomatic roaming obligations cannot be used as a backdoor way to create de facto mandatory resale obligations or virtual reseller networks.”).

¹²³ Complaint, *supra* note 1, at 5, para. 12; Answer, *supra* note 10, at 42; Joint Statement, *supra* note 4, at 2, para. 6.

¹²⁴ *CMRS Interconnection & Resale Obligations Order*, 14 FCC Rcd at para. 21, n.51. The Commission did not describe any particular restrictions that could be challenged in stating that the section 208 complaint process remained applicable.

Commission orders.¹²⁵ In examining whether a carrier has violated section 201(b), we consider the totality of the relevant circumstances.¹²⁶ In light of the specific facts of this case—with a unanimous jury verdict finding UPM committed fraud by active concealment—we are unconvinced that Digicel Haiti acted unjustly or unreasonably in deactivating the SIM cards UPM’s contractors purchased in Haiti.¹²⁷ UPM sought at every turn to conceal from Digicel Haiti the identity of both itself and the callers (and by extension the callers’ wholesale providers). UPM used third parties to buy the SIM cards, passed on incorrect caller identification information to Digicel Haiti, and employed “human behavior software” to purposefully create the false impression that individual Haitian customers were making calls while traveling in the United States.¹²⁸ UPM provides no basis, nor are we aware of any, for the proposition that the Act shields an entity from fraudulently attempting to resell a CMRS provider’s services in such a manner.¹²⁹

32. We also reject UPM’s tenuous assertion that, by deactivating the SIM cards and allegedly “interfer[ing] with the development and operation of competitive markets,” i.e., UPM’s alleged efforts to drive down prices, Digicel Haiti acted in an unjust and unreasonable manner in the United States because it is a monopoly in Haiti.¹³⁰ Specifically, UPM describes Digicel Haiti as “unique,” because “[n]o other wireless carrier in the world is both dominant in its home market and charges the maximum benchmark rate.”¹³¹ UPM does not show that, in any respect, Digicel Haiti harmed the communications marketplace in the United States. Moreover, as UPM admits, United States carriers paid Digicel Haiti a *lawful* benchmark rate for terminating calls in Haiti.¹³² UPM’s argument effectively challenges the international

¹²⁵ See, e.g., *AT&T, et al. v. Bell Atlantic - Pennsylvania*, Memorandum Opinion and Order, 14 FCC Rcd 556, 570, para. 27 (1998) (citing *Amendments of Rules Governing Procedures to be Followed When Formal Complaints Are Filed Against Common Carriers*, Report and Order, 8 FCC Rcd 2614, 2616-17 (1993)).

¹²⁶ See, e.g., *North County Corp. v. Cricket Communications, Inc., et al.*, Memorandum Opinion and Order, 31 FCC Rcd 10739, 10747, para. 17 (2016) (*North County v. Cricket*) (“We examine the preponderance of the evidence in light of the totality of the relevant circumstances to determine whether North County has met its burden of proving that Cricket’s conduct violates Section 201(b).”).

¹²⁷ See Answer Exh. 1, Special Verdict, *supra* note 62, at 1 (Bates Nos. DH-000001-03).

¹²⁸ Although at trial, UPM denied using human behavior software, the jury unanimously found by clear and convincing evidence that it in fact did so. See, e.g., Complaint Exh. 3, Item 30, Trial Transcript, Volume 3, *supra* note 40, Tran Testimony at 457 (Bates No. 001950) (“[UPM] never used any simulation software in Haiti”); Answer Exh. 1, Special Verdict, *supra* note 62, at 1 (Bates Nos. DH-000001-03) (unanimously finding by clear and convincing evidence that UPM “engaged in fraud by active concealment by using human behavior simulation software in furtherance of Digicel-Haiti’s RLYH bypass (or RLYH) program”).

¹²⁹ In this regard, the bar against resale restrictions, even for carriers subject to more strict requirements than wireless carriers, is not absolute. For example, the Act expressly permits incumbent local exchange carriers to impose some resale restrictions, see 47 U.S.C § 251(c)(4)(B), and courts have found that such carriers may limit the resale of services “available only for use by a single user” so that the services cannot be aggregated for use by multiple end users. See, e.g., *Sw. Bell Tel. Co. v. Apple*, 309 F.3d 713, 718-20 (10th Cir. 2002); *CMC Telecom, Inc. v. Mich. Bell Tel. Co.*, 637 F.3d 626 (6th Cir. 2011) (same). In other words, even stringent prohibitions barring restrictions on resale do not require a carrier to “eliminat[e] a restriction” in a way that “would transform the offering into a different service.” *Id.* at 633. In the same manner, UPM’s use of Digicel Haiti’s SIM cards and their international roaming features cannot be fairly characterized as resale, but rather seeks to transform them into an entirely different service, i.e., offering large volumes of inbound international calling to Haiti for entities that are not in any sense roaming from Haiti.

¹³⁰ Complaint, *supra* note 1, at 2, para. 4, 33, paras. 75-81.

¹³¹ Reply, *supra* note 15, at 5, 17.

¹³² Complaint, *supra* note 1, at 34, para. 76; Reply, *supra* note 15, at 5.

benchmark rate regime established by the Commission.¹³³ However, any such challenge is properly made in an industry-wide rulemaking proceeding rather than an individual complaint proceeding.

33. Moreover, even accepting UPM's assertion that its business model was designed to create downward pressure on a monopolist's rates,¹³⁴ the purported benefits of this strategy do not excuse UPM's fraudulent arbitrage scheme. Although the Commission has encouraged innovation designed to reduce international call termination rates,¹³⁵ we will not endorse a carrier deceptively using a foreign carrier's service in furtherance of an arbitrage scheme. Based on the record before us, Digicel Haiti's deactivation of the SIM cards appears to have served legitimate business needs—i.e., discouraging the misuse or abuse of its SIM cards and protecting its ability to determine the calls' originating information.¹³⁶ The Commission has recognized that similar action to combat fraudulent schemes may be reasonable.¹³⁷ In sum, UPM has failed to show that Digicel Haiti's deactivation of SIM cards was unjust or unreasonable.

¹³³ See *International Settlement Rate Order*, Report and Order, 12 FCC Rcd 19806 (1997); see also *International Settlements Policy Reform*, First Report and Order, 19 FCC Rcd 5709, 5724, para. 29, 5772, App. E (2004) (*International Settlements Reform Order*) (“We also attach . . . a list of routes [including Haiti] that we believe, based on filings at the Commission, to be benchmark-compliant.”).

¹³⁴ See Complaint, *supra* note 1, at 34-35, 38, paras. 77, 85.

¹³⁵ See, e.g., *International Settlements Reform Order*, 19 FCC Rcd at 5714, para. 9 (“The Commission has consistently maintained that effective competition in the global market will bring the greatest benefits to U.S. customers, including lower international calling prices, and better service quality and options. As the Commission has previously concluded, competition mitigates anticompetitive harm and permits the Commission to rely more on market solutions and less upon regulatory requirements. Competition also promotes more cost-based international calling prices; stimulates technological and commercial innovation; prevents inefficiencies in markets; and, encourages better service quality and options.”) (internal citations omitted).

¹³⁶ See *Infonxx, Inc. v. New York Tel. Co.*, Memorandum Opinion and Order, 13 FCC Rcd 3589, 3597, para. 16 (1997) (“the Commission has previously recognized the legitimate business needs as relevant factors for purposes of determining reasonableness under Section 201(b)"); see also, e.g., *North County v. Cricket*, *supra* note 126, at 10746-47, paras. 15-16 (“While the Commission rarely countenances carriers' blocking of calls, the Act does not frame carriers' interconnection and carriage obligations in absolute terms. The Act requires carriers to make 'reasonable' decisions about interconnections and carriage.”). Digicel Haiti demonstrates its actions were consistent with managing the business relationships with its host carriers in the United States. By using Digicel Haiti's SIM cards to support its wholesale call termination arbitrage operation, UPM caused the volume of wholesale traffic sent via Digicel Haiti SIM cards to far exceed what Digicel Haiti's host carriers had contemplated would be used by individual Haitians traveling in the United States. As a result, the host carriers capped the roaming minutes of Digicel Haiti's SIM cards, and Digicel Haiti was unable to negotiate preferential terms in new agreements for roaming services. See Complaint Exh. 3, Item 31, Trial Transcript, Volume 4, *supra* note 14, Boute Testimony at 926, 928-34 (Bates Nos. 002467, 69-75). Similarly, Digicel Haiti has shown that the Haitian regulator required it to block SIMs that were being used in bypass operations. *Id.* at 918-19.

¹³⁷ Cf. *Policies and Rules Concerning Operator Service Access and Pay Telephone Compensation*, Order on Reconsideration, 7 FCC Rcd 4355, para. 20 (1992); *rev'd and remanded on other grounds, Florida Public Telecommunications Ass'n v. FCC*, 54 F.3d 857 (D.C. Cir. 1995) (while requiring aggregators to unblock phones to allow consumer use of 10XXX access, Commission recognized potential for fraudulent activities involving international calling and mandated LECs to offer blocking service to aggregators for direct-dialed international calls); *Advanced Methods to Target and Eliminate Unlawful Robocalls*, Declaratory Ruling and Third Further Notice of Proposed Rulemaking, 34 FCC Rcd 4876, 4883-84, para. 22 (2019) (recognizing that the Commission “encouraged local exchange carriers to offer blocking and screening services to assist in the prevention of toll fraud”); *Advanced Methods to Target and Eliminate Unlawful Robocalls*, Fifth Further Notice of Proposed Rulemaking in CG Docket No. 17-59 and Fourth Further Notice of Proposed Rulemaking WC Docket No. 17-97, 36 FCC Rcd 14971, 14973, 14978-80, paras. 8-9, 18-21 (2021) (recognizing the reasonableness of call blocking, and encouraging it, for unwanted and illegal calls under certain conditions including unlawful spoofed calls, i.e., calls transmitted with false or misleading caller ID information in order to cause harm, which harm includes harm to carriers that handle the calls, *citing John C. Spiller, et al.*, Notice of Apparent Liability for Forfeiture, 35 FCC Rcd (continued....)

34. We likewise find unpersuasive UPM's arguments that Digicel Haiti violated section 202(a) of the Act. A complainant alleging discrimination under section 202(a) must establish three elements: (1) there are "like" services at issue; (2) there are differences in the terms and conditions pursuant to which the services are provided; and (3) the differences are not reasonable.¹³⁸

35. As a threshold matter, UPM has not made the case on the record here that there is differential treatment cognizable under section 202(a) in the case of Digicel Haiti's service. UPM does not demonstrate that the terms and conditions of Digicel Haiti's service permitted its use in the manner undertaken by UPM.¹³⁹ And insofar as Digicel Haiti's service did not, in fact, allow for use in the manner UPM attempted, UPM also does not demonstrate that Digicel Haiti enforced those terms and conditions of service against UPM while failing to enforce them in a comparable manner against other entities similarly-situated to UPM. Consequently, UPM has failed to identify differential treatment of similarly situated customers of Digicel Haiti's service in violation of section 202(a).¹⁴⁰

36. To the extent that UPM objects to Digicel Haiti's failure to offer service that can be used in the manner UPM attempted, we find Digicel Haiti's actions reasonable on the record here. Although UPM seeks to characterize the differential treatment as focused on end users vs. resellers,¹⁴¹ Digicel Haiti characterizes the differential treatment as "diligently carrying out its legal and contractual obligations to detect and prevent fraud."¹⁴² In our section 201(b) analysis above, we conclude that Digicel Haiti's actions here did, in fact, respond to legitimate fraud prevention concerns.¹⁴³ Further, Digicel Haiti explains that the unanticipated usage that flowed from UPM's action burdened the networks of Digicel Haiti's roaming partners, leading them to take actions in response that affected all Digicel Haiti's

(Continued from previous page)

5948, 5957-61, para. 33 (2020)); *North County v. Cricket*, *supra* note 126, at 10746-47, para. 16 ("Nor has the Commission previously found that a mobile provider's failure to transmit 900 calls under the facts of this case is a per se violation of 201(b). While the Commission rarely countenances carriers' blocking of calls, the Act does not frame carriers' interconnection and carriage obligations in absolute terms. The Act requires carriers to make 'reasonable' decisions about interconnections and carriage. . . .").

¹³⁸ See, e.g., *Competitive Telecommunications Ass'n v. FCC*, 998 F.2d 1058, 1061 (D.C. Cir. 1993).

¹³⁹ UPM's section 202(a) claim is based on its status as a Digicel Haiti customer, and UPM does not dispute that it became a Digicel Haiti customer when it purchased a Digicel Haiti SIM card. See *supra* note 88. We find UPM's suggestion that it was not subject to any terms and conditions of service when it purchased Digicel Haiti's SIM cards unpersuasive. See Complaint, *supra* note 1, at 13, para. 32, 25, para. 59; Reply, *supra* note 15, at 23-31, 36-39. There is no evidence that Digicel Haiti offered its services to anyone devoid of any terms and conditions. UPM is unable to provide any evidence regarding how the SIM cards were purchased on its behalf, including whether they were governed by any terms and conditions when purchased. (See Trial Transcript, Volume 3, *supra* note 40, Tran Testimony at 424-25 (Bates Nos. 001917-18) (Tran testifying that he does not know how UPM's contractors purchased SIM cards or whether they were stolen).

¹⁴⁰ See, e.g., *Am. Message Centers v. FCC*, 50 F.3d 35, 40 (D.C. Cir. 1995) (party failed to allege that "the carrier is offering the service to other customers at a 'different' price or under 'different' conditions than those offered to the petitioner" as required for a claim under section 202(a) "because AMC failed to identify any specific instance in which Sprint treated another customer in like circumstances differently than it treated AMC"); *Nova Cellular West v. Air Touch Cellular*, Memorandum Opinion and Order, 17 FCC Rcd 15026, 15038, para. 35 (2002) (rejecting a claimed section 202(a) violation where, among other things, "Nova makes no suggestion that AirTouch did not require other similarly-situated customers to submit such wholesale rate plan change requests in writing"); *RCI Long Distance v. NY Telephone Company*, Memorandum Opinion and Order, 11 FCC Rcd 8090, 8107, para. 38 (1996) (the claim that "payphone PIC-change procedures discriminate against IXCs . . . fails to state a cognizable claim under Section 202(a)" where the complainant "does not dispute the defendants' claim that they apply the same procedures to all IXCs that submit payphone PIC-change requests").

¹⁴¹ See, e.g., Complaint, *supra* note 1, at 31, para. 72.

¹⁴² Answer, *supra* note 10, at 25, para. 64.

¹⁴³ See *supra* paras. 30-33.

customers.¹⁴⁴ Thus, even to the extent that Digicel Haiti's enforcement of the terms and conditions of its service offerings had the effect of limiting or practically precluding resale, UPM still has failed to make the case that Digicel Haiti's actions to prevent fraud and manage network utilization were unjustly and unreasonably discriminatory—particularly in the absence of any generally applicable duty for wireless carriers to allow resale of their service.¹⁴⁵

IV. ORDERING CLAUSE

37. Accordingly, **IT IS HEREBY ORDERED**, pursuant to sections 1, 2, 3, 4(i), 4(j), 201, 202, 206, and 208 of the Communications Act, 47 U.S.C. §§ 151, 152, 153, 154(i), 154(j), 201, 202, 206, and 208, and sections 1.720-1.740 of the Commission's rules, 47 CFR §§ 1.720-1.740, that UPM's Complaint is **DISMISSED WITH PREJUDICE**, and as an independent and alternative basis, **DENIED** for the reasons stated herein.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

¹⁴⁴ See, e.g., Answer, *supra* note 10, at 6, para. 24.

¹⁴⁵ The distinct treatment of resale in the wireless context under modern precedent is one reason we distinguish precedent cited by UPM for the proposition that “discrimination against a communications customer – in this case, by the carrier's refusal to provide service to a reseller – is unlawful if it is based only upon the fact that the customer is not the ultimate user of the service.” Complaint, *supra* note 1, at 30-31, para. 70 (quoting *1976 Resale Order*, *supra* note 118, at 286-87, para. 45). Separately and independently, Digicel Haiti's fraud-prevention and traffic-level management efforts—which we credit as valid under the record here—mean that the refusal to provide service is not based “only” on the potential customer's status as a reseller.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Mission Broadcasting, Inc.
Licensee of Station WPIX, New York, NY
Nexstar Media Group, Inc.
NAL/Acct. No. MB-202441440001
FRN: 0004284899
Facility ID No. 73881
NAL/Acct. No. MB-202441440002
FRN: 0025293747

NOTICE OF APPARENT LIABILITY FOR FORFEITURE

Adopted: March 20, 2024

Released: March 21, 2024

By the Commission: Chairwoman Rosenworcel issuing a statement; Commissioner Carr concurring and issuing a statement.

TABLE OF CONTENTS

Heading Paragraph #
I. INTRODUCTION..... 1
II. BACKGROUND..... 2
III. DISCUSSION 21
A. Apparent Violations 22
1. Unauthorized Transfer of Control and National Ownership Cap Violation..... 22
a. Unauthorized Transfer of Control..... 22
(i) Programming..... 27
(ii) Personnel..... 34
(iii) Finances..... 39
b. National Ownership Cap Violation..... 53
2. EDP Attribution/National Ownership Cap Violation..... 56
B. Forfeitures and Remedies 69
1. Violations/Forfeitures..... 70
a. De Facto Control and National Ownership Cap..... 70
b. EDP Attribution/National Ownership Cap 78
2. Remedying Non-Compliance 82
IV. ORDERING CLAUSES..... 87

I. INTRODUCTION

1. In this Notice of Apparent Liability for Forfeiture (NAL), issued pursuant to section 503(b) of the Communications Act of 1934, as amended (Act),¹ and section 1.80 of the Commission’s Rules (Rules),² we find that Mission Broadcasting, Inc. (Mission) and Nexstar Media Group, Inc. (Nexstar) (collectively, Parties) apparently willfully and repeatedly violated several of the Commission’s

¹ 47 U.S.C. § 503(b).

² 47 CFR § 1.80.

Rules in a series of transactions through which Mission acquired WPIX(TV), New York, NY (WPIX or Station). To be specific, the Parties' actions before, during, and after Mission's acquisition of WPIX (the Acquisition) apparently resulted in Nexstar taking *de facto* control of WPIX, resulting in Nexstar and Mission violating section 310(d) of the Act through an unauthorized transfer of control.³ In addition, Nexstar apparently violated the ownership restrictions in section 73.3555(e) of the Rules by obtaining undisclosed cognizable attributable interests in WPIX without Commission authorization. These interrelated violations apparently placed Nexstar in violation of the national television multiple ownership limitations in Section 73.3555(e) of the Rules (National Ownership Cap), when its undisclosed cognizable interests in WPIX, combined with its existing interests in television stations across the country, gave Nexstar cognizable ownership interests exceeding the 39% percent aggregate national audience reach limitation set by the National Ownership Cap.⁴

II. BACKGROUND

2. *The Commission's Rules.* The Commission, as directed by Congress, has placed limits on the ability of the largest television station group owners to increase their national coverage areas.⁵ These limits were created to protect localism, which focuses on the incentives and ability of licensees to provide programming responsive to the needs and interests of the local communities in which they are licensed.⁶ The National Ownership Cap prohibits a single entity from owning television stations that, in the aggregate, reach more than 39% of the total television households in the United States.⁷ In determining compliance with the 39% National Ownership Cap, stations broadcasting in the VHF spectrum are attributed with all television households in their Nielsen Designated Market Areas (DMAs), while UHF stations are attributed with only 50% of the households in their DMAs (known as the UHF discount).⁸

3. In measuring compliance with Commission ownership rules, including the National Ownership Cap, licensees must consider all broadcast stations in which they are deemed to hold an attributable interest. Codified in the notes to section 73.3555, the attribution rules seek to identify ownership interests, corporate positions, and contractual relationships that, in the Commission's long-standing experience, afford the interest holder the potential to influence the licensee to a significant degree.⁹ In addition to traditional interests such as officers, directors, certain shareholders of a corporation, or the uninsured partners of a limited partnership, the Commission's Rules also address attribution arising from a debt interest or a non-voting equity interest in particular circumstances.

³ 47 U.S.C. § 310(d); *see also* 47 CFR § 73.3540 ("Prior consent of the FCC must be obtained for a voluntary assignment or transfer of control").

⁴ 47 CFR § 73.3555(e).

⁵ *See* Consolidated Appropriations Act, 2004, Pub. L. No. 108-199, 118 Stat. 3, § 629 (1)-(2) (2004).

⁶ *See Amendment of Section 73.3555(e) of the Commission's Rules, National Television Multiple Ownership Rule*, MB Docket No. 17-318, Notice of Proposed Rulemaking, 32 FCC Rcd 10785, 10786-77, para. 3 (2017) (*2017 National Ownership Cap NPRM*); *2002 Biennial Review Order – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996*, MB Docket No. 02-277, Report and Order and Notice of Proposed Rulemaking, 18 FCC Rcd 13620, 13815, 13842, paras. 501, 578 (2003).

⁷ 47 CFR § 73.3555(e)(1); *see also Amendment of Section 73.3555(e) of the Commission's Rules, National Television Multiple Ownership Rule*, MB Docket No. 13-236, Report and Order, 31 FCC Rcd 10213 (2016), *reconsidered in part*, Order on Reconsideration, 32 FCC Rcd 3390 (2017) (*UHF Discount Recon Order*), *pet. for rev. dismissed*, *Free Press et al. v. FCC*, No. 17-1179 (D.C. Cir. July 25, 2018).

⁸ *UHF Discount Recon Order*, 32 FCC Rcd at 3391, para. 2. UHF stations are those that transmit on channel 14 and above. WPIX broadcasts over-the-air on television channel 11, a VHF channel, making the station ineligible for the UHF discount under the National Ownership Cap.

⁹ 47 CFR § 73.3555, Note 2(i)(1)-(2).

4. Specifically, the Commission's Equity/Debt Plus (EDP) rule addresses certain otherwise non-attributable interests that could allow the holder to exert significant influence over a licensee, and which are thus considered attributable.¹⁰ Under the EDP rule, an entity that: (1) is a major program supplier (i.e., it provides programming constituting over 15% of the broadcast station's total weekly broadcast programming hours), and (2) holds an interest that exceeds 33% of the total assets of the licensee, aggregating both debt and equity holdings, will be deemed to hold an attributable interest in the station.¹¹ In other words, attribution results where the financial interest exceeds 33% of the equity plus debt *and* the interest holder is a major program supplier of the station. The Commission adopted the EDP rule in part to address concerns raised that certain non-attributable investments, while permissible under the rules, might permit a degree of influence warranting their attribution.¹² The rule was also adopted to address the concern that individually permissible cooperative arrangements between broadcasters were being combined to result in a degree of influence that the rules had intended to prohibit.¹³

5. In addition to the specific attribution rules, an entity or individual may be found to have exercised *de facto* control in a particular situation based on the specific facts and circumstances of the case, regardless of what interest it holds in the licensee, if any.¹⁴ In such cases, the Commission looks to the totality of the circumstances to determine whether an entity or individual exercises control of a station, looking in particular at the station's programming, personnel, and finances.¹⁵ Thus, regardless of what interest an entity or individual holds in a licensee, it may nonetheless be found to have exerted actual control of a station. Furthermore, a finding that a party exercises *de facto* control in a particular case often indicates that the parties have engaged in an unauthorized transfer of control, which is prohibited by the Commission's Rules and the Communications Act.¹⁶

6. *The Parties.* Nexstar is the largest broadcast television station group in the country with \$4.9 billion in annual revenue.¹⁷ According to Nexstar, it "owns, operates, programs or provides sales

¹⁰ As the Commission has explained previously, the "EDP rule is designed to resolve concerns that multiple non-attributable interests could be combined to allow the holders to exert significant influence over licensees such that these interests should be counted in applying the multiple ownership rules." *Promoting Diversification of Ownership in Broadcasting Services*, MB Docket No. 07-294, Report and Order and Third Further Notice of Proposed Rulemaking, 23 FCC Rcd 5922, 5932 (2008) (*Promoting Diversification Order*).

¹¹ 47 CFR § 73.3555, Notes 2(a) & (i).

¹² *Review of the Commission's Regulations Governing Attribution of Broadcast and Cable/MDS Interests*, MM Docket No. 94-150, Report and Order, 14 FCC Rcd 12559, 12578-82, paras. 35-46 (1999) (*1999 Attribution Order*).

¹³ *Promoting Diversification Report and Order*, 23 FCC Rcd at 5932, para. 20. In particular, the Commission intended that the EDP rule would operate in conjunction with its other attribution standards and would increase the precision of the attribution rules. *Id.* at 5932, para. 21 (citing *1999 Attribution Order*, 14 FCC Rcd at 12573, para. 27).

¹⁴ *See, e.g.*, 47 CFR § 73.3540 (requiring that parties obtain the Commission's prior consent before engaging in a voluntary assignment of license or transfer of control).

¹⁵ *See, e.g., Stereo Broadcasters, Inc. Station WLIR (FM), Garden City, N.Y. for Renewal of Broadcast License*, Memorandum Opinion and Order, 55 F.C.C. 2d. 819, 821-23, paras. 7-9 (1975) (*Stereo Broadcasters, Inc.*); *see also* 47 CFR § 73.3540.

¹⁶ Under section 310(d) of the Communications Act, a broadcast station license may not be transferred without prior application to, and consent by, the Commission. 47 U.S.C. § 310(d) ("No construction permit or station license, or any rights thereunder, shall be transferred, assigned, or disposed of in any manner, voluntarily or involuntarily, directly or indirectly, or by transfer of control of any corporation holding such permit or license, to any person except upon application to the Commission and upon finding by the Commission that the public interest, convenience, and necessity will be served thereby."); *Entertainment Media Trust, Dennis J. Watkins, Trustee, et al.*, Hearing Designation Order and Notice of Opportunity for Hearing, 34 FCC Rcd. 4351, para. 32 (MB 2019).

¹⁷ Harry A. Jessel, *Updated Top 30 Station Groups: Nexstar Retains Top Spot, Gray Now No. 2 As FCC-Rejected Standard General Drops Off*, (Aug. 14, 2023), <https://tvnewscheck.com/business/article/top-30-station-groups->

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and other services to over 200 broadcast stations (including partner stations) and their related low power and digital multicast signals reaching 117 markets or more than 68% of all U.S. television households.”¹⁸ In addition, Nexstar owns cable news network NewsNation, and in October 2022 it acquired a 75% controlling interest in The CW Network.¹⁹ The company is publicly traded,²⁰ with a market capitalization of approximately \$5.5 billion, and as of December 31, 2023, the company had 13,294 employees, including 11,877 full-time employees.²¹

7. Nexstar and Mission have a long-standing and deeply interwoven relationship. While Mission is not a subsidiary of Nexstar, it operates as a Variable Interest Entity (VIE) of the larger company, meaning that Nexstar is considered to have a controlling financial interest in Mission for financial reporting purposes.²² Consistent with Generally Accepted Accounting Principles (GAAP), Nexstar includes Mission’s assets, revenue, and financial information as part of its own financial calculations and reporting.²³ As Nexstar explains in its most recent Annual 10-K report filed with the U.S. Securities and Exchange Commission (SEC):

Mission and the other consolidated VIEs are included in our Consolidated Financial Statements because we are deemed to have controlling financial interests in these entities as VIEs for financial reporting purposes as a result of (i) local service agreements we have with the stations they own, (ii) Nexstar’s (excluding The CW) guarantee of the obligations incurred under Mission’s senior secured credit facility, (iii) our power over significant activities affecting these entities’ economic performance, including budgeting for advertising revenue, advertising sales and, in some cases, hiring and firing of sales force personnel and (iv) purchase options granted by each consolidated VIE which permit Nexstar to acquire the assets and assume the liabilities of all of these VIEs’ stations at any time, subject to FCC consent. These purchase options are freely exercisable or assignable by Nexstar without consent or approval by the VIEs. These option agreements expire on various dates between 2024 and 2033. We expect to renew these option

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[nexstar-retains-top-spot-after-standard-general-tegna-deal-dies/](#); see also Nexstar Media Group, Inc., Securities and Exchange Commission Annual Report (Form 10-K) at 4 (filed Feb. 28, 2024) (reporting information for the fiscal year ending December 31, 2023), <https://www.sec.gov/Archives/edgar/data/1142417/000095017024021979/nxst-20231231.htm> (Nexstar 10-K or Annual Report).

¹⁸ Nexstar Media Group, Inc., Company Profile, <https://www.nexstar.tv/company/> (last visited Mar. 11, 2024).

¹⁹ Nexstar Media Group, Inc., *Nexstar Media Closes Acquisition of The CW Network* (Oct. 3, 2022), <https://www.nexstar.tv/nexstar-closes-acquisition-of-the-cw-network/>.

²⁰ The company is publicly traded on the NASDAQ Global Select Market exchange under the symbol “NXST.”

²¹ See Nexstar 10-K at 17.

²² Nexstar 10-K at 45; see also *Northstar Wireless, LLC; SNR Wireless LicenseCo, LLC; Applications for New Licenses in the 1695-1710 MHz, and 1755-1780 MHz and 2155-2180 MHz Bands*, Memorandum Opinion and Order on Remand, 35 FCC Red 13317, 13345, para. 85 (2020) (citing, as evidence of DISH’s “own continued recognition of its financial responsibility for the Applicants,” the fact that DISH identified the applicants—Northstar and SNR—as VIEs of DISH and consolidated the entities into its financial statements based on Financial Accounting Standards Board guidance). VIE status attaches where certain conditions exist, such as (1) where the total equity investment at risk is not sufficient to permit the entity at issue to finance its activities without additional subordinated financial support, or (2) the entity lacks the power to direct activities that most significantly impact its performance. Financial Accounting Standards Board, Accounting Standards Codification 810-10-15-14, <https://asc.fasb.org/1943274/2147481410/GUID-6558A531-EFBA-446C-A31D-A3D1D9D5BFA1> (last visited Mar. 11, 2024).

²³ Nexstar 10-K at 6 (describing Mission as a “consolidated VIE”).

agreements upon expiration. Therefore, these VIEs are consolidated into these financial statements.²⁴

As Nexstar states in its Annual Report, “[i]n return for the services we provide, we receive substantially all of the consolidated VIEs’ available cash, after satisfaction of their operating costs and any debt obligations.”²⁵ Nexstar also often issues press releases regarding Mission’s business decisions or financial results.²⁶

8. Thus, while Mission—a company with fewer than 60 employees—is the licensee of 29 full power television stations in 26 markets around the country, all of the stations are operated by, or in conjunction with, Nexstar.²⁷ In 25 of these 26 markets, Mission and Nexstar each hold the license for at least one full power television station. Nexstar then operates the Mission station, performing various functions for the station pursuant to a Shared Services Agreement (SSA), a Joint Sales Agreement (JSA), a Local Marketing Agreements (LMA), or a combination of several such agreements.²⁸ The only market in which Mission owns a station but Nexstar does not is the New York DMA.²⁹

9. In addition to Mission being contractually dependent on Nexstar for the operation of its stations, the two companies are financially intertwined in other ways. As reported in Nexstar’s Annual Report to the SEC, each company provides cross-guarantees of the other’s debts. Specifically, Nexstar guarantees full payment of all obligations incurred under Mission’s senior secured credit facility. Mission is also a guarantor of Nexstar’s senior secured credit facility and several of its outstanding debt instruments, despite the fact that Mission is a fraction of the size of the publicly traded Nexstar and is largely dependent on Nexstar for the provision of programming and business services.³⁰ Further, Nexstar

²⁴ *Id.* at 45.

²⁵ *Id.* at 23. The Commission’s attribution rules do not address Variable Interest Entities. Thus, for SEC purposes, Nexstar must include Mission’s assets and revenue for accounting purposes and financial reporting, and is deemed to have a controlling financial interest in the smaller company. But for FCC purposes, the VIE relationship itself does not trigger attribution under the Commission’s current rules.

²⁶ See, e.g., Nexstar, *Nexstar Variable Interest Entity, Mission Broadcasting, Closes New \$300 Million Senior Secured Term Loan B Facility* (June 3, 2021), <https://www.nexstar.tv/nexstar-variable-interest-entity-mission-broadcasting-closes-new-300-million-senior-secured-term-loan-b-facility/>.

²⁷ See Nexstar Media Group, Inc., Securities and Exchange Commission Quarterly Report (Form 10-Q) at 9 (filed Aug. 8, 2023), <https://www.sec.gov/ixviewer/ix.html?doc=/Archives/edgar/data/0001142417/000095017023039930/nxst-20230630.htm> (reporting information for the fiscal year ending June 30, 2023 and indicating that Nexstar holds agreements pertaining to the operation of each of the Mission stations) (Nexstar 10-Q); see also Mission Broadcasting, Inc., Biennial Ownership Report, FCC File Number 0000224346 (filed Oct. 31, 2023); https://en.wikipedia.org/wiki/Mission_Broadcasting (last visited Mar. 11, 2024) “All but one of Mission’s stations are located in markets where Nexstar Media Group also owns a station, and all of Mission’s stations (including its lone stand-alone station) [WPIX] are managed by Nexstar through shared services and local marketing agreements—effectively creating duopolies between the top two stations in a market or in markets with too few stations or unique station owners to legally allow duopolies.”); Response to Letter of Inquiry, from Dennis P. Thatcher, Mission Broadcasting, Inc., to Christopher Sova and Ty Bream, Industry Analysis Division, FCC Media Bureau, at 3 (Dec. 5, 2022) (Mission Second LOI Response).

²⁸ Nexstar 10-Q at 9.

²⁹ *Id.*; see also Nexstar 10-K at 7-10.

³⁰ Nexstar 10-K at 43. Unlike Nexstar, which is a publicly traded company, Mission is a privately held company owned by two individuals, Nancie J. Smith, who holds 51% of the voting and equity stock of the company, and Dennis P. Thatcher, who holds the remaining 49% interest. See Mission Broadcasting, Inc., Biennial Ownership Report, FCC File Number 0000224346 (filed Oct. 31, 2023). Mr. Thatcher is also Mission’s President and Chief Executive Officer. Response to Letter of Inquiry, from Dennis P. Thatcher, Mission Broadcasting, Inc., to Brendan (continued....)

holds options permitting it to acquire the assets and assume the liabilities of each of Mission's stations, subject to FCC consent. Such options are freely exercisable or assignable by Nexstar without consent or approval by Mission.³¹ In addition, Nexstar also holds an option to buy all of the capital stock of Mission for the greater of: (1) five times (5x) the cashflow generated by the Mission stations in the preceding 12 months minus the company's outstanding debt,³² or (2) \$100,000.³³ In exchange for this option to acquire 100% of the capital stock of the company, Nexstar paid Mission's two shareholders only \$50 apiece.³⁴

10. Although the general arrangements described immediately above apply to all of the Mission stations that are reliant on Nexstar, only one—WPIX—is without a Nexstar-owned station in the same local market. It is important to note the distinction made in the Commission's Rules between relationships concerning entities that own stations in the same geographic market (i.e., same-market) and those that do not.³⁵ When presented with same-market instances, the Commission has recognized the efficiencies that SSAs, JSAs, or LMAs, can produce.³⁶ The Commission has not considered previously

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Holland and William Durdach, Industry Analysis Division, FCC Media Bureau, at 4 (Jan. 14, 2022) (Mission LOI Response).

³¹ Nexstar 10-K at 43. Nexstar explains that the purchase options allowing it to acquire the assets and assume the liabilities of each Mission station are, in part, the consideration that Mission has granted to Nexstar in exchange for it guaranteeing Mission's outstanding debt. Nexstar 10-Q at 15.

³² Nexstar recently reported that Mission's long-term debt alone, consisting of a term loan and a revolving line of credit, was \$357 million. Nexstar 10-Q at 14.

³³ The parties originally entered into the option agreement in 2011 and subsequently amended it in 2021 to extend the agreement until November 2028. See Stock Option Agreement, <https://www.sec.gov/Archives/edgar/data/1142417/000114241712000010/missionoptionagmt.htm> (last visited Mar. 11, 2024); Amendment of Option Agreement, https://www.sec.gov/Archives/edgar/data/1142417/000156459021009747/nxst-ex104_14.htm (last visited Mar. 11, 2024); see also Mission Broadcasting, Biennial Ownership Report FCC File Number 0000165413.

³⁴ See Stock Option Agreement, <https://www.sec.gov/Archives/edgar/data/1142417/000114241712000010/missionoptionagmt.htm> (last visited Mar. 11, 2024). Additionally, the stock option agreement restricts Mission's existing shareholders, Ms. Smith and Mr. Thatcher, from selling or otherwise transferring their ownership interests to any entity or individual that does not agree to be bound by the same contractual terms, thereby ensuring that Nexstar retains the option to acquire the company.

³⁵ See 47 CFR § 73.3555, Note 2(j) (stipulating that for the "sale by a licensee of discrete blocks of time to a 'broker' that supplies the programming to fill that time and sells the commercial spot announcements in it," the licensee's station is attributable to the broker if it "brokers more than 15 percent of the broadcast time per week of the other such station"); *Id.* § 76.65(b)(1)(viii) (prohibiting "[c]oordination of negotiations or negotiation on a joint basis by two or more television broadcast stations in the same local market to grant retransmission consent to a multichannel video programming distributor, unless such stations are directly or indirectly under common de jure control permitted under the regulations of the Commission").

³⁶ See, e.g., 2014 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, Order on Reconsideration, MB Docket No. 14-50, 32 FCC Rcd 9802, 9852, para. 108 (2017) (stating that "television JSAs have created efficiencies that benefit local broadcasters—particularly in small- and medium-sized markets—and have enabled these stations to better serve their communities"); 2014 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, Second Report and Order, MB Docket No. 14-50, 31 FCC Rcd, 9864, 10008, para. 337 (2016) (stating that SSAs between stations in the same local market "no doubt result in cost savings—savings that could be reinvested in improved programming and other public interest-promoting endeavors"); 1999 Attribution Order, 14 FCC Rcd at 12598, n.183 (noting the LMA attribution rule's intent to "allow[] a station the flexibility to broker a small amount of programming through an LMA with another station in the same market").

whether the same benefits occur to the same degree when a licensee outsources these functions to a party that does not already operate in the same market.

11. *Nexstar-Tribune Transaction.* In November 2018, Nexstar entered into an agreement to acquire Tribune Media Company (Tribune), which was then one of the largest television station groups in the country, owning 41 full-power television stations and one AM radio station. Given the number of full power television stations already owned by Nexstar at the time, it was unable to acquire all of the Tribune stations as the resulting station combinations would have violated both the Commission's National Ownership Cap³⁷ and Local Television Ownership Rule.³⁸ Accordingly, in order to comply with the Commission's Rules and obtain approval for the transaction, Nexstar divested a number of full power television stations to three unrelated companies: Scripps Media, Inc. (Scripps); TEGNA, Inc. (TEGNA); and CCB License, LLC.³⁹ In particular, in order to maintain compliance with the 39% National Ownership Cap, Nexstar divested three stations to Scripps: WSFL-TV, Miami, Florida; KASW, Phoenix, Arizona; and WPIX.⁴⁰

12. In divesting these stations to comply with the National Ownership Cap, Nexstar represented that it would not provide ongoing services via sharing, joint sales, or local marketing agreements to any divested station, including WPIX.⁴¹ Nexstar, however, retained an option to purchase WPIX from Scripps at some point in the future if, for example, the Commission were to change the National Ownership Cap or if Nexstar were to otherwise obtain room under the 39% cap (i.e., by selling stations in other markets equivalent to the audience share of the New York DMA).⁴² The WPIX option was exercisable until December 31, 2020. Based on the divestitures made as part of the transaction and Nexstar's representation that it would not engage in joint operations with any of the divested stations, the

³⁷ See *supra* para. 2.

³⁸ The Commission's Local Television Ownership Rule allows an entity to own two television stations licensed in the same Nielsen DMA if: (1) the digital noise limited service contours of the stations (as determined by section 73.622(e) of the Commission's Rules) do not overlap; or (2) at the time the application to acquire or construct the station(s) is filed, at least one of the stations is not rated among the top-four stations in the DMA, based on the most recent all-day (9 a.m.-midnight) audience share, as measured by Nielsen Media Research or by any comparable professional, accepted audience ratings service. See 47 CFR § 73.3555(b)(1).

³⁹ *Tribune Media Company (Transferor) and Nexstar Media Group, Inc. (Transferee), et al.*, Memorandum Opinion and Order, 34 FCC Rcd 8436, 8437, 8439-42, paras. 2, 4-8 (2019) (*Nexstar-Tribune Order*). Notably, Nexstar did not divest any stations to its long-standing partner Mission as part of this transaction.

⁴⁰ *Id.* at 8441-42, para 8. The New York DMA is the largest television market in the country, accounting for approximately 6% of the TV households in the country. See *infra* para. 54.

⁴¹ *Nexstar-Tribune Order*, 34 FCC Rcd at 8444, para 14, note 65 (quoting the applicants' representation that "Nexstar will not be providing ongoing services under sharing agreements (JSAs, local marketing agreements ('LMAs') or shared services agreements ('SSAs')) to any of the stations that it is divesting").

⁴² The Commission has an open rulemaking proceeding considering potential revisions to the National Ownership Cap, including raising the 39% limit. See *2017 National Ownership Cap NPRM*, 32 FCC Rcd at 10785. At the time of the Nexstar-Tribune transaction, interested parties—including Nexstar—were actively lobbying the Commission to increase the ownership cap, which might have afforded Nexstar the ability to acquire WPIX directly. See, e.g., *Amendment of Section 73.3555(e) of the Commission's Rules, National Television Multiple Ownership Rule*, MB Docket No. 17-138, Letter from Perry Sook, Chairman, President & CEO, Nexstar Broadcasting, Inc., et al., to Ajit Pai, Chairman, FCC, et al. (filed Mar. 11, 2019) (*ex parte* letter advocating setting the national ownership cap at 78% of television households in the country).

Commission found concerns raised by petitioners opposed to the transaction to be moot,⁴³ and it granted the Nexstar-Tribune transaction on September 13, 2019.⁴⁴

13. *WPIX, New York, New York.* Less than a year after the consummation of the Nexstar-Tribune transaction, Nexstar assigned its option to purchase WPIX from Scripps to Mission in July 2020.⁴⁵ Shortly thereafter, on August 28, 2020, Mission—using a line of credit guaranteed and cross-collateralized by Nexstar—exercised the option to purchase WPIX from Scripps for approximately \$82.6 million.⁴⁶

14. On September 1, 2020, Mission and Scripps filed an application seeking Commission consent to Mission’s acquisition of the station.⁴⁷ The Application included an unexecuted draft of a Local Programming and Marketing Agreement (LPMA) between Mission and Nexstar, which called for, among other things, Nexstar to provide all of the programming for WPIX, as well as to collect all of the revenue from the station.⁴⁸ The Media Bureau (Bureau) granted the unopposed Application on December 1, 2020. Mission closed on the acquisition of the station on December 30, 2020.⁴⁹ That same day Mission entered into the LPMA authorizing Nexstar to program and operate the station.

15. Mission’s acquisition of WPIX from Scripps was made possible by the revolving line of credit effectively shared by Mission and Nexstar (the Revolver). The Revolver was part of a joint credit facility with Nexstar under which Nexstar both guaranteed repayment and provided its own assets as collateral to secure the money borrowed. The Revolver took effect on January 17, 2017, with Bank of America serving as agent for a syndicate of lenders.⁵⁰ Although the overall credit facility provides Mission and Nexstar with separate lines of credit for each respective company, Mission and Nexstar both guarantee each other’s borrowing and provide collateral for each other, in what essentially creates a single securitized pool of assets that can be seized in case either party defaults.⁵¹ The credit agreements

⁴³ *Nexstar-Tribune Order*, 34 FCC Rcd at 8444, para 14 & n.65.

⁴⁴ *Id.* at 8444, para 13. Nexstar consummated the transaction on September 19, 2019. *See* Nexstar Consummation Notice, Lead File No. BALCDT-20190403ABL (filed Sept. 20, 2019).

⁴⁵ Application for Consent to Assignment of WPIX from Scripps Media, Inc. to Mission Broadcasting, Inc., FCC File No. BALCDT-20200901AAB, at Exh. 13 (granted Dec. 1, 2020) (containing Assignment and Assumption Agreement by which Nexstar conveyed its option to acquire WPIX to Mission, dated July 8, 2020) (WPIX Application or Application).

⁴⁶ Response to Letter of Inquiry, from Dennis P. Thatcher, Mission Broadcasting, Inc., to Christopher Sova and Ty Bream, Industry Analysis Division, FCC Media Bureau, at n.10 (May 8, 2023) (Mission Response to Further LOI). More precisely, Mission states that it paid \$[]}. Mission LOI Response at 15. We note that, although the reported sale price may vary slightly as reported by different sources, even accounting for small adjustments, any difference in the final sales price does not change our conclusions herein. *See, e.g.*, Nexstar Media Group, Inc., Securities and Exchange Commission Annual Report (Form 10-K) at 6 (filed Mar. 1, 2021) (Nexstar 2020 10-K) (reporting that Mission paid \$85.1 million for WPIX). As discussed further above, Mission relied on a revolving line of credit to acquire WPIX.

Material set off by double brackets {[]} is business-confidential information and is redacted from the public version of this document.

⁴⁷ *See* WPIX Application, FCC File No. BALCDT-20200901AAB (granted Dec. 1, 2020).

⁴⁸ The LPMA is, for programming purposes, similar to what are more commonly known as Local Marketing or Time Brokerage agreements. Although Nexstar Inc. is the signatory to the LPMA, we use “Nexstar” to indicate wholly-owned subsidiaries of Nexstar Media Group, Inc., such as Nexstar Media Inc. and Nexstar Inc.

⁴⁹ *See* Mission Consummation Notice, FCC File No. BALCDT-20200901AAB (filed Dec. 30, 2020).

⁵⁰ Revolver Credit Agreement, dated Jan. 17, 2017, and amendments thereto, as submitted at Exh. A to Mission Response to Further LOI.

⁵¹ Mission Response to Further LOI at 2.

governing the Revolver's lending facility also permit the parties to jointly request reallocation of unused credit from one party to the other. On December 3, 2020, Mission and Nexstar jointly requested that Bank of America reallocate \$80 million from Nexstar's Revolver line to Mission's Revolver line.⁵² Mission then purchased WPIX using that available credit line. While Mission was the borrower obligated to repay the Revolver loan, Nexstar's assets were at risk as collateral should Mission default.⁵³

16. Consistent with the options that Nexstar holds for Mission's other stations,⁵⁴ Nexstar also entered into an option to purchase the license and assets of WPIX in the future.⁵⁵ Under the terms of the option agreement, Nexstar can purchase WPIX from Mission for less than the amount that Mission paid to Scripps to acquire the station.⁵⁶ Mission granted this option to Nexstar, in part, in exchange for Nexstar granting Mission the option to acquire the station from Scripps in the first place.⁵⁷

17. As described above, on September 13, 2019, the Commission granted Nexstar's acquisition of Tribune predicated upon the divestiture of WPIX to Scripps, an unaffiliated, independent third party. Both before and after that date, however, Nexstar took steps that contemplated the possibility that a Nexstar-affiliated entity, such as Mission, would acquire WPIX in place of Nexstar, as Nexstar was unable to lawfully acquire the station and remain in compliance with the National Ownership Cap. Specifically, Nexstar negotiated for and signed retransmission consent agreements with multichannel video programming distributors (MVPDs), which provided that, {{

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}}, it was "understood" between Nexstar and Mission that Nexstar "would negotiate for retransmission consent of WPIX upon Mission's acquisition of the

⁵² *Id.* at n.10.

⁵³ *Id.* at 7 (stating that "all of Mission's assets (excluding FCC licenses) are collateralized assets").

⁵⁴ Nexstar 10-K at 43 ("In consideration of our guarantee of Mission's senior secured credit facility, Mission has granted us purchase options to acquire the assets and assume the liabilities of each Mission station, subject to FCC consent. These option agreements (which expire on various dates between 2024 and 2033) are freely exercisable or assignable by us without consent or approval by Mission or its shareholders. We expect these option agreements to be renewed upon expiration.").

⁵⁵ See WPIX Application at Exh. 17; see also Nexstar Media Group, Inc., Securities and Exchange Commission Annual Report (Form 10-K) at F-20 (filed Feb. 28, 2023), <https://www.sec.gov/Archives/edgar/data/1142417/000095017023005209/nxst-20221231.htm> (Nexstar 2022 10-K) ("Upon Mission's acquisition of WPIX, it entered into a TBA with Nexstar. Mission also granted Nexstar an option to purchase WPIX from Mission, subject to FCC consent. These transactions allowed [Nexstar]'s entry into this market [New York City].").

⁵⁶ See *infra* Section III.A.1.a.iii.

⁵⁷ See WPIX Application at Exh. 17 ("The Option is granted in return for, among other consideration, the sale to Option Seller of the Purchased Assets pursuant to the Scripps Option Agreement"); see also Nexstar 2022 10-K at F-20.

⁵⁸ See, e.g., Response to Letter of Inquiry, from Jennifer A. Johnson, Counsel to Nexstar Media Inc., to Christopher Sova and Ty Bream, Industry Analysis Division, FCC Media Bureau, at 10-11 (Dec. 2, 2022) (Nexstar Second LOI Response) ({{

}}); Response to Letter of Inquiry, from Jennifer A. Johnson, Counsel for Nexstar Media Inc., to Brendan Holland and William Durdach, Industry Analysis Division, FCC Media Bureau, at Exh. C (Jan. 10, 2022) (Nexstar LOI Response) (including an excerpt from Nexstar's retransmission consent agreement with DIRECTV/AT&T, dated August 29, 2019, which provided that {{

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station.”⁵⁹ In accordance with that understanding between Nexstar and Mission, following Mission’s acquisition of WPIX, Mission did, in fact, “authorize[] Nexstar to negotiate retransmission consent for WPIX (but only WPIX) {[]}.”⁶⁰

18. This complete delegation of authority with respect to retransmission consent for the Station became apparent {

}.⁶¹ Although Mission {

}⁶² For instance, on December 30, 2020, Comcast received a letter from Mission indicating that {[

}⁶³ Subsequent to that {

]}.⁶⁴ Nexstar {[

since indicated to Commission staff that it is }.⁶⁵ Mission has

]}⁶⁶

19. In addition to Nexstar’s involvement with the station’s retransmission consent negotiations, Nexstar took other actions with respect to WPIX in the months immediately following the Bureau’s approval of Mission’s acquisition of the Station from Scripps. For instance, on February 17, 2021, Nexstar issued a press release announcing the promotion of one of its own employees, Chris McDonnell—who had been serving as the Vice President and General Manager of Nexstar station

⁵⁹ Mission Second LOI Response at 4.

⁶⁰ *Id.* Although such behavior is not prohibited by the Commission’s Rules—which only address the delegation of retransmission consent negotiation authority between parties that both own a station in a given market—nothing in the Commission’s Rules or precedent precludes such behavior from being considered as a factor in the totality of the circumstances when evaluating the party in control of an out-of-market station.

⁶¹ Nexstar Second LOI Response at 17 & Exh. F; Letter from Maureen A. O’Connell, Vice President, Regulatory Affairs, Charter Communications, Inc., and Howard J. Symons, Counsel to Spectrum Management Holding Company, LLC, to Holly Saurer, Chief, Media Bureau, FCC, at 3 & n.15, Exh. 2 (Apr. 12, 2022) (Spectrum Informal Complaint); Comcast Cable Communications, LLC, Petition for Declaratory Ruling, at 15-17 (filed July 1, 2021) (Comcast Petition for Declaratory Ruling).

⁶² Mission Second LOI Response at 4 & n.15 (“{[

}.”).

⁶³ Response to Letter of Inquiry, from Jonathan A. Friedman, Counsel for Comcast Cable Communications, LLC, to Christopher Sova and Ty Bream, Industry Analysis Division, FCC Media Bureau, at 2-3 (Nov. 23, 2022) (Comcast LOI Response).

⁶⁴ *Id.* at 3.

⁶⁵ *Id.*

⁶⁶ Response to Letter of Inquiry, from Dennis P. Thatcher, Mission Broadcasting, Inc., to Maria Mullarkey and Lyle Elder, Policy Division, FCC Media Bureau, at 3 (July 21, 2023) (Mission Good Faith Negotiation LOI Response) (responding to June 21, 2023 Letter of Inquiry on good faith negotiations).

KRON-TV—to become the new Vice President and General Manager of WPIX.⁶⁷ In his new role at WPIX, Mr. McDonnell remained subject to oversight under the Nexstar corporate umbrella, reporting to Nexstar’s Broadcast President, Tim Busch.⁶⁸ Moreover, on May 24, 2021, Nexstar issued another press release to announce Nexstar’s hiring of Nicole Tindiglia as News Director for WPIX, reporting to Mr. McDonnell, and with the responsibility of “overseeing the newsgathering operations of WPIX-TV, PIX11.com and their related digital, mobile, and social media applications.”⁶⁹

20. *Commission Investigation and Letters of Inquiry.* Following complaints about the operation and ultimate control of WPIX,⁷⁰ the Bureau sent several letters of inquiry to Mission and Nexstar, respectively, seeking information about the ownership and control of the station. Specifically, the Bureau sent initial Letters of Inquiry on November 9, 2021 (*First LOI*), follow-up Letters of Inquiry on October 27, 2022 (*Second LOI*), and Further Letters of Inquiry on March 16, 2023 (*Further LOI*). The Bureau received Nexstar’s responses to these LOIs on January 10, 2022, December 2, 2022, and May 15, 2023, and Mission’s responses on January 14, 2022, December 5, 2022, and May 8, 2023, respectively.⁷¹ The Parties’ LOI responses inform this NAL.

III. DISCUSSION

21. We find that Mission and Nexstar have committed apparent willful and repeated violations of the Act and the Rules, and are apparently liable for their respective violations in two areas. First, we find that the Parties apparently violated section 310(d) of the Act and section 73.3540 of the Rules by undertaking a *de facto* transfer of control of WPIX from Mission to Nexstar without prior authorization and, in doing so, Nexstar also apparently violated the National Ownership Cap by exceeding the 39% aggregate national audience limit. Second, on an independent basis from unauthorized transfer of control, we find that Nexstar also apparently violated the National Ownership Cap by disregarding the EDP rule when Nexstar obtained an attributable interest by providing collateral for a line of credit that financed Mission’s acquisition of WPIX. We then set forth two divestiture options under which (1) Nexstar and Mission can remedy their unauthorized transfer of control, and (2) Nexstar can remedy its noncompliance with the National Ownership Cap. We also propose forfeitures for the Parties tailored to their apparent violations.

⁶⁷ Press Release, Nexstar, Nexstar Inc. Promotes KRON-TV’s Chris McDonnell to Vice President and General Manager of its New York City Operations (Feb. 17, 2021), <https://www.nexstar.tv/chris-mcdonnell-wpix-vp-gm-nexstar-2021/>.

⁶⁸ *Id.*

⁶⁹ Press Release, Nexstar, WPIX-TV Names Nicole Tindiglia as News Director (May 24, 2021), <https://www.nexstar.tv/wpix-tv-names-nicole-tindiglia-as-news-director/>. According to Mission, it {
}}—Ofelia Castiblanco, WPIX’s Station Manager, and Abraham Adler, WPIX’s Chief Operator. Mission LOI Response at 4.

⁷⁰ *See, e.g.*, Comcast Petition for Declaratory Ruling (seeking a declaratory ruling from the Commission that Nexstar’s relationship with WPIX violates the National Ownership Cap and the *Nexstar-Tribune Order*); Spectrum Informal Complaint (arguing that Nexstar asserts control over WPIX in violation of the National Ownership Cap and the *Nexstar-Tribune Order*); DIRECTV, LLC, Informal Complaint (filed June 29, 2023) (urging the Commission to conclude that Nexstar controls WPIX).

⁷¹ In addition to the letters sent to Nexstar and Mission, the Bureau sent letters to Comcast, Spectrum Management Holding Company, LLC (Spectrum), and Scripps on October 27, 2022, and received responses from Comcast on November 23, 2022, Spectrum on December 2, 2022, and Scripps on December 5, 2022.

A. Apparent Violations**1. Unauthorized Transfer of Control and National Ownership Cap Violation****a. Unauthorized Transfer of Control**

22. Section 310(d) of the Act states that no “station license, or any rights thereunder, shall be transferred, assigned, or disposed of in any manner, voluntarily or involuntarily, directly or indirectly, or by transfer of control . . . to any person except upon application to the Commission and a Commission finding that the public interest, convenience, and necessity will be served thereby.”⁷² Thus, under section 310(d) of the Act, the Commission prohibits *de facto*, as well as *de jure*, transfers of control of a station license, or any rights thereunder, without prior Commission consent.⁷³

23. In determining whether an entity has *de facto* control of a broadcast applicant or licensee, we have traditionally looked beyond legal title and financial interests to determine who holds operational control of the station.⁷⁴ The Commission in particular looks to whether the entity in question controls the policies governing station programming, personnel, and finances.⁷⁵ And while the Commission has held that a licensee may delegate day-to-day operations regarding those three areas without necessarily surrendering *de facto* control, the licensee must retain ultimate authority over the policies governing those operations.⁷⁶ In addition, the Commission will consider other factors, such as whether someone other than the licensee holds themselves out to station staff and/or the public as one who controls station affairs.⁷⁷

24. Based on the totality of the circumstances and the record in this case, we find that Nexstar and Mission apparently willfully violated section 310(d) of the Act. The Commission has previously found that a licensee’s surrender of control over any one of the areas of personnel, programming, and finances to another is sufficient to find that the other entity has *de facto* control.⁷⁸ As discussed below, we find that Nexstar and Mission, acting together, violated section 310(d) in each of these three areas. We emphasize that while the record shows that Nexstar has assumed control from Mission over each of these areas, the cumulative effect makes clear Mission’s apparent abdication of control of WPIX to Nexstar. Consistent with the Bureau’s previous examinations of *de facto* control in situations involving licensees with sharing arrangements in multiple markets,⁷⁹ our decision here is limited to an analysis of WPIX and a finding that Nexstar has apparent control over WPIX. We adopt the Bureau’s approach because we focus on the programming, personnel, and finances of the station subject to the inquiry, and while those station-specific facts may overlap with the circumstances and practices of a licensee’s other stations, a wholesale audit of all of the licensees’ practices at other stations is beyond

⁷² 47 U.S.C. § 310(d); *see also* 47 CFR § 73.3540.

⁷³ *See id.*

⁷⁴ *See WHDH, Inc.*, Memorandum Opinion and Order, 17 FCC 2d 856, 863 (1969), *aff’d sub nom. Greater Boston Television Corp. v. FCC*, 444 F.2d 841 (D.C. Cir. 1970), *cert. denied*, 403 U.S. 923 (1971); *Paxson Mgmt. Corp. & Lowell W. Paxson (Transferors) & CIG Media LLC (Transferee)*, Memorandum Opinion and Order, 22 FCC Rcd 22224, 22234, para. 28 (2007).

⁷⁵ *See supra* note 15.

⁷⁶ *See, e.g., Radio Moultrie, Inc.*, Order to Show Cause and Notice of Opportunity for Hearing, 17 FCC Rcd 24304, 24306 (2002).

⁷⁷ *See WQRZ, Inc.*, Decision, 22 FCC 1254, 1332, para. 51 (1957).

⁷⁸ *Hicks Broadcasting of Indiana, LLC*, Hearing Designation Order, MM Docket 98-66, 13 FCC Rcd 10662, 10677 (1998). *See also Clear Channel Broadcasting Licenses, Inc.*, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, 24 FCC Rcd 14078, 14095, para. 38 (MB 2009).

⁷⁹ *See, e.g., Applications for Assignment of License KFTA-TV, Fort Smith, Arkansas and KNWA-TV, Rogers, Arkansas*, Order, 23 FCC Rcd 3528 (MB 2008) (*Nexstar-Mission Arkansas 2008 Order*).

the scope of this NAL. Accordingly, we do not make any other finding with regard to Mission's other licensed stations at this time.

25. To be clear, the Commission was previously aware of certain elements of the Nexstar/Mission relationship, including the proposed LPMA and Nexstar's option to purchase WPIX, both of which remain relevant as part of the facts we consider herein. Beyond those elements, however, additional facts have come to light, the most notable being Mission's complete delegation of its retransmission consent authority for WPIX—which we confirmed only during the course of our investigation. This factor, in combination with the application of the LPMA and the operation of the relationship in practice, leads us to conclude that Nexstar has overstepped the bounds and assumed *de facto* control of WPIX.

26. As a natural consequence of this apparent *de facto* control of WPIX, we also find an apparent violation by Nexstar of the National Ownership Cap, as its cognizable interest in a station in the New York DMA causes it to exceed that ownership restriction.⁸⁰

(i) Programming

27. We first find that Nexstar exercises apparent *de facto* control over WPIX with regard to the Station's programming. At the outset, we recognize that the LPMA has delegated to Nexstar virtually all of the programming responsibilities of WPIX. Specifically, the LPMA grants Nexstar the right to program "all of the airtime on the Station (including the primary and all secondary program streams and ancillary uses) for programming provided by [Nexstar] for broadcast on the Station twenty-four (24) hours per day, seven (7) days per week."⁸¹ By making available to Nexstar the use of all airtime on the station, Mission has effectively ceded to Nexstar all upfront, initial decision-making responsibility with regard to how the station's licensed broadcast spectrum will be used to provide service to the public or generate revenue, including what will appear on any and all of the station's program streams as well any "ancillary uses" of the station's spectrum. While Mission does retain the theoretical right to reject, substitute, refuse, or preempt Nexstar programming under certain circumstances, that power is limited, including a constraint that the substitute programming must be "of equal or greater value to [Nexstar]."⁸² Under the open-endedness of the terms of the contract, the determination of that value remains exclusively with Nexstar, ultimately giving it, rather than Mission, the final say to interpret the contract in its favor as to whether any substitute programming is acceptable.

28. Further, apart from limitations on staffing and programming availability, the LPMA imposes another disincentive on Mission to exercise the nominal right to substitute by qualifying Mission's ability to be reimbursed only where an expense is deemed "reasonable."⁸³ Specifically, we find it highly unlikely that Nexstar would concur that it is "reasonable" for Mission to reject Nexstar-supplied programming and then reimburse Mission for the expense it incurred to replace that programming. Accordingly, we find unpersuasive Mission's assertion that if Nexstar-supplied programming is falling

⁸⁰ 47 CFR § 73.3555(e).

⁸¹ LPMA at A-1. Currently, WPIX broadcasts three channels of programming on its over-the-air signal, all of which are subject to Nexstar's programming agreement: 11.1 The CW Network; 11.2 Antenna TV; and 11.4 Rewind TV. There is currently no programming available on 11.3 and 11.5. See <https://pix11.com/about-us/tv-listings/> (last visited Mar. 11, 2024); see also <https://en.wikipedia.org/wiki/WPIX> (last visited Mar. 11, 2024) (listing WPIX's multicast programming streams and noting that WPIX serves as the *de facto* flagship of The CW Television Network, which is 75% owned by Nexstar); see also <https://www.nexstar.tv/stations/wpix/> ("PIX11 was a true Independent station until 1995 when it became the flagship of the WB Network, followed by the transition to the CW Network in 2006").

⁸² LPMA § 5(c).

⁸³ See LPMA Sched. A (obligating Nexstar to reimburse Mission only for the "reasonable operating and maintenance expenses of the Station incurred by the Licensee in the ordinary course of business").

short of furthering WPIX's public interest obligations or is in violation of the Commission's Rules or other laws, "Mission will not hesitate to address the issue."⁸⁴

29. In finding that Nexstar exercises *de facto* control of the Station's programming, we find probative that in more than a year since Mission acquired WPIX and the LPMA took effect, Mission has not exercised its right to preempt, reject, or otherwise refuse to broadcast any programming supplied by Nexstar pursuant to the LPMA.⁸⁵ While the LPMA does require Nexstar

},⁸⁶ the Parties' LOI responses do not provide any indication of any actions undertaken in practice by the Parties (such as regular or even irregular correspondence or other communication) to give effect to that contractual obligation. Specifically, nothing in the record identifies any *affirmative* behavior by Mission with regard to overseeing local programming, such as communicating with Nexstar with regard to local issues, much less previewing or even reviewing the Nexstar-supplied and broadcast programming.⁸⁷ At best, Mission commits to {{

⁸⁴ *Id.* There is clearly a large monetary risk for Mission to undertake in determining that it should (1) reject or substitute for Nexstar-supplied programming for whatever reason; (2) front the expense to produce or procure and then air substitute programming; and then (3) hope that Nexstar, contrary to its own self-interest, would agree that it is "reasonable" for Nexstar's own programming to be rejected or substituted and reimburse Mission.

⁸⁵ Mission LOI Response at 7; Nexstar LOI Response at 9.

⁸⁶ LPMA § 6(a).

⁸⁷ {{

} Mission LOI Response at 6. In response to an LOI question asking for a description of Mission senior employees with roles and responsibilities for WPIX programming, Mission identified three people with potential programming responsibilities: (1) CEO Thatcher, who has overall responsibility for day-to-day operation of all Mission stations, including WPIX; (2) Ms. Castiblanco, who reports on station activities to Mr. Thatcher and Ms. Moser as well as serving as the station's Public Service Director; and (3) Mr. Adler, who oversees the station's technical operations. Mission LOI Response at 4. {{

}] *Id.* at 4-5. In response to another question about a description of who is involved in the decision-making process regarding the negotiation, selection, production, and approval of programming, Mission responded that {{

}} *Id.* at 6. Accordingly, the identified resources do not indicate a capacity for making informed decisions about rejecting programming prior to airing, especially where, as the record indicates, there is a seven-hour weekday morning broadcast. *Id.* Based on the responses from the parties, it does not appear that Mission produces any original programming on the Station. Further, the LPMA does not reserve any portion of the WPIX broadcast schedule on any of its five channels for any time to be programmed by Mission, the licensee. Although the Commission does not require such a reservation to establish control, it has relied on it in concluding that a broker has not impermissibly asserted control over a licensee. *See, e.g., Choctaw Broadcasting Corp.*, Memorandum Opinion and Order, 12 FCC Rcd 8534, 8539, para. 12 (1997) (relying on an LMA's provision that the licensee must not only be responsible for monitoring the broker's programming, but also be responsible for preparing up to three hours per week of programming material responsive to the needs and interests of community residents); *KHNL/KGMB License Subsidiary, LLC*, Memorandum Opinion and Order, 33 FCC Rcd 12785, 12790-91, para. 14 (2018) (*KHNL/KGMB License Subsidiary*) (affirming no unauthorized transfer of control based, in part, on the fact that pursuant to its contract, for example, the licensee's General Manager writes and delivers two editorials per week). The reservation of some time on the schedule would therefore help show control by the licensee.

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30. The Commission previously has found that nominal ownership or programming rights do not necessarily confer *de facto* control where a licensee has surrendered control of programming to a broker.⁸⁹ In contrast, the Commission has denied claims of unauthorized transfer of control where, among other facts, the licensee has actually rejected programming.⁹⁰ The execution of an LPMA that purports to comply with the Commission’s Rules and policies,⁹¹ coupled with a limited, hard-to-use exception that is subject to the broker’s ultimate approval and that has never been exercised in any event, does not insulate Nexstar and Mission from our reaching a finding of effective surrender of control over programming.

31. Further evidence of Nexstar’s actions, in practice, in the time since Mission acquired WPIX, reveal how Nexstar exercises its control over WPIX’s programming. As Comcast points out, WPIX consistently attaches Nexstar’s logo (rather than Mission’s) at the end of each broadcast.⁹² Indeed, even in its recent June 15, 2023 broadcast celebrating 75 years of service to New York, WPIX featured the Nexstar logo at the end of the broadcast, without any indication of Mission as licensee.⁹³ While Mission correctly points out that it would not be unusual for a Nexstar logo to appear in the credits of a show that it produced,⁹⁴ the absence of any Mission logo in conjunction with or even separately from

⁸⁸ Mission has in practice and writing repeatedly expressed its comfort with the selection of its programmer. *See, e.g.,* Mission LOI Response at 7 (“Nexstar has been a trusted partner of Mission in time brokerage and other sharing arrangements for many years. Indeed, in Section 6(a) of the LPMA, Mission ‘acknowledges that it is familiar with the type of programming [Nexstar] currently produces or licenses and has determined that the broadcast of such programming on the Station would serve the public interest.’ Thus, Mission expected at the time it entered into the LPMA, and still expects, that it will rarely if ever need to preempt Nexstar-supplied programming”). However well-vetted it believes its programmer to be, it does not relieve Mission of its obligations to safeguard vigilantly the interests of its community.

⁸⁹ *See, e.g., Revocation of the License of Blue Ribbon Broadcasting, Inc.*, Decision, 90 FCC 2d 1023, 1025 (1982) (“*De facto* control is necessarily a complex concept which arises out of a totality of circumstances and cannot always be gleaned from evidence of nominal ownership. The Commission requires that the legal owners also exercise *de facto* control over the station so that the party granted the license will retain ultimate responsibility for station performance. Nevertheless, professional service contracts which vest great operational authority in management employees are not impermissible.”) (citations omitted); *Stereo Broadcasters, Inc.*, Memorandum Opinion and Order, 55 FCC 2d 819, 821-23, paras. 7-9 (1975), *modified*, 59 FCC 2d 1002 (1976).

⁹⁰ *See, e.g., KHNL/KGMB License Subsidiary*, 33 FCC Rcd at 12790-91, para. 14 (affirming a Bureau finding that a licensee has retained programming control where, among other facts, the licensee actually exercised its right to reject local news programming).

⁹¹ *See* LPMA § 6(a)

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⁹² Letter from Jonathan A. Friedman, Counsel for Comcast Communications, LLC, to Holly Saurer, Chief, Media Bureau, FCC, at 4 (filed Apr. 18, 2022) (Comcast Apr. 18, 2022 Letter) (citing <https://www.youtube.com/watch?v=k7cckiMF-ts>).

⁹³ *See* “PIX11 Special: Celebrating 75 Years of WPIX,” <https://www.youtube.com/watch?v=G5V74TEo964>.

⁹⁴ Mission LOI Response at 7-8 (“Because Nexstar legally owns the programs it produces for WPIX, it would not be unusual for a local newscast, for example, to feature a Nexstar logo in the credits or other references to Nexstar as the producer of the program. Indeed, any other disclosure would be inaccurate. . . . In short, the appearance of Nexstar ‘branding’ on WPIX programming and website content is simply a truthful acknowledgment of Nexstar’s

(continued....)

Nexstar's branding would appear to give viewers the impression that Nexstar is the only party involved and the licensee of the Station. Where WPIX features Nexstar branding exclusively, viewers would not see Mission as the licensee. In addition, the non-broadcast media generated by Nexstar and WPIX further perpetuate the representation to the public that Nexstar controls WPIX's programming. Nexstar press releases identify WPIX as a Nexstar station;⁹⁵ viewers wishing to share video or photos with WPIX must agree to a content license agreement with Nexstar as the content licensee;⁹⁶ and WPIX's own website home page and website footers feature the Nexstar Media logo without any Mission logo.⁹⁷ Again, the issue is not whether Nexstar has a right to brand its property, but the persistent exclusion of Mission's branding and role as licensee.

32. While the licensee has little response to the fact that Nexstar appears to be branding the station as its own with no indication as to the true owner of the station, Mission's LOI responses object to one specific point. Namely, Mission seeks to minimize the significance of Nexstar's branding on WPIX's website by arguing that the Commission places no relevance on station website disclosures.⁹⁸ However, the Bureau-level pronouncements it cites about the relevance of station websites are not only inconsistent with contemporaneous Bureau-level guidance,⁹⁹ but an overstatement of the Commission's position. In *Secret Communications II*—the Commission-level case underlying the Bureau decisions that Mission cites—the Commission stated that allegations based *solely* on Internet website icons are speculative and inadequate to raise a substantial and material question of fact concerning abdication of control.¹⁰⁰ However, contrary to Mission's suggestion, the full Commission has never deemed website content to be irrelevant. To the extent that the Bureau's decision in *Schmeltzer* could be interpreted as holding that website content is irrelevant to questions of control, we disavow that reasoning.¹⁰¹ Furthermore, *Secret Communications II* is over 20 years old, adopted at a time when an Internet presence and branding was less central to a station's business identity and daily operations than it is now. Indeed, the decision predates the creation of Facebook, YouTube, Yelp, Twitter/X, Instagram, and the Commission's Online Public Inspection File, among other things. In assessing how a licensee holds itself out to the public, the full Commission has relied upon a variety of media as probative with regard to how a licensee presents

(Continued from previous page) _____

production of and property rights in that material, which it is obligated to supply under the LPMA. This does not equate to a concerted effort to portray WPIX as a "Nexstar station."")

⁹⁵ See, e.g., Press Release, Nexstar, Nexstar Media Inc. To Host Exclusive Statewide Live Telecast of Debate Between the Candidates for U.S. Senate from Pennsylvania on October 25 at 8 P.M. ET, (Oct. 11, 2022), <https://www.nexstar.tv/nexstar-to-host-debate-us-senate-from-pa-on-oct-25/>.

⁹⁶ See "Sharing Media with PIX11" (available at <https://pix11.com/sharing-media-with-pix11/>) (last visited Mar. 11, 2024).

⁹⁷ Mission points out that an online user can click through on the "About Us" tab to learn that Mission is indeed the owner of WPIX, which is operated by Nexstar. Mission Second LOI Response at 7-8. However, Mission's presence on the WPIX website is dwarfed by that of Nexstar's.

⁹⁸ See Mission Second LOI Response at 7 (citing *Nexstar Broad., Inc., & Mission Broad., Inc.*, 23 FCC Rcd 3528, 3534-35 (MB 2008); *Kathryn R. Schmeltzer, Esq.*, Letter Order, 19 FCC Rcd 3897, 3900 (MB 2004) (*Schmeltzer*)).

⁹⁹ In 2005, after the *Schmeltzer* decision was released, the Bureau evaluated on the merits whether a station's website identification of Clear Channel personnel established whether Clear Channel "holds itself out as if it owns" the station, which indicates that a station's website representations were indeed relevant and probative. *WJZD, Inc., c/o Dennis J. Kelly*, Letter Order, 20 FCC Rcd 9941, 9944-45, para. 3 (AD 2005).

¹⁰⁰ See *Secret Communications II, LLC*, Memorandum Opinion and Order, 18 FCC Rcd 9139, 9148-49, para. 24 (2003) (*Secret Communications II*).

¹⁰¹ It is well established that an agency is not bound by the actions of its staff if the agency has not endorsed those actions. See, e.g., *Comcast Corp. v. FCC*, 526 F.3d 763, 769 (D.C. Cir. 2008) (an agency is not bound by unchallenged staff guidance).

itself to the public,¹⁰² and as a Commission we affirm that we do not categorically deem irrelevant any such communication or publication. In light of the language in *Schmeltzer* suggesting that website content is irrelevant to questions of control, which we disavow here, we do not rely in this case on Nexstar's branding on the Station's website as evidence of control of programming. Even without this evidence, however, we would reach the same conclusion that Mission has ceded control of WPIX.

33. Furthermore, we disagree with Nexstar's implication that the Commission's approval of the Application for consent to assign the license of WPIX to Mission, which included an unexecuted draft LPMA as an attachment, affords Nexstar carte blanche to exert control of WPIX with impunity.¹⁰³ It is true that, in the absence of additional facts that were not known at the time of application, the Bureau did not raise objections to the LPMA in the course of approving the Application. Under the totality of the circumstances, facts that were known from the face of the LPMA (i.e., the contract affords the broker round-the-clock programming rights¹⁰⁴ and the licensee's ability to exempt or substitute programming is at best constrained), when combined with facts that have emerged in application of the LPMA in actual practice (i.e., the licensee's ability to exempt or substitute programming in practice has never been exercised, and Nexstar's comprehensive representation of itself to the public as controlling WPIX programming), we are compelled to make a finding of apparent *de facto* control by Nexstar of WPIX programming.¹⁰⁵

(ii) Personnel

34. In light of the actual practices of Nexstar and Mission after Mission acquired WPIX, we find their claim that Mission controls the personnel at the Station to ring hollow, and we find that Nexstar exercises apparent *de facto* control in this area as well. How Nexstar holds itself out to the public with

¹⁰² See, e.g., *WGPR, Inc.*, Memorandum Opinion and Order, 10 FCC Red 8140, 8142, para. 14 (1995) (*WGPR, Inc.*), vacated on other grounds sub nom. *Serafyn v. FCC*, 149 F.3d 1213 (D.C. Cir. 1998) (evaluating correspondence to local program producers as evidence with regard to control over programming, although eventually finding no transfer of control).

¹⁰³ Letter from Jennifer A. Johnson, Counsel for Nexstar Media Inc., to Michelle Carey, Chief, Media Bureau, FCC, at 4-5 (filed July 26, 2021) (Nexstar July 26, 2021 Letter) ("Nexstar and Mission acted in reliance upon the FCC's existing rules and its approval of the WPIX Application (which included the LMA) in making business decisions regarding financial investments and the operation of WPIX."); see also Nexstar LOI Response at 3 ("Nexstar relied in good faith on [the Commission's] rules and precedents, and the FCC's approval of Mission's application to acquire WPIX (including the LPMA). . . . However, it would be inequitable for the FCC to subject Nexstar to an enforcement proceeding when Nexstar has acted in reliance on existing FCC rules and actions and has conducted its business in accordance with the LPMA approved by the FCC.").

¹⁰⁴ The LPMA also grants Nexstar control of any "ancillary uses" of the Station's broadcast spectrum, which under the Commission's Rules could include datacasting or experimentation with the emerging ATSC 3.0 standard, among other uses, and could generate ancillary fees to which Nexstar would be wholly entitled.

¹⁰⁵ We are aware that the Bureau has previously found that 15 years ago there was no substantial and material question of fact as to whether Nexstar had *de facto* control over a Mission station at that time, but the facts in that case are readily distinguishable from the present situation in all significant aspects. See *Nexstar-Mission Arkansas 2008 Order*. Most notably, Nexstar did not have any input into the station's programming beyond newscasts, which were limited to 15 percent of the station's programming; Mission retained control over the format and even the title of those newscasts; and Mission received 70 percent of all advertisement revenue. *Nexstar-Mission Arkansas 2008 Order*, 23 FCC Red at 3534-35. In addition, while comparing in-market sharing arrangements and out-of-market sharing arrangements is not dispositive here, in *Nexstar-Mission Arkansas 2008 Order*, the governing SSA specified that for all programming other than news programming, "[e]ach Party will maintain for the Station(s) operated by it separate managerial and other personnel to carry out the selection and procurement of programming for such Station," and even for news programming, Mission will determine the title and format of such newscasts. *Id.* at 3533-34.

regard to employment is a key factor in our analysis, consistent with prior Bureau precedent¹⁰⁶ which we endorse today. Here, despite nominal and minimal recognition of Mission's ownership, Nexstar presents itself as controlling the affairs of WPIX in this regard.

35. The Commission's elimination of the Main Studio Rule in 2017 also eliminated the requirement that stations must have at least two employees (one management and one staff) present on a full-time basis at a main studio during normal business hours.¹⁰⁷ While the Commission reasoned that doing so would provide broadcasters with more flexibility to staff their operations as they see fit and allow them to allocate greater resources to programming and other matters, the Commission cautioned at the time that eliminating the rule did not in any way limit or reduce broadcast licensees' obligation and responsibility to retain and maintain control over essential station matters, such as personnel, programming, and finances.¹⁰⁸ Further, the Commission stated that it "expects that broadcast licensees will continue to be able to demonstrate such control notwithstanding the elimination of the main studio rule and the staffing requirements associated with the main studio rule."¹⁰⁹ Mission does not clearly make such a demonstration here.

36. WPIX is located in New York City, the number one market in the country based on Nielsen rankings. Yet, the record shows that, at best, Mission only maintains two employees at the Station, and the status of these two nominal on-site Mission employees is heavily qualified, and their independence is questionable. As Mission explains, {{

}}¹¹⁰ Having supervision or management by Nexstar or Nexstar employees, even if {{
 }}, over Mission's Station Manager and Chief Operator would appear to be probative of Mission relinquishing control over WPIX's station personnel. In contrast, in its 2008 finding that a petition failed to raise a substantial and material question of fact as to whether Mission had ceded *de facto* control of its station to Nexstar, the Bureau relied on the terms of a shared services agreement specifying that the Mission station employees will report *solely* to Mission.¹¹¹ The record shows that centralized Mission employees (who are not specific to WPIX) carry out certain

¹⁰⁶ In considering whether an individual is exercising *de facto* control over a station's "employment, supervision, and dismissal of personnel," the Commission "has traditionally considered indicia such as . . . who is in charge of employment, supervision, and dismissal of personnel," and the Commission "will consider such factors as whether someone other than the licensee holds themselves out to station staff and/or the public as one who controls station affairs." *Entertainment Media Trust*, Hearing Designation Order and Notice of Opportunity for Hearing, MB Docket No. 19-156, 34 FCC Rcd 4351, 4358, para. 32 (MB 2019) (citation omitted); *see also J. Stewart Bryan III*, Memorandum Opinion and Order, 28 FCC Rcd 15509, 15516, para. 16 (VD 2013) (recognizing that correspondence with a signature block identifying the manager of a broker as the manager of the licensee coupled with other evidence may constitute persuasive evidence of *de facto* control).

¹⁰⁷ *Elimination of Main Studio Rule*, Report and Order, 32 FCC Rcd 8158, 8169-70, paras. 17-18 (2017) (*Elimination of Main Studio Rule Order*). The Main Studio Rule, which was eliminated in 2017, required the licensee of a broadcast station to maintain a main studio in order to serve the needs and interests of the residents of the station's community of license. Mission maintains that {{

}} Mission LOI Response at 4.

¹⁰⁸ *Elimination of Main Studio Rule Order*, 32 FCC Rcd at 8170, para. 18 & n.83 (stating that, "We caution that the deletion of the main studio rule does not in any way limit or reduce broadcast licensees' obligation and responsibility to retain and maintain control over essential station matters, such as personnel, programming, and finances.").

¹⁰⁹ *Id.*

¹¹⁰ *See* Mission LOI Response at 4-5 (emphasis added).

¹¹¹ *Nexstar-Mission Arkansas 2008 Order*, 23 FCC Rcd at 3534.

administrative and other functions at a corporate level for all Mission-owned stations, including WPIX, but these activities do not further Mission's claim of station control for WPIX in particular.¹¹² While we do not take issue with Mission's representations that its recordkeeping for Mission employees is separate from that of Nexstar,¹¹³ we note that these accounting and other practices are not dispositive. Moreover, irrespective of whether Mission centralizes certain administrative functions, it stretches credulity to believe that a station in the number one market in the country can be meaningfully operated based on two part-time employees.

37. Setting aside Mission's claims of maintaining its own minimal employee presence, the record is clear that Nexstar holds itself out to the public as hiring, promoting, and supervising WPIX employees. For example, Nexstar puts out press releases celebrating the hiring and promotion of Nexstar employees to oversee newsgathering operations of WPIX, or to lead WPIX's broadcast operations, with these employees reporting to other Nexstar managers or executives.¹¹⁴ This includes the Vice President and General Manager for the station, as well as the News Director, two of the most pivotal roles at the station, and both of which are staffed by and overseen by Nexstar, not Mission, employees. While it is not unusual for a programmer's employees to be present at the brokered station,¹¹⁵ such an expectation does not entail misleading the public that the *station* has hired the employees. In addition, the "PIX11 Careers" drop-down page on the WPIX website, PIX11.com, features a map with all of the 100 markets in which Nexstar operates, and under the "Our Company" heading, describes Nexstar's operations as a national company.¹¹⁶ Mission is not referenced at all under this page. {

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¹¹² The only two other senior Mission employees asserted to be involved in the Station's operation are Mr. Thatcher and Sharon Moser, Mission's Senior Vice President and Controller. Mission LOI Response at 4. Ms. Moser is a former Nexstar employee, a relationship that the Commission has previously found to be potentially problematic with regard to establishing independent control. *See, e.g., Applications of Tribune Media Company (Transferor) and Sinclair Broadcast Group, Inc. (Transferee)*, Hearing Designation Order, 33 FCC Rcd 6830, 6836, para. 19 (2018) (identifying a question of independence based upon the employee relationship of prospective CEO of purportedly independent licensee from Sinclair, where employee worked for company in which Sinclair's executive chairman had a controlling interest). Mission's { } corporate employees who participate in WPIX activities work off-site from WPIX. Mission LOI Response at 8. With regard to WPIX, Mission asserts that Ms. Moser's accounting and other responsibilities include approval and oversight of payment of station expenses, including rent, utilities, the salaries of Mission's employees, music licensing fees and maintenance; the maintenance of the company's overall financial records; and presenting WPIX expenses for reimbursement pursuant to the LPMA. Mission LOI Response at 4.

¹¹³ *See, e.g.,* Mission LOI Response at 4 ("Mission is also required to provide all personnel necessary for the broadcast transmission of the programming and is responsible for the salaries, taxes, insurance, and other costs related to those employees."); *id.* ("When Nexstar's employees are on Mission's premises, they are subject to the direction and control of Mission's management."); Mission LOI Response at 5 ("Nexstar does not make hiring or promotion decisions with respect to Mission's employees at the station. Mission exercises ultimate control over the operations of WPIX and over Nexstar's employees while they are on WPIX's premises pursuant to the LPMA . . .").

¹¹⁴ Press Release, Nexstar, WPIX-TV Names Nicole Tindiglia as News Director (May 24, 2021), <https://www.nexstar.tv/wpix-tv-names-nicole-tindiglia-as-news-director/>; Press Release, Nexstar, Nexstar Inc. Promotes KRON-TV's Chris McDonnell to Vice President and General Manager of its New York City Operations (Feb. 17, 2021), https://www.nexstar.tv/chris_mcdonnell_wpix_vp_gm_nexstar_2021/.

¹¹⁵ *See, e.g., WGPR, Inc.*, 10 FCC Rcd at 8143, para. 17 ("We have acknowledged that a local marketing arrangement, which entails the broker's provision of programming and the sale of advertising to be aired on the station, by its very nature necessitates the presence of the broker's staff at the licensee's studio.")

¹¹⁶ *See* WPIX, *PIX11 Careers*, <https://pix11.com/about-us/work-for-us/> (last visited Mar. 11, 2024).

¹¹⁷ Mission LOI Response at 4.

38. The fact that WPIX’s website elsewhere identifies Mission as the owner of the Station and Nexstar as the operator does not insulate Nexstar from a finding that Nexstar is presenting itself as the employer for WPIX, nor does any boilerplate language in the LPMA that “[Mission] shall have full authority, power and control over the operation of the Station and over all persons working at the Station during the Term.”¹¹⁸ Where Nexstar: (1) handles the postings for and front-end hiring of almost all Station personnel, {{ }}; (2) sets out the press releases for the Station hires; and (3) directly supervises almost all the Station employees, and even for the two it does not, {{ }} the Parties cannot hide behind some savings language in the LPMA or corner of the website to confer personnel responsibility upon Mission.

(iii) Finances

39. In determining abdication of financial control, the Commission looks to determine whether a party other than the licensee has exerted actual control over the station, and not simply whether a third-party holds the ability to potentially influence the licensee’s actions. Thus, the standard, and the Commission’s calculation, is different from whether a party is simply attributable, which is a measure of the *potential* degree of influence, rather than a finding of actual control.¹¹⁹ The Commission has determined that a licensee’s retention of the economic incentive to control programming aired over its station is a key element of retaining control.¹²⁰ Despite more recent Commission precedent that could be read to caution against overreliance on this element, or a rigid application of it, we find that a licensee’s economic incentives to control programming remain relevant to evaluating its financial control.¹²¹

¹¹⁸ LPMA § 5(a); *see also id.* § 7 (“Licensee will provide all personnel necessary for the broadcast transmission of the Programs (once received at its transmitter site) and will be responsible for the salaries, taxes, insurance and related costs for all such personnel.”); § 9(b) (“When on Licensee’s premises, Programmer’s personnel shall be subject to the direction and control of Licensee’s management personnel and shall not act contrary to the terms of any lease for such premises.”). The Commission has determined that its inquiry into the actual control of a licensee goes beyond the four corners of the contract even where the language was “clear and unequivocal” that certain licensee executives were purportedly in control. *Stereo Broadcasters*, 55 FCC 2d at 821-23, paras. 7-9. *See also SNR Wireless Licenseco, LLC v. FCC*, 868 F.3d 1021, 1033 (D.C. Cir. 2017) (upholding Commission’s finding of *de facto* control despite the fact that parties “wrote into their contracts general terms that formally spoke to” control factors established in Commission precedent; stating that “[w]hat mattered, in the Commission’s analysis, was the substance of the terms of [] control, not the formal recitations of compliance” with control factors set forth in Commission precedent).

¹¹⁹ Attribution of an ownership interest to an individual or entity represents the Commission’s best judgment concerning when an interest is sufficient to confer on the owner a potential degree of influence over a licensee that should be cognizable for purposes of applying the Commission’s broadcast ownership rules. *See, e.g., 2014 Quadrennial Regulatory Review*, MB Docket No. 14-50, Report on Ownership of Commercial Broadcast Stations, 29 FCC Rcd 7835, 7836, para. 1 n.1 (MB 2014). The Commission initially employed an economic incentive standard in 2002. *Shareholders of the Ackerley Group, Inc.*, Memorandum Opinion and Order, 17 FCC Rcd 10828, 10841, paras. 32-33 (2002) (*Ackerley*) (finding that a series of agreements, including a Joint Sales Agreement, in combination with a Local Marketing Agreement, resulted in attribution because it did not provide the licensee with the “economic incentive” to control the programming provided by the broker). As a general matter, the Commission for decades has deemed officers and directors of licensee entities, as well as holders of 5% or more voting interests, to be attributable owners. *See, e.g., Amendment of Part 73 to Authorize the use of Multiple, Synchronous Transmitters by AM Broadcast Stations*, Notice of Inquiry, 2 FCC Rcd 1389, 1395 n.13 (1987) (citing 1985 version of 47 C.F.R. Section 73.3555, Notes 1 and 2 (1985)); *see also Sixth Report on Ownership of Broadcast Stations*, DA 23-35 (MB & OEA Jan. 2023) at 2.

¹²⁰ *See Ackerley*, 17 FCC Rcd at 10841, paras. 32-33 (finding no economic incentive to control programming where broker programmed 15% of weekly broadcast hours and retained 100% of revenue under JSA); *Applications for Consent to Transfer Control from Shareholders of Belo Corp. to Gannett Co., Inc.*, Memorandum Opinion and Order, 28 FCC Rcd 16867, 16878, para. 28 (MB 2013) (*Gannett-Belo*).

Accordingly, we do not over-rely on this element—we include it as one factor to be weighed along with others in assessing the greater totality of the circumstances in assessing financial control. Nor do we apply this factor rigidly to suggest there is a formula to apply or a precise line of revenue share below which the licensee has ceded financial control. We need not undertake such an assessment here because Mission receives no share of the revenue at all.

40. As further described below, the record before us demonstrates overwhelmingly that Mission has no economic incentive to control either the programming or the day-to-day operations of the station. Mission has no profit-making potential pursuant to the LPMA, Option, or unwritten and undisclosed retransmission consent practices. Accordingly, without an upside in the success of the Station, in combination with its abdication to Nexstar of all key aspects of management of the Station's business affairs, we conclude that Nexstar has apparent *de facto* control of the Station's finances.¹²²

41. Pursuant to the terms of the LPMA, Nexstar is entitled to all revenues of the Station, including revenues from the sale of advertising time on the Station's five programming channels and the Station's website, from the lease of space on the Station's towers, and from retransmission consent fees obtained for the Station's programming.¹²³ Notably, and as discussed throughout this decision, Nexstar, not Mission, is the party responsible for marketing, promoting, and selling the station's programming, advertising time, tower space, data transmission capabilities, and any other revenue-generating venture at the Station. Furthermore, Nexstar collects all revenue generated by the Station as a result of those efforts. The LPMA requires Mission to pay for maintenance of all studio and transmitter equipment and all other operating costs, where Mission would interact with vendors as the nominal face of the Station, but Nexstar must reimburse Mission for the reasonable operating and maintenance expenses of the Station.¹²⁴ In no way does the LPMA afford Mission any opportunity to actually profit from the operation of WPIX, nor any incentive to remain engaged and in control of the Station's operations. Thus, Nexstar operates the station, reaps the revenue, and reimburses Mission for the cost of the electricity, tower rent, and other

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¹²¹ When it comes to station finances, the Commission has expressly disagreed with the Bureau's attempt to establish a specific revenue-sharing formula to determine whether the licensee retains *de facto* control. See, e.g., *KHNL/KGMB License Subsidiary*, 33 FCC Rcd at 12791-92, para. 15 ("In *Ackerley*, the Commission concluded that a series of agreements, including a [JSA] and [LMA] had the combined effect of depriving the licensee of the economic incentive to control its programming and determined that the agreements therefore created an attributable interest for purposes of the multiple ownership rules. The Commission does not apply this principle as a means of determining whether an entity exercises *de facto* control, and we overrule the Bureau Order to the extent it could be read as doing so. To the extent that Media Council reads the Bureau's decisions in other cases as establishing a specific revenue-sharing formula that is necessary in order to ensure that the licensee retains *de facto* control, we disagree with this interpretation."). It is illogical to extend this precedent into creating a total bar on examining whether the licensee has any economic incentive to control programming as an aspect of *de facto* control. Clearly, a licensee retaining the technical right on paper to make certain programming decisions is effectively meaningless if such decisions are of no consequence to the licensee. Indeed, even in rejecting the Bureau's approach (which appeared to elevate economic incentive over all other elements), the Commission affirmed its "longstanding practice of examining the totality of the circumstances in each case to determine whether a licensee retains operational control of the station." *Id.* Nothing in our decision today, disturbs the *KHNL/KGMB License Subsidiary* precedent, and we do not establish as a basis for demonstrating retention of licensee control any numerical revenue-sharing requirements. Furthermore, our consideration of the totality of the circumstances is consistent with *KHNL/KGMB License Subsidiary's* rejection of any formulaic approach.

¹²² Although we undertake this analysis of economic incentives as part of our evaluation of whether Nexstar has exercised *de facto* control, economic incentives are also relevant to a determination regarding attribution, and Nexstar's assumption of all financial upside and downside for WPIX would independently qualify the Station as attributable to Nexstar for the purposes of our ownership rules. See *Ackerley*, 17 FCC Rcd at 10841, paras. 32-33 (considering economic incentive as an aspect of attribution).

¹²³ LPMA § 3.

¹²⁴ *Id.* § 7, Sch. A.

operating expenses that Mission pays out directly, perhaps to maintain the facade that it has indicia of control. If the programming performs well, and revenues increase, all of the additional profit goes to Nexstar. By contrast, if the programming performs poorly, and revenues drop, Mission still receives exactly the same amount of compensation (reimbursement for operating expenses). Accordingly, the agreements put in place by Nexstar prevent Mission from ever seeing any financial upside to owning the Station, making its ownership of the Station a fiction, and effectively transforming the licensee into merely a facilities operator.¹²⁵

42. Mission seeks in its responses to create the appearance that, if WPIX had a poor financial showing, this might impact future financing.¹²⁶ Yet, as discussed in detail below in Section III.A.2, and in Section II above, the intertwined financial arrangement between Nexstar and Mission highlights the degree to which Nexstar's financial support underlies Mission's transactions. The collateral and loan arrangement utilized by Nexstar and Mission obviates the need for Mission to seek financing as an independent entity. Moreover, Mission relies on Nexstar for both investment and station services at all its stations, not just at WPIX. Hence, Mission's purported concerns about lack of future funds in the event of poor financial performance of WPIX appear speculative.

43. Not only is Mission unable to earn any profits from the operation of its own station, it also is unable to benefit from any increased value of WPIX over the long-term, due to the terms of the Option held by Nexstar. That is, Mission will similarly not see any potential profit from improved performance upon any eventual sale of the Station. In fact, the terms of the Option guarantee that Mission will incur a *loss* on the sale of WPIX to Nexstar. Mission, with financial assistance from Nexstar,¹²⁷ paid \$82.6 million to acquire WPIX in 2020.¹²⁸ However, the Option establishes that Nexstar has the right to purchase WPIX for a base price of \$75 million, with an "Additional Purchase Price" of \$7.5 million, which totals a maximum of \$82.5 million.¹²⁹ This option presents a marked contrast in critical contract terms compared to the arms-length Scripps Option Agreement that Scripps negotiated with Nexstar.¹³⁰ Specifically, Scripps contracted the Additional Purchase Price at an interest rate of 6.5 percent during the first year and jumping up to 13 percent in subsequent years, with a cap of \$12.5 million the first year and \$25 million thereafter, in contrast to the constant 3.5 percent interest rate that Nexstar enjoys in its Option with Mission.¹³¹ Unlike Mission's current situation, Scripps had the potential and incentive to make a

¹²⁵ This is consistent with Nexstar's statement in its annual reports regarding companies like Mission: "[i]n return for the services we provide, we receive substantially all of the consolidated VIEs' available cash, after satisfaction of their operating costs and any debt obligations." Nexstar 10-K at 23.

¹²⁶ Mission asserts {{

}}. Mission LOI Response at 11.

¹²⁷ See *infra* Section III.A.2.

¹²⁸ See *supra* note 46 and accompanying text.

¹²⁹ See "Option Agreement Between Mission Broadcasting Inc. and Nexstar Broadcasting, Inc.," File No. BALCDT – 20200901AAB, Att. 17, at § 1.3(b) (Nexstar-Mission Option Agreement).

¹³⁰ While we traditionally do not evaluate the purchase price, we do so in making *de facto* determinations "where it appears from other facts that the arrangement may not have been an arms-length transaction between the parties." *Edwin L. Edwards, Sr. (Transferor) and Carolyn C. Smith (Transferee) for Consent to the Transfer of Control of Glencairn, Ltd., parent entity of Baltimore (WNUV-TV) Licensee, Inc. Licensee of Television Station WNUV-TV, Baltimore, Maryland, et al.*, Memorandum Opinion and Order and Notice of Apparent Liability, 16 FCC Rcd 22236, 22250, para. 26 (2001) (*Sinclair/Glencairn*). In making a finding of *de facto* control, the Commission found probative that Sinclair, the broker and programmer, bought stations under the option agreement it had with the licensee of the stations (now Cunningham Broadcasting, then known as Glencairn). *Id.* at 22249-50, paras 23-27.

¹³¹ See "Option Agreement Between Scripps Media, Inc. and Nexstar Broadcasting, Inc.," File No. BALCDT – 20200901AAB, Att. 13, at § 1.3(b) (Nexstar-Scripps Option Agreement). Nexstar explains that {{

(continued....)

profit by ultimately selling at a higher rate than its purchase price, even if Nexstar were to exercise its option. Moreover, the Scripps Option Agreement had an exercise period of less than two years; Nexstar's option with Mission has an initial eight-year term,¹³² with an expectation of renewal,¹³³ giving Nexstar an even longer upside potential.

44. In its LOI Response, in answer to a question about the risk of loss and potential for profit, if any, that Mission holds for WPIX, Nexstar does not assert that Mission has any direct risk of loss or profit potential. Rather, Nexstar claims that Mission {

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}}.¹³⁶ Mission further speculates that if the value of the Station were to increase, it could conceivably sell to a third party, but that could only happen if Nexstar chose not to exercise its then below-market option to purchase the Station, which has an initial eight-year term.¹³⁷ In fact, Nexstar appears to hold the right to assign the Option to any party of its choosing without Mission's consent or approval.¹³⁸ This means that Nexstar could sell its favorable-rate option to a third party for a significant price, further benefiting itself and leaving Mission unable to prevent the sale of its own station or to receive the benefit of the station's increased value.

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}} Nexstar LOI Response at 28. Mission evidently {{
 }}. Mission LOI Response at 14 ({{
 }}).

¹³² The Nexstar-Mission Option Agreement establishes the option expiration date to be the date on which the LPMA terminates or expires. Nexstar-Mission Option Agreement § 1.4. The LPMA has a term of eight years. LPMA § 1.

¹³³ Nexstar 10-K at 43 (“These option agreements (which expire on various dates between 2023 and 2033) are freely exercisable or assignable by [Nexstar] without consent or approval by Mission or its shareholders. [Nexstar] expect[s] these option agreements to be renewed upon expiration”). However, in its LOI Response, Nexstar characterizes the option slightly differently: {{

}} Nexstar LOI Response at 10.

¹³⁴ Nexstar LOI Response at 10.

¹³⁵ *Id.*

¹³⁶ Mission LOI Response at 15.

¹³⁷ *Id.* at 11. Mission does recognize the opportunity to lose money upon ultimate sale of the station (unlike the inability to lose money during its operation of the Station). *Id.* (“Conversely, were WPIX to perform poorly from a financial perspective, that would reduce the value of Mission’s station assets in its hands and upon any third-party sale. . . . Mission has a strong interest in preserving and enhancing its reputation in the broadcast community, which would be harmed if it permitted WPIX to perform poorly.”).

¹³⁸ Nexstar 10-K at F-25 (stating: “In consideration of Nexstar’s guarantee of the Mission senior secured credit facility, Mission has granted Nexstar purchase options to acquire the assets and assume the liabilities of each Mission station, subject to FCC consent. These option agreements, which expire on various dates between 2023 and 2033, are freely exercisable or assignable by Nexstar without consent or approval by Mission. The Company expects these option agreements to be renewed upon expiration.”).

45. In sum, we disagree that Mission has sufficient economic incentives tied to WPIX's operation to establish financial control. Nexstar cannot have it both ways—to simultaneously occupy the exclusive role as programmer and employer of the programming personnel, as described above, and yet somehow claim that Mission will reap the credit and public recognition for successfully running WPIX. Upon these facts, we are not persuaded that the success of WPIX will accrue to Mission's benefit either in the short or long term. Instead, the existing operation of WPIX ensures that any goodwill or other value generated by the successful operation of the Station will go to Nexstar. Furthermore, given that Nexstar holds itself out as the owner, operator, and programmer of WPIX, it is simply not credible to assert that Mission somehow receives value from {{

}}.¹³⁹ In reality, any value either being built over time or extracted year-to-year from the operation of WPIX redounds exclusively to the benefit of Nexstar, which holds the Station out as the flagship of its commonly owned The CW Network.¹⁴⁰

46. Nexstar argues that the Option and the LPMA were included as attachments to the WPIX Application, and the Commission therefore approved these agreements when it approved the Application.¹⁴¹ Nexstar asserts that a party operating in good faith based upon Commission action should not be subject to an enforcement proceeding due to its reliance on that approval.¹⁴² We recognize the importance of this reliance, but stress that such reliance is based upon the Commission's full understanding of the transaction before it, based upon the full disclosure of the relevant agreements. We conclude that when put into practice—and especially in tandem with the previously undisclosed retransmission consent practices—the full set of circumstances in this particular case leads us to find that Nexstar has exercised *de facto* control of the Station and, consequently, that Mission has abdicated control of its station.

47. In particular, we find Mission's unwritten delegation to Nexstar of the power to serve as the exclusive decisionmaker with regard to retransmission consent authority¹⁴³—which was not revealed in the Application nor any other filing, much less ever approved explicitly or tacitly by the Commission—as indicative of the usurpation by Nexstar of the financial and business affairs of WPIX. We emphasize that Nexstar's contractual right to retransmission consent revenues in no way implicitly confers a right to negotiate on Mission's behalf. Retransmission consent negotiation confers authority to resolve or not resolve often critical issues, such as rejecting a MVPD offer and, at impasse, imposing a blackout; designation as a primary channel or multicast; determination of the length of the retransmission consent contract; and right to renewal. The fact that the parties revealed to the Commission that the way in which incoming revenues would flow in no way indicated that Nexstar would be sole decisionmaker on these key issues. As Nexstar, Mission and the MVPDs acknowledge, {{

¹³⁹ Nexstar LOI Response at 10.

¹⁴⁰ In addition to WPIX now serving as the flagship station for the Nexstar-owned The CW Network, WPIX shares a building with the New York studios for Nexstar-owned cable news network NewsNation, which host operations for both WPIX and NewsNation. See tvtech, *NewsNation, WPIX Open New Manhattan Studios* (Apr. 26, 2023), <https://www.tvtechnology.com/news/newsnation-wpix-open-new-manhattan-studios>.

¹⁴¹ Nexstar LOI Response at 10, 24. Similarly, in response to the Comcast Petition for Declaratory Ruling, Nexstar argues that Comcast's critique of the LPMA is a collateral attack on a final Commission order approving the WPIX transaction. Nexstar July 26, 2021 Letter at 4-5.

¹⁴² Nexstar LOI Response at 5.

¹⁴³ See, e.g., Mission LOI Response at 17; Nexstar LOI Response at 2, 16.

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48. As described above,¹⁴⁵ Nexstar’s relationship with WPIX is different than the types of sharing agreements that have been approved in the past, which exist between two stations in the same market, and are subject to limitations in the Commission’s Rules designed to balance the efficiencies of such agreements against the need for licensees to remain independent and maintain control of their stations.¹⁴⁶ Our discussion herein does nothing to change the existing limits for same-market stations, which remain the relevant standards for evaluating the compliance of same-market arrangements.

49. Moreover, while the Commission has approved of sharing agreements between same-market licensees, such agreements do not release licensees from the requirement that they control their stations. The Commission has held that a licensee involved in a local marketing relationship is not relieved of its overarching duty to retain ultimate control, that is, to mandate basic policies pertaining to the fundamental station operations of programming, personnel, and finances.¹⁴⁷ To this end, a licensee engaged in time brokerage or other sharing agreements must operate as a stand-alone entity discrete from the broker providing programming or services to its station. This means that the licensee should be ready and able to operate independently from the programmer at any time it believes the arrangement does not fulfill its public interest responsibilities.¹⁴⁸ The record provides no indicia that Mission has ever issued any policy directives to Nexstar in this regard, nor communicated any other form of oversight. Rather, the record shows that Mission has unequivocally surrendered the ability to exercise control over the Station’s retransmission consent negotiations, which are critical to the well-being and survival of this broadcast station in the nation’s biggest market.

50. Mission’s delegation (or intent to delegate) to Nexstar every aspect of its retransmission consent affairs was not a fact that was apparent or disclosed to the Commission at the time Mission applied to acquire WPIX. The fact that Mission and Nexstar never memorialized Nexstar’s apparent assumption of Mission’s retransmission consent rights¹⁴⁹—that Mission never sought to put in writing any limitation of scope or duration of such rights— is probative of the degree of control that Nexstar enjoys over WPIX’s business affairs, and the lack of involvement exhibited by Mission. Indeed, Mission is so far removed that it not only concedes that it is {

}}¹⁵⁰ {

¹⁴⁴ See, e.g., Mission Second LOI Response at 4 (“Mission has authorized Nexstar to negotiate retransmission consent for WPIX (but only WPIX) {

}}.”).

¹⁴⁵ See *supra* para. 10.

¹⁴⁶ For example, while Nexstar programs 100% of the broadcast time on WPIX, the Commission considers anything beyond 15% attributable between same-market stations. See 47 CFR § 73.3555, Note 2(j). In addition, while Nexstar handles all of the retransmission consent negotiations for WPIX, the Commission, at the direction of Congress, prohibits coordination or joint negotiation between stations in the same market unless those stations are under common *de jure* control. See 47 CFR § 73.3555, Note 2(k).

¹⁴⁷ See *WGPR, Inc.*, 10 FCC Rcd at 8142-46.

¹⁴⁸ *Id.* at 8145.

¹⁴⁹ Mission Second LOI Response at 4. Nexstar explains that because the LPMA entitles Nexstar to {

}} Nexstar Second LOI Response at 16-17. Neither party explains why such an important “delegation” would not be included in the LPMA or elsewhere.

¹⁵⁰ Mission LOI Response at 17.

}}.¹⁵¹ When asked to explain whether Mission has transferred or assigned to Nexstar the right to grant retransmission consent on behalf of the Station, Mission demurs and attempts instead to defend what it purports to be a delegation of negotiating authority as being consistent with the Commission's Rules.¹⁵² The limits the Commission has established on the negotiation of retransmission consent are intended to ensure parties on both sides negotiate in "good faith." The strict adherence (or not) to such rules— i.e., whether or not a licensee engages in good faith negotiation—is not determinative of whether or not a licensee does or does not maintain control of its station.

51. The apparent delegation of all retransmission consent rights goes far beyond that of any principal-agent relationship or delegation of authority to negotiate.¹⁵³ In this instance Mission has not simply engaged a third-party to negotiate retransmission consent terms with MVPDs on its behalf, which Mission then approved and executed in its own name. Rather, it has abdicated this key financial aspect of the Station's operations to the entity that helped finance the purchase of the station and now controls 100% of the programming and revenue of the Station. Based on the totality of the circumstances present in this case, we find that Nexstar dominates the management of the business affairs of Mission with regard to WPIX.¹⁵⁴ Specifically, Nexstar reaps all of the revenue and potential profit from the Station, sets and controls the programming, and engages in contracts for carriage of the Station in its own name. As a result, Mission does not and cannot operate its WPIX-related business affairs independently from Nexstar and fails to exercise ultimate financial control over the Station that it ostensibly owns.

52. We stress that the decision we reach today is limited to the facts before us and the relationship between Nexstar, Mission, and WPIX. In particular, we are not concluding that assigning the right to negotiate retransmission consent for a station to a third party on its own constitutes control,¹⁵⁵ nor does it under previously-approved relationships where the facts do not indicate that the licensee has abdicated control of its station. In other instances, the Bureau has found more limited financial arrangements involving a combination of joint sales agreements, other types of shared services agreements, options, and guarantees of debt do not result in the broker's *de facto* control of the licensee,¹⁵⁶ and our decision today does nothing to disturb that precedent. While sharing agreements

¹⁵¹ Mission Good Faith Negotiation LOI Response at 3.

¹⁵² Mission LOI Response at 17 (citing 47 CFR § 76.65(b)). In fact, Mission's attempt in its responses to imply that having Nexstar negotiate the retransmission consent fees is a benefit that ultimately accrues to WPIX, as Nexstar has the leverage to negotiate higher retransmission fees, only further highlights the degree to which Mission has abdicated control of the Station to Nexstar because all the revenues from the retransmission consent agreements are going to Nexstar per the LPMA. It is up to Nexstar, not Mission, whether to reinvest any of the retransmission consent fees into WPIX or use the money for other purposes.

¹⁵³ To be clear, while the rules bar a negotiating entity from refusing to designate a representative with authority to make binding representations on retransmission consent, 47 CFR § 76.65(b)(ii), the specifics of the apparent designation of Nexstar as a negotiating representative are indicative of an abdication of control based on the record before us, where Mission has not set any policies or parameters for the negotiation; does not receive any potential profits; and remains unaware of the terms contracted even after the agreement is executed.

¹⁵⁴ See *Terrier Media*, Declaratory Ruling, 34 FCC Rcd 10544, 10549-50, para. 14 (MB 2019) (citing *Univision Holdings, Inc.*, Memorandum Opinion and Order, 7 FCC Rcd 6672, 6675, para. 15 (1992)).

¹⁵⁵ See Nexstar July 26, 2021 Letter at 3-4; Nexstar LOI Response at 5.

¹⁵⁶ See, e.g., *Gannett-Belo*, 28 FCC Rcd at 16867 (approving various acquisitions that include Option, SSA, Lease Agreement, JSA, and loan guarantee); *SagamoreHill of Corpus Christi Licenses, LLC*, Letter, 25 FCC Rcd 2809 (MB 2010) (SSA with programming not to exceed 15% of weekly broadcast hours, JSA with 30 % of revenues going to broker, Option, Studio Lease, Guarantee); *Piedmont Television of Springfield License LLC*, Memorandum Opinion and Order, 22 FCC Rcd 13910 (MB 2007) (SSA with programming not to exceed 15% of weekly broadcast hours, JSA, Option, Studio Lease, Guarantee and sale of non-license assets to broker); *Chelsey Broadcasting Company of Youngstown, LLC*, Letter Order, 22 FCC Rcd 13905 (VD 2007) (SSA with programming not to exceed 15% of weekly broadcast hours, Option and Guarantee).

themselves are not prohibited, there can be a slippery slope between sharing and control. We therefore expect parties to sharing agreements to note the importance of fully disclosing their relationships to ensure the Commission can properly evaluate the transaction before it, and to take care in ensuring each licensee maintains control of its station.

b. National Ownership Cap Violation

53. The National Ownership Cap prohibits a party from acquiring a television station license where it results in that party “having a cognizable interest in television stations which have an aggregate national audience reach exceeding thirty-nine (39) percent.”¹⁵⁷ Given our finding above of an unauthorized transfer of control, Commission precedent requires that we next assess whether that transfer necessarily violates any multiple ownership rules.¹⁵⁸ We find that by assuming *de facto* control over WPIX, the Station therefore must be counted toward Nexstar’s aggregate national audience reach. Given Nexstar’s other holdings, we find it apparently violated the National Ownership Cap.

54. Prior to acquiring an attributable interest in WPIX, Nielsen reported that Nexstar had an aggregate national audience reach of approximately 39.0%.¹⁵⁹ For purposes of calculating the audience reach of WPIX, we use the percentage of the total national television households that are in the DMA in which the station is located, which for WPIX is the New York DMA.¹⁶⁰ According to information from Nielsen for the 2020-2021 television season, the New York DMA, to which WPIX is licensed, constituted a reach of 6.163% of television households in the nation.¹⁶¹ With WPIX added, then, Nexstar’s national reach apparently exceeded 45%, well in excess of the 39% limit set by the National Ownership Cap.

55. The fact that ownership of WPIX would cause Nexstar to exceed the National Ownership Cap was precisely the reason the Commission required Nexstar to divest WPIX in conjunction with Nexstar’s acquisition of Tribune.¹⁶² As described above, following the divestiture of WPIX to Scripps, Nexstar retained an option to re-acquire WPIX, presumably in case circumstances changed such that Nexstar could eventually do so in a manner compliant with the National Ownership Cap.¹⁶³ When that possibility appeared unlikely to occur within the term of the option, Nexstar apparently resorted to a different course of action by backing Mission with the financial wherewithal to acquire WPIX and setting up an arrangement whereby Nexstar could control and profit exclusively from the station.

¹⁵⁷ 47 CFR § 73.3555(e)(1).

¹⁵⁸ See, e.g., *Roy M. Speer*, Memorandum Opinion and Order and Notice of Apparent Liability, 11 FCC Rcd 18393, 18419, paras. 65-66 (1996) (*Roy M. Speer*) (“In light of our finding that Silver King assumed unauthorized control of Urban’s WTMW(TV) during the three and one-half year construction of that station, we must determine whether that control placed Silver King in violation of any of our multiple ownership rules. . . . Thus, because we find that Silver King assumed control of WTMW(TV) without waiver of the rule during the years 1990 to 1993, we find also that it violated the television duopoly rule during that period.”).

¹⁵⁹ Justin Nielson, S&P Global Market Intelligence, *Top 50 U.S. TV Station Groups: E.W. Scripps Takes Top Spot in Deal for ION* (Oct. 30, 2020) (based on data reported in Excel format, and using Nielsen television household estimates, Nexstar reached 39.0% of US TV households, after accounting for the UHF discount.).

¹⁶⁰ 47 CFR § 73.3555(e)(2)(i).

¹⁶¹ Nielsen, Local Television Market Estimates (used beginning Sept. 26, 2020).

¹⁶² *Nexstar-Tribune Order*, 34 FCC Rcd at 8441, para 8.

¹⁶³ See, e.g., *Amendment of Section 73.3555(e) of the Commission’s Rules, National Television Multiple Ownership Rule*, MB Docket No. 17-138, Letter from Perry Sook, Chairman, President & CEO, Nexstar Broadcasting, Inc., et al., to Ajit Pai, Chairman, FCC, et al. (filed Mar. 11, 2019) (*ex parte* letter advocating setting the national ownership cap at 78% of television households in the country); see also Harry A. Jessell, *Nexstar’s Sook To FCC: Set Cap At 78% ASAP* (Apr. 23, 2019), <https://tvnewscheck.com/business/article/nexstars-sook-to-fcc-set-cap-at-78-asap>.

2. EDP Attribution/National Ownership Cap Violation

56. We further find that Nexstar apparently violated the National Ownership Cap by virtue of holding an attributable interest in WPIX under the Commission's EDP rule, which thereby caused Nexstar to have a cognizable interest in television stations with an aggregate national audience reach exceeding the Commission's 39% limit.¹⁶⁴

57. *EDP Analysis.* The Commission's attribution rules, which include the EDP rule, serve to determine which stations will be counted toward the calculation of a licensee's National Ownership Cap compliance by identifying "those interests in or relationships to licensees that confer on their holders a degree of influence or control such that the holders have a realistic potential to affect the programming decisions of licensees or other core operating functions."¹⁶⁵ As discussed above, under the EDP rule, an entity that holds an interest greater than 33% of the total assets of the licensee (aggregating both debt and equity holdings) and is also a major program supplier to the station will be deemed to hold an attributable interest in the licensee.¹⁶⁶ For purposes of the EDP rule, an interest holder is considered a "major programming supplier" if it "supplies over fifteen percent of the total weekly broadcast programming hours of the station in which the interest is held."¹⁶⁷ In other words, attribution results where the financial interest exceeds 33% of the equity plus debt of the licensee *and* the interest holder is a major program supplier to the station.

58. Applying this EDP analysis to the instant matter, we first look at whether Nexstar supplies more than 15% of the programming to WPIX, thereby satisfying the "major program supplier" prong of the rule. Pursuant to the WPIX LPMA between Mission and Nexstar, Nexstar programs effectively all of WPIX's airtime.¹⁶⁸ As it provides 100% of the programming time on the Station, Nexstar far exceeds the 15% threshold necessary to be considered a major program supplier under the rule.

59. With Nexstar defined as a major programming supplier to WPIX, the next step in the analysis is to determine whether the financial structure of Nexstar's interest in Mission is attributable for EDP purposes. Nexstar's interest is attributable under the EDP rule if the equity and debt interests "in the aggregate, exceed 33 percent of the total asset value, defined as the aggregate of all equity plus debt, of that broadcast licensee."¹⁶⁹

60. Nexstar both guaranteed the borrowing Mission used to buy WPIX and provided assets to secure repayment, as collateral, for Mission's loans. Commission precedent has made clear that, although loan guarantees alone are not ordinarily attributable under our rules, the Commission will "include any security deposit or financial contribution made by a guarantor for the guarantee of a loan in determining

¹⁶⁴ 47 CFR § 73.3555(e). Absent record evidence, we do not address herein whether Nexstar acquired an attributable interest with respect to any station besides WPIX based on EDP, and we find that attribution of WPIX alone was more than sufficient to cause Nexstar to exceed the National Ownership Cap.

¹⁶⁵ *1999 Attribution Order*, 14 FCC Rcd at 12560.

¹⁶⁶ *See supra* para. 4; 47 CFR § 73.3555, Note 2(i). The EDP rule also contains a second prong by which an entity can trigger the attribution rules, namely, if the party holding a 33% or greater EDP interest in a licensee also holds an attributable interest in another broadcast licensee in the same market. Because Nexstar is not the licensee of another station in the market, that prong is not relevant to this proceeding.

¹⁶⁷ *Id.*

¹⁶⁸ LPMA, at para. 2 ("Licensee shall make available to Programmer all of the airtime on the Station (including the primary and all secondary program streams and ancillary uses) for programming provided by Programmer (the 'Programs') for broadcast on the Station twenty-four (24) hours per day, seven (7) days per week.").

¹⁶⁹ 47 CFR § 73.3555, Note 2(i).

whether the guarantor's interest is attributable under the EDP rule."¹⁷⁰ While Mission acknowledges that "consideration paid for the guarantee would be considered as part of the calculation under the EDP Rule,"¹⁷¹ the Commission has explained that it "will include any financial contributions made by a guarantor, including amounts placed into escrow as *security for a loan guarantee* or amounts otherwise made in connection with the guarantee, to any other equity or debt investments the guarantor has in a license."¹⁷²

61. Collateral is, by definition, something that is pledged as security for a loan.¹⁷³ It has financial worth¹⁷⁴ and, therefore, represents "a financial contribution made by a guarantor,"¹⁷⁵ in the course of guaranteeing the loan making Mission's WPIX acquisition possible. Accordingly, as a matter of logic and plain English construction, loan collateral is a form of security that is counted under EDP.¹⁷⁶ The Parties note that the Commission has specifically mentioned other types of financial contributions as relevant to EDP enforcement (e.g., "will include amounts placed into escrow as security for a loan guarantee"), apparently implying that only expressly identified financial vehicles should trigger concerns. If this is their argument, it is specious. The use of the term "including" at the beginning of the Commission's list of examples signals plainly that the list is not exhaustive.¹⁷⁷ Moreover, it is illogical as a policy matter to believe that "security for a loan guarantee" is problematic only when it is held in "escrow" as opposed to being held pursuant to other arrangements mutually agreeable to the parties. In keeping with that understanding, Media Bureau guidance indicates that collateral used to secure a guaranteed loan is a relevant financial contribution for EDP purposes.¹⁷⁸

62. The evidence in this case shows that Nexstar provided collateral as security for Mission's borrowing, and such collateral made possible Mission's acquisition of WPIX. As noted above, the credit facility used by Mission to acquire WPIX was a revolving line of credit guaranteed by Nexstar and backed by its collateral assets.¹⁷⁹ Mission acknowledges that when a Revolver draw occurs, "all then-existing and after-acquired assets of Mission and Nexstar (excluding their FCC licenses, consistent with

¹⁷⁰ *Review of Commission's Regulations Governing Attribution*, MM Docket No. 94-150, Report and Order on Reconsideration, 16 FCC Rcd 1097, 1112-13 (2001) (*2001 Order on Recon*). See also *Radio Monroe, LLC*, Letter Order, 26 FCC Rcd 392, 394 (AD 2011) (*Radio Monroe*) (stating that "loan guarantees will trigger the EDP rule only to the extent that the guarantor provides security for the loan").

¹⁷¹ Mission Response to Further LOI at 11 (internal citations omitted).

¹⁷² *2001 Order on Recon*, 16 FCC Rcd at 1112-13, para. 32 (emphasis added). See also *Radio Monroe*, 26 FCC Rcd at 394 ("loan guarantees will trigger the EDP rule only to the extent that the guarantor provides security for the loan.").

¹⁷³ See 9 *Corbin on Contracts* § 47.8 (2023) and Uniform Commercial Code § 9-102.

¹⁷⁴ See *Rubin v. United States*, 449 U.S. 424, 429 (1981) ("Obtaining a loan secured by a pledge of shares of stock unmistakably involves a "disposition of [an] interest in a security, for value.") (internal citations omitted).

¹⁷⁵ *2001 Order on Recon*, 16 FCC Rcd at 1112-13, para. 32.

¹⁷⁶ *Radio Monroe*, 26 FCC Rcd at 394 (providing that if a "loan guarantee will not be secured by any collateral, there would be no post-transaction attribution").

¹⁷⁷ See *Federal Land Bank v. Bismarck Lumber Co.*, 314 U.S. 95, 100 (1941) ("the term 'including' is not one of all-embracing definition, but connotes simply an illustrative application of the general principle.") (citing *Phelps Dodge Corp. v. NLRB*, 313 U.S. 177, 189 (1941)).

¹⁷⁸ See, e.g., *Radio Monroe*, 26 FCC Rcd at 392 (recognizing that assignment was granted in FCC File No. BALH-20091006ACZ after application amended to eliminate collateral tied to loan guarantee that was the focus of petition to deny).

¹⁷⁹ Mission Response to Further LOI at 4.

the FCC's policy against permitting security interests in such licenses) serve as collateral for the companies' respective loan obligations."¹⁸⁰

63. Functionally, then, the Revolver gives Mission and Nexstar, respectively, borrowing rights from a jointly secured pool of money under which each party is assigned an individual cross-collateralized credit limit. When one party, such as Mission, needs a higher credit limit, the parties can arrange to transfer available borrowing capacity through a joint request, known as "Reallocation."¹⁸¹

64. In December 2020, when Mission {{
}},¹⁸² the Parties arranged a Reallocation allowing Mission to tap into another \$80 million in Revolver financing.¹⁸³ That Reallocation from Nexstar gave Mission the wherewithal to make its approximately \$82.6 million¹⁸⁴ closing payment for WPIX on December 30, 2020 (WPIX Closing Day).¹⁸⁵

65. Under the Revolver, both parties' assets (except for station licenses, which under Commission precedent cannot be used as collateral) provide collateral securing any draw by either party from the Revolver loan facility. The amount of collateral is key. Given this blanket collateralization, no specific assets have been given priority for seizure or otherwise segregated to first make lenders whole, in case of default.¹⁸⁶ Rather, if Mission defaults, the clear legal implication is that any collateralized Nexstar asset is subject to seizure to satisfy Mission's debt. Thus, the entirety of Mission's Revolver balance on WPIX Closing Day was secured by Nexstar collateral and, therefore, counted as a Nexstar financial contribution to Mission under EDP.

66. The EDP rule sets a 33% threshold at which financial contributions can become attributable ownership interests in a licensee.¹⁸⁷ Thus, if Nexstar collateral or other financial contributions equal 33% or more of Mission's total value, Nexstar would hold an attributable ownership interest in Mission. If the total amount of its financial interests, including collateral, is below the 33% threshold, Nexstar would not be an attributable owner of Mission under the EDP rubric.

67. The arithmetic showing that Nexstar apparently became attributable in Mission via EDP just after WPIX Closing Day is as follows:

(a) The total amount of Mission's Revolver debt for which Nexstar assets served as security was \$327 million, the day after the WPIX transaction closed.¹⁸⁸

(b) Mission's value on December 31, 2020 was \${{
}}}.¹⁸⁹

¹⁸⁰ *Id.*

¹⁸¹ Reallocation rights are established in the Revolver Credit Agreement, dated Jan 17, 2017 at Sec. 206(d), and amendments thereto, as submitted at Exh. A to Mission Response to Further LOI.

¹⁸² See E-mail from Sharon Moser, Mission's Comptroller, to Yili Shi {{
}} (Jan. 20, 2021) at Exh. C to Mission Response to Further LOI.

¹⁸³ Reallocation request documentation is attached to Mission Response to Further LOI, at Exh. C.

¹⁸⁴ Mission Response to Further LOI at n.10.

¹⁸⁵ The parties requested Reallocation on December 3, 2020. The lenders approved on December 14, 2020. Mission drew \$80 million from the Revolver on December 29, 2020 (the day before the WPIX transaction closed).

¹⁸⁶ Mission Response to Further LOI at 3 ("given the nature of its Credit Agreement, Mission does not have a list that includes the specific assets that are collateral . . . and creating such a list would be unduly burdensome").

¹⁸⁷ See 47 CFR § 73.3555, Note 2(i).

¹⁸⁸ Nexstar 2020 10-K at F-55.

¹⁸⁹ Mission Response to Further LOI at 1.

(c) The Revolver debt collateralized by Nexstar assets = {[]}% of Mission’s enterprise value the day after the WPIX transaction closed (i.e., 327 million divided by {[]}).

(d) Nexstar thus held a {[]}% EDP-attributable stake in Mission the day after the WPIX transaction closed. As {[]}% is far greater than the 33% EDP attribution threshold, Nexstar apparently became an attributable owner of Mission at the time the WPIX transaction closed.¹⁹⁰

68. *National Ownership Cap Violation.* By becoming an attributable interest holder in the Station, WPIX would then be added to Nexstar’s aggregate national audience reach under the National Ownership Cap. With WPIX properly included, Nexstar apparently violated the National Ownership Cap. As described above, Nexstar had an aggregate national audience reach of approximately 39.0% without WPIX. Once attributed with an additional reach of 6.163% for WPIX, Nexstar’s national reach apparently exceeded 45%, well in excess of the 39% limit set by the National Ownership Cap.

B. Forfeitures and Remedies

69. For each of the apparent violations set forth below, we establish the appropriate proposed forfeiture tailored to the violation. In addition, longstanding Commission precedent requires licensees to correct their non-compliant behavior. Accordingly, after setting forth the proposed forfeitures, we then identify the remedies the relevant party or parties must undertake to come into compliance with our rules.

1. Violations/Forfeitures

a. De Facto Control and National Ownership Cap

70. Both Nexstar and Mission were parties to an apparent unauthorized *de facto* transfer of control in violation of section 310(d) of the Act, and it is incumbent upon both parties to take the steps necessary to correct the unauthorized transfer of control as discussed further below. Further, by usurping control of WPIX, Nexstar holds a combination of television stations that exceeds the National Ownership Cap. The Commission has imposed a wide array of penalties for unauthorized transfers of control, from small forfeitures up to license revocation.¹⁹¹ Because mere remediation of their serious breach of this statute does not adequately penalize this transgression, we find it necessary to impose forfeitures upon both parties as follows.

71. We find that Nexstar and Mission each apparently willfully and repeatedly violated section 310(d) of the Act and section 73.3540 of the Commission’s Rules by transferring *de facto* control

¹⁹⁰ Although we divide by total asset value of the *licensee* for purposes of our calculation here, we note that at least one Commission decision has suggested the proper value is set by the total asset value of the *station*. See *2001 Order on Recon*, 16 FCC Rcd at 1099, para. 3 (“Any interest the major program supplier has in a station, to which it supplies programming, will be attributable under the EDP rule if the interest, aggregating both equity and debt, exceeds 33 percent of the total asset value of the *station*.”) (emphasis added); see also *id.* at 1111, para.28. We use the approach consistent with the language of section 73.5555, Note 2 of our rules, which states that the aggregate equity and debt interests are divided by the total asset value of the “broadcast licensee.” Under either test, an EDP violation is clear. If Nexstar’s attributable interest was instead calculated with reference to the amount of collateralized debt tapped to buy WPIX, Nexstar would similarly have violated both EDP and National Ownership Cap rules. The total collateralized debt used to purchase WPIX was \$80 million. The total asset value of WPIX when Mission acquired it was \$[]. Those numbers put Nexstar’s attributable interest in the station at about []%, which is well in excess of the 33% EDP attribution threshold.

¹⁹¹ See, e.g., *Radio Moultrie, Inc.*, Order of Revocation, 18 FCC Rcd 22950, 22957 (EB 2003) (revoking license for violating section 310(d) by engaging in an unauthorized transfer of control and failure to comply with Commission directives); *Birach Broadcasting Corp.*, 25 FCC Rcd 2643, 2647, 2648, paras. 10, 13 (EB 2010) (proposing an \$8,000 forfeiture, after recognizing that Birach took substantial steps to remedy the situation after receiving a letter of inquiry).

of WPIX from Mission to Nexstar without Commission consent.¹⁹² This transfer of control was “conscious and deliberate,” and thus willful, on behalf of both parties, as evidenced by the actions undertaken by both parties without prior Commission approval. Furthermore, we find that as a result of its apparent *de facto* control of WPIX, Nexstar apparently willfully and repeatedly violated section 73.3555(e) of the Commission’s Rules. Given the duration of the violation and other relevant criteria, we propose a forfeiture on each company in the amount of \$612,395 for the violations.

72. Section 503(b) of the Act authorizes the Commission to impose a forfeiture against any entity that “willfully or repeatedly fail[s] to comply with . . . any rule, regulation, or order issued by the Commission”¹⁹³ Section 312(f)(1) of the Act defines willful as “the conscious and deliberate commission or omission of [any] act, irrespective of any intent to violate” the law.¹⁹⁴ This definition of willful applies to section 503(b) of the Act, as the Commission has previously established.¹⁹⁵ Section 312(f)(2) of the Act provides that “[t]he term ‘repeated,’ when used with reference to the commission or omission of any act, means the commission or omission of such act more than once or, if such commission or omission is continuous, for more than one day.”¹⁹⁶

73. Section 503(b)(2)(A) of the Act authorizes us to assess a forfeiture against a broadcast licensee of up to \$61,238 per violation or day of a continuing violation, up to a statutory maximum of \$612,395 for a single act or failure to act.¹⁹⁷ In exercising our forfeiture authority, we consider the nature,

¹⁹² Previously, the Commission has found it appropriate to hold both the licensee and the party that overstepped and asserted control of the station without prior Commission approval accountable and subject to monetary forfeiture for an unauthorized transfer of control in violation of 310(d). *See, e.g., Roy M. Speer*, 11 FCC Rcd at 18414, para. 53 (addressing an unauthorized transfer of control of a television station license and holding both parties accountable, the licensee for its abdication and the usurper for its assumption of control, and imposing a monetary forfeiture and remediation); *see also CanXus Broadcasting Corp.*, Memorandum Opinion and Order, 7 FCC Rcd 3874, para. 3 (MMB 1992), *recon. granted in part*, 8 FCC Rcd 4323 (MMB 1993) (rejecting argument that the imposition of a forfeiture against the third party usurping control rather than the licensee was inappropriate, and stating that sanctions could be imposed against either party, or against both, as both the licensee and the third party were involved in the unauthorized conduct), *aff’d*, 10 FCC Rcd 9950 (1995) (denying application for review and affirming the imposition of a forfeiture for the unauthorized transfer of control).

¹⁹³ 47 U.S.C. § 503(b).

¹⁹⁴ 47 U.S.C. § 312(f)(1). The legislative history to section 312(f)(1) of the Act clarifies that this definition of willful applies to both sections 312 and 503(b) of the Act, *see* H.R. Rep. No. 97-765, 97th Cong. 2d Sess. 51 (1982), and the Commission has so interpreted the term in the section 503(b) context. *See Southern California Broad. Co.*, Memorandum Opinion and Order, 6 FCC Rcd 4387, 4388, para. 5 (1991), *recon. denied*, Memorandum Opinion and Order, 7 FCC Rcd 3454 (1992).

¹⁹⁵ *Id.*

¹⁹⁶ 47 U.S.C. § 312(f)(2).

¹⁹⁷ 47 U.S.C. § 503(b)(2)(A). These amounts reflect inflation adjustments of the forfeitures specified in section 503(b)(2)(A) of the Act. The Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, Pub. L. No. 114-74, § 701, 129 Stat. 584, 599 (2015 Inflation Adjustment Act) requires agencies, starting in 2017, to adjust annually the civil monetary penalties covered thereunder, and to publish each such annual adjustment by January 15. 47 CFR § 1.80(b)(11). The 2015 Inflation Adjustment Act amended the Federal Civil Penalties Inflation Adjustment Act of 1990, which is codified, as amended, at 28 U.S.C. § 2461 note (4). The Commission’s Enforcement Bureau released the order making the 2024 annual adjustment on December 22, 2023. *See Amendment of Section 1.80(b) of the Commission’s Rules; Adjustment of Civil Monetary Penalties to Reflect Inflation*, Order, DA 23-1198, 2023 WL 8889597, at *1 (EB Dec. 22, 2023); *see also Annual Adjustment of Civil Monetary Penalties to Reflect Inflation*, 89 Fed. Reg. 2148 (Jan. 12, 2024) (setting January 15, 2024 as the effective date for the increases). The 2015 Inflation Adjustment Act provides that the new penalty levels shall apply to penalties assessed after the effective date of the increase, “including [penalties] whose associated violation predated such increase.” *See* 28 U.S.C. § 2461 note, citing Inflation Adjustment Act, as amended § 6. To the extent the Commission issues a Forfeiture Order in this proceeding after a subsequent increase in the statutory maximum forfeiture amount due to an

(continued....)

circumstances, extent, and gravity of the violation and, with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, substantial economic gain, and such other matters as justice may require.¹⁹⁸ As required by the Act, the Commission will apply these statutory factors to determine a forfeiture based on the Commission's evaluation of each individual case on its own merits.¹⁹⁹ We may also adjust the base forfeiture upward or downward, taking into account the particular facts of each individual case.²⁰⁰

74. Here, we apply the base forfeiture of \$8,000 for “unauthorized substantial transfer of control” to both Nexstar and Mission. The Commission treats an unauthorized transfer of control as a continuing violation that does not end until the Commission grants a transfer of control application.²⁰¹ Typically, in assessing a continuing violation, the Commission would multiply the base forfeiture amount by the number of days a violator was out of compliance with our rules.²⁰² The record before us does not identify a precise date that the Parties committed the *de facto* control violation; rather, our finding of this apparent violation is based on the Parties' cumulative actions and inactions, and our totality-of-the-circumstances analysis does not identify a single action as the demarcation point at which Mission abdicated control to Nexstar. Nevertheless, given that the Parties filed their responses to the *First LOI* with the Commission on January 14, 2022 and memorialized Nexstar's and Mission's activities as of that date (which demonstrated *de facto* control), and the record does not indicate that Mission has subsequently exerted control over WPIX at any point in time since then up through the present day, clearly well more than 75 days of non-compliance have elapsed. Accordingly, our base forfeiture reaches

(Continued from previous page) _____

inflation adjustment, the Commission reserves the right to assess a higher forfeiture amount to reflect the inflation-adjusted statutory maximum in effect at the time of a Forfeiture Order.

¹⁹⁸ 47 U.S.C. § 503(b)(2)(E); 47 CFR § 1.80(b)(10), Note 2.

¹⁹⁹ 47 U.S.C. § 503(b).

²⁰⁰ *The Commission's Forfeiture Policy Statement and Amendment of Section 1.80 of the Rules to Incorporate the Forfeiture Guidelines*, Report and Order, 12 FCC Rcd 17087, 17098-99, para. 22 (1997) (*Forfeiture Policy Statement*) (noting that “[a]lthough [the Commission has] adopted the base forfeiture amounts as guidelines to provide a measure of predictability to the forfeiture process, [the Commission] retain[s] the discretion to depart from the guidelines and issue forfeitures on a case-by-case basis, under [the] general forfeiture authority contained in Section 503 of the Act”), *recons. denied*, Memorandum Opinion and Order, 15 FCC Rcd 303 (1999); *see also* 47 CFR § 1.80(b)(10), Table 3:

Upward Adjustment Criteria

- (1) Egregious misconduct.
- (2) Ability to pay/relative disincentive.
- (3) Intentional violation.
- (4) Substantial harm.
- (5) Prior violations of any FCC requirements.
- (6) Substantial economic gain.
- (7) Repeated or continuous violation.

Downward Adjustment Criteria

- (1) Minor violation.
- (2) Good faith or voluntary disclosure.
- (3) History of overall compliance.
- (4) Inability to pay.

²⁰¹ *See, e.g., Enserch Corporation*, Forfeiture Order, 15 FCC Rcd 13551, 13554, para. 10 (2000).

²⁰² *See, e.g., Gray Television, Inc.*, Forfeiture Order, 37 FCC Rcd 13475, 13486, para. 27 (2022), *appeal pending sub nom. Gray Television, Inc. v. FCC*, No. 22-14274 (11th Cir.) (*Gray Television, Inc.*).

the statutory maximum penalty for each party, and we hereby impose a forfeiture on Nexstar of \$612,395, as well as a forfeiture for Mission of \$612,395.²⁰³

75. While the Commission is barred from imposing higher forfeiture amounts given that we are assessing fines at the statutory cap, we recognize that there would be a number of bases upon which to adjust a forfeiture upwards in this case. Namely, the “[a]bility to pay/relative disincentive” criterion would support an upward adjustment for these parties with their significantly higher-than-usual ability to pay and the need to establish a deterrent to such transgressions in the future.²⁰⁴ In particular, the Parties’ actions here circumvented our National Ownership Cap and allowed Nexstar to achieve control of a station that Nexstar is otherwise prohibited from acquiring, absent significant station divestitures. After passing on the chance to acquire the Station as part of the Nexstar-Tribune transaction and failing to secure an increase in the Commission’s National Ownership Cap that could have allowed it to exercise the Option and purchase the Station from Scripps, Nexstar instead transferred its Option to Mission and ensured that Mission had the funds necessary to acquire the Station. Thereafter, Mission ceded control of the station to Nexstar, which effectively operated the Station as its own, controlling 100% of the programming, receiving all of the revenue, negotiating retransmission consent, and earning the potential financial benefit, or harm, of the Station’s operations. In addition, at least with regard to Nexstar, the violation resulted in apparent substantial economic gain from superior retransmission consent revenues.

76. We have also reviewed all possible grounds for a downward adjustment, and do not consider them sufficiently compelling in this instance. Downward adjustment criteria are not present here, including a minor violation, voluntary disclosure, history of compliance, and inability to pay. We emphasize that all possible grounds for a downward adjustment are outweighed by the egregiousness of the Parties’ misconduct, their ability to pay, and the need for a relative disincentive, as well as the substantial economic gain for Nexstar created by the transaction.

77. Finally, as discussed in Section III.A.1.b. above, Nexstar’s assumption of *de facto* control of WPIX also resulted in its apparent violation of the National Ownership Cap contained in section 73.3555(e) of the Rules. Because we propose a forfeiture below for Nexstar’s apparent violation of the National Ownership Cap by virtue of its cognizable attributable EDP interest in the Station, we decline to propose a separate forfeiture for Nexstar’s apparent violation of the National Ownership Cap by virtue of its *de facto* control of WPIX.

b. EDP Attribution/National Ownership Cap

78. In addition to apparently engaging in an unauthorized transfer of control by assuming *de facto* control of the Station, Nexstar also apparently violated the National Ownership Cap by virtue of its attributable EDP interest in the Station. In light of our finding that Nexstar apparently violated the National Ownership Cap as a result of its attributable interest in WPIX by virtue of Nexstar collaterally securing Mission’s borrowing from the Revolver loan, we impose a forfeiture against Nexstar as follows. Further, as detailed below, Nexstar must also take steps to come into compliance with the National Ownership Cap.

79. We propose the maximum forfeiture of \$612,395 for Nexstar pursuant to section 1.180 Note 1(b)(1) of the Commission’s Rules for violating the National Ownership Cap on the basis of its

²⁰³ The Commission has employed a similar methodology in other cases where a specific violation date is not verifiable but the statutory maximum is met. *See, e.g., DIRECTV, LLC et al v. Deerfield Media et al*, Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture, 35 FCC Rcd 10695,10719, para. 20 (2020).

²⁰⁴ For 2023, Nexstar reports that it had revenues of \$4.9 billion. *See* Nexstar 10-K at 4. We note that as a VIE, Mission’s revenues and assets are consolidated with Nexstar’s financial accounting and annual reporting. Hence, Mission and Nexstar are effectively treated as a single entity for financial purposes in the Nexstar 10-K.

attributable ownership interest in WPIX resulting from its attributable EDP interest at the time Mission acquired the Station.²⁰⁵

80. The Commission has not previously proposed a forfeiture for a violation of the National Ownership Cap set forth in section 73.3555(e). Where no base forfeiture amount exists, the Commission looks at forfeitures established or issued in analogous cases for guidance. In this instance, we find that the base forfeiture of \$8,000 for “unauthorized substantial transfer of control” cases is sufficiently analogous to the violation at hand in this case.²⁰⁶ We also find that the violation of the Local Television Ownership Rule and Note 11 to section 73.3555 of the Rules through the acquisition of a second top-four affiliation, which also has a base forfeiture of \$8,000, is sufficiently analogous, as it similarly seeks to prevent evasion of Commission ownership limits.²⁰⁷ Nexstar’s apparent violation began on December 31, 2020, when Nexstar’s attributable EDP interest in WPIX put it in violation of the National Ownership Cap. Its cognizable interest in WPIX in combination with its other station holdings raised its aggregate national audience reach well above 39% from that date until the present. As a result, clearly well more than 75 days of non-compliance have elapsed.

81. Accordingly, our base forfeiture reaches the statutory maximum penalty for Nexstar of \$612,395. Again, while the Commission is barred from imposing higher forfeiture amounts given that we are assessing fines at the statutory cap, we recognize that there would be a number of bases upon which to upwardly adjust a forfeiture in this case. Namely, the “[a]bility to pay/relative disincentive” criterion would support an upward adjustment for Nexstar’s significantly higher-than-usual ability to pay and establish a deterrent to such transgressions in the future.²⁰⁸ In addition, the violation resulted in apparent substantial economic gain from superior retransmission consent revenues. We have also reviewed all possible grounds for a downward adjustment, as discussed above, and do not consider them sufficiently compelling to warrant a downward adjustment in this instance. We emphasize that all possible grounds for a downward adjustment are outweighed by the egregiousness of Nexstar’s misconduct, its ability to pay, and the need for a relative disincentive, as well as the substantial economic gain for Nexstar created by the transaction.

2. Remedying Non-Compliance

82. Simply effecting a formal transfer of control of WPIX from Mission to Nexstar would not place the Parties in full compliance with all of the Commission’s Rules, as Nexstar’s holdings would still exceed the National Ownership Cap. Accordingly, our remedy here seeks to ensure that Nexstar comes into compliance with the National Ownership Cap. Further, we note that even absent the apparent violation of the National Ownership Cap, the same remedy would be warranted based on the apparent unauthorized transfer of control of WPIX.

83. We are aware, however, that there is more than one way for the Parties to come into compliance with the statute and our rules. In the interest of minimizing disruption to the market we will allow the Parties some flexibility to remedy their regulatory non-compliance.²⁰⁹ Specifically, as set forth

²⁰⁵ As discussed in Sections III.A.1.b. and III.A.2., respectively, we find that Nexstar violated the National Ownership Cap both as a result of its obtaining unauthorized *de facto* control of WPIX, and separately and independently as a result of the cognizable attributable EDP interest it held in WPIX in connection with the Revolver loan at and after the time of the acquisition of WPIX. As discussed in this section, we find it appropriate to assess a forfeiture against Nexstar for its violation of 73.3555(e) arising from these separate acts and on the legal basis discussed in Section III.A.2.

²⁰⁶ 47 CFR § 1.80(b)(10), Table 1.

²⁰⁷ See *Gray Television Inc.*, 37 FCC Rcd at 13486, para. 27.

²⁰⁸ For 2023, Nexstar reports that it had revenues of \$4.9 billion. See Nexstar 10-K at 4).

²⁰⁹ The Bureau has, in certain situations, afforded licensees in violation of our rules several options to come into compliance. See, e.g., *Nat’l Ass’n of Broadcasters*, Declaratory Ruling and Order, 17 FCC Rcd 6065, 6082, para. 31

(continued....)

in more detail below, Nexstar and Mission must undertake one of two options within twelve months of the issuance of any forfeiture order or payment of the forfeiture proposed in this NAL, whichever comes first, whereby either (1) Mission divests WPIX to an unrelated third party, or (2) Mission formally sells WPIX to Nexstar and the Parties file an application seeking Commission consent to the assignment of license, with Nexstar divesting a sufficient number of other stations to reduce its national coverage footprint consistent with the National Ownership Cap.

84. Under the first remedial option, Mission must sell both the license and station assets of WPIX to a third party that is unrelated to, and unaffiliated with, either Nexstar or Mission and without either Nexstar or Mission retaining any sharing arrangement or contingent financial interest. Further, under this approach, Nexstar may not exercise its prior Option; rather, *de jure* control of WPIX must pass directly to the third party either by assignment or transfer of control from Mission. To ensure the Station is divested cleanly to an unrelated third party, none of the attributable interest holders of the proposed third-party assignee or transferee, including owners, officers, or directors, may be the same as, or related to, any owners or officer of Mission or hold an attributable interest in either Mission or Nexstar.²¹⁰ Additionally, neither Nexstar nor Mission may enter into any LMA, JSA, or other sharing arrangement with the third party assignee or transferee for the Station for a period of eight years. Further, we emphasize that such a divestiture of the Station may not include any option for Nexstar or Mission to re-acquire the Station, nor any other similar, or even partial, contingent financial interest in the Station, and that neither Nexstar nor Mission may serve as a guarantor of the third party's financing. Lastly, we condition any such divestiture with a requirement that neither Nexstar nor Mission may re-acquire the Station for a period of eight years. We find that such additional prophylactic measures are necessary to ensure compliance with the Commission's Rules, and a clear break in Nexstar's influence and control of WPIX.

85. Under the second option, Nexstar would formally acquire the license for WPIX and file an application seeking Commission consent to the assignment. Simultaneously, Nexstar must divest a sufficient number of stations in other markets as necessary to clear space under the National Ownership Cap in order to maintain the company's nationwide footprint at 39% or less.²¹¹ In divesting stations in other markets to come into compliance with the National Ownership Cap, Nexstar may not engage in an LMA, JSA, or other sharing arrangement with any of the divested stations for a period of eight years. Similarly, Nexstar may not retain an option to re-acquire a divested station nor hold any other contingent financial interest in those divested stations. Further, Nexstar may not divest those stations to Mission, or any other entity in which Nexstar or Mission has a cognizable interest under our attribution rules, also for a period of eight years. To ensure the stations are divested cleanly to an unrelated third party, none of the attributable interest holders of the proposed third-party assignee or transferee, including owners, officers, or directors, may be the same as or related to any owners or officers of either Mission or Nexstar or hold an attributable interest in either Mission or Nexstar.

(Continued from previous page) _____
(MB 2002), *vacated in part*, Memorandum Opinion and Order, 22 FCC Rcd 16074 (MB 2007) (implementing changes to the relevant statute enacted by Congress in the Satellite Home Viewer Extension and Reauthorization Act of 2004).

²¹⁰ In imposing these conditions, we rely in part on past measures that the Commission has adopted for the selection of a divestiture trustee to protect against undue influence. *See, e.g., Clear Channel Broadcasting Licenses, Inc.*, Memorandum Opinion and Order, 22 FCC Rcd 21196, 21294, para. 21 n.47 (2007) ("The trustee shall have no family relationships with the principals of either PEP, the post-merger Newport, or Clear Channel, and no past business relationship with either PEP, Newport, or Clear Channel, their affiliates or principals, except to the extent required to establish the trust."). Our conditions necessarily deviate from those adopted for divestiture trusts in part because such cases typically contemplate an individual being the trustee.

²¹¹ Because WPIX is in the New York DMA, the largest market in the country with a footprint of more than 6%, Nexstar would need to sell stations in more than one market to operate within the Cap.

86. We also impose the following additional requirements that apply under either option. In seeking Commission approval for any transaction(s) under either option, Nexstar must file a certified showing of compliance with the National Ownership Cap, broken down by market and with a cumulative footprint under 39%. In selecting 12 months as the deadline for compliance, we rely on other decisions that afforded divesting licensees a similar 12-month period to file an application to come into compliance with our rules.²¹² Upon Commission approval, the acquisition(s) must be consummated within 30 days.²¹³

IV. ORDERING CLAUSES

87. Accordingly, **IT IS ORDERED**, pursuant to section 503(b) of the Communications Act of 1934, as amended,²¹⁴ and sections 1.80 of the Commission's Rules,²¹⁵ that Nexstar Media Group, Inc. is hereby **NOTIFIED** of its **APPARENT LIABILITY FOR FORFEITURE in the amount of one million, two hundred twenty-four thousand, seven hundred and ninety dollars (\$1,224,790)** for its apparent willful violation of sections 73.3540 and 73.3555(e) of the Commission's Rules and section 310(d) of the Act.²¹⁶

88. **IT IS FURTHER ORDERED**, pursuant to section 503(b) of the Communications Act of 1934, as amended,²¹⁷ and sections 1.80 of the Commission's Rules,²¹⁸ that Mission Broadcasting, Inc. is hereby **NOTIFIED** of its **APPARENT LIABILITY FOR FORFEITURE in the amount of six hundred twelve thousand, three hundred and ninety-five dollars (\$612,395)** for its apparent willful violation of section 73.3540 of the Commission's Rules and section 310(d) of the Act.²¹⁹

89. **IT IS FURTHER ORDERED** that, within 12 months of the date of the issuance of any forfeiture order issued in this proceeding or the payment of the forfeiture proposed in this *NAL*, whichever comes first, Nexstar Media Group, Inc. and Mission Broadcasting, Inc. **SHALL FILE** the divestiture application(s) consistent with the requirements set forth in paragraphs 82-85 above.

²¹² See, e.g., *Application of Shareholders of CBS Corp.*, Memorandum Opinion and Order, 15 FCC Rcd 8230, 8236, paras. 19-22 (2000) (allowing applicants 12 months to file applications to divest television broadcast stations in order to comply with National Ownership Cap as part of the approval of applications for consent to transfer control of broadcast stations); *AT&T/MediaOne*, Memorandum Opinion and Order, 15 FCC Rcd 9816 (2000) (Commission grants slightly under 12 months for company to divest assets to comply with the cable horizontal ownership cap).

²¹³ To provide parties with more flexibility to set closing dates in accordance with business accounting procedures, the Commission's Form 732 and processing guidance allow the parties 90 days from approval to consummate or submit a request to extend the consummation period. See *Mass Media Bureau Announces Revised Procedure Regarding Assignment and Transfer Consummation Deadlines*, Public Notice, DA 97-600 (MMB Mar. 21, 1997). However, parties who are out of compliance with the Commission's Rules have previously been subject to shorter consummation deadlines, and due to the potential for the Parties to gain an extended financial advantage to delay consummation, we impose a similar one here. See, e.g., *David D. Oxenford, et al.*, Letter Order, 36 FCC Rcd 16778, 16785 (MB 2021) (requiring divestiture assignments to be consummated within 15 days of Commission approval of the assignments); *Jeffrey D. Southmayd*, Letter, 31 FCC Rcd 10912, 10926 (AD 2016) (requiring consummation within 60 days of any relevant divestiture assignment); *WZJD, Inc.*, Letter Notice of Apparent Liability, 20 FCC Rcd 9941, 9949 (AD 2005) (ordering that where a licensee is and remains out of compliance with the Commission's main studio rule, if the assignment is not consummated within 30 days, the licensee must notify commission staff that it has otherwise brought the station into compliance with the Commission's Rules).

²¹⁴ 47 U.S.C. § 503(b).

²¹⁵ 47 CFR § 1.80.

²¹⁶ 47 U.S.C. § 310(d); 47 CFR §§ 73.3540, 73.3555(e).

²¹⁷ 47 U.S.C. § 503(b).

²¹⁸ 47 CFR § 1.80.

²¹⁹ 47 U.S.C. § 310(d); 47 CFR § 73.3540.

90. **IT IS FURTHER ORDERED** that, pursuant to section 1.80 of the Commission's Rules,²²⁰ within thirty (30) days of the release date of this *NAL*, Nexstar Media Group, Inc. **SHALL PAY** the full amount of the proposed forfeiture or **SHALL FILE** a written statement seeking reduction or cancellation of the proposed forfeiture.

91. **IT IS FURTHER ORDERED** that, pursuant to section 1.80 of the Commission's Rules,²²¹ within thirty (30) days of the release date of this *NAL*, Mission Broadcasting, Inc. **SHALL PAY** the full amount of the proposed forfeiture or **SHALL FILE** a written statement seeking reduction or cancellation of the proposed forfeiture.

92. Payment of the forfeiture must be made by credit card, ACH (Automated Clearing House) debit from a bank account using CORES (the Commission's online payment system),²²² or by wire transfer. Payments by check or money order to pay a forfeiture are no longer accepted. **Upon payment, Licensee must send notice that payment has been made by e-mail to Ty.Bream@fcc.gov, Jeremy.Miller@fcc.gov, and Michael.Richards@fcc.gov.** Below are instructions that payors should follow based on the form of payment selected:²²³

- Payment by wire transfer must be made to ABA Number 021030004, receiving bank TREAS/NYC, and Account Number 27000001. A completed Form 159 must be faxed to the Federal Communications Commission at 202-418-2843 or e-mailed to RROGWireFaxes@fcc.gov on the same business day the wire transfer is initiated. Failure to provide all required information in Form 159 may result in payment not being recognized as having been received. When completing FCC Form 159, enter the Account Number in block number 23A (call sign/other ID), enter the letters "FORF" in block number 24A (payment type code), and enter in block number 11 the FRN(s) captioned above (Payor FRN).²²⁴ For additional detail and wire transfer instructions, go to <https://www.fcc.gov/licensing-databases/fees/wire-transfer>.
- Payment by credit card must be made by using the Commission's Registration System (CORES) at <https://apps.fcc.gov/cores/userLogin.do>. To pay by credit card, log-in using the FCC Username associated to the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select "Manage Existing FRNs | FRN Financial | Bills & Fees" from the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the "Open Bills" tab and find the bill number associated with the NAL/Acct. No. The bill number is the NAL Acct. No. (e.g., NAL/Acct. No. 1912345678 would be associated with FCC Bill Number 1912345678). After selecting the bill for payment, choose the "Pay by Credit Card" option. Please note that there is a \$24,999.99 limit on credit card transactions.
- Payment by ACH must be made by using the Commission's Registration System (CORES) at <https://apps.fcc.gov/cores/paymentFrnLogin.do>. To pay by ACH, log in using the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select "Manage Existing FRNs | FRN Financial | Bills & Fees" on the CORES Menu, then select FRN Financial and the view/make payments option next to the FRN. Select the "Open Bills" tab and find the bill number associated with the NAL/Acct. No. The bill

²²⁰ 47 CFR § 1.80.

²²¹ *Id.*

²²² Payments made using CORES do not require the submission of an FCC Form 159.

²²³ For questions regarding payment procedures, please contact the Financial Operations Group Help Desk by phone at 1-877-480-3201 (option #6), or by e-mail at ARINQUIRIES@fcc.gov.

²²⁴ Instructions for completing the form may be obtained at <https://www.fcc.gov/Forms/Form159/159.pdf>.

number is the NAL/Acct. No. (e.g., NAL/Acct. No. 1912345678 would be associated with FCC Bill Number 1912345678). Finally, choose the “Pay from Bank Account” option. Please contact the appropriate financial institution to confirm the correct Routing Number and the correct account number from which payment will be made and verify with that financial institution that the designated account has authorization to accept ACH transactions.

93. Requests for full payment of the forfeiture proposed in this *NAL* under the installment plan should be sent to: Associate Managing Director-Financial Operations, 45 L Street, NE, Washington, DC 20554.²²⁵ Questions regarding payment procedures should be directed to the Financial Operations Group Help Desk by phone, 1-877-480-3201 (option #6), or by e-mail at ARINQUIRIES@fcc.gov.

94. The written response seeking reduction or cancellation of the proposed forfeiture, if any, must include a detailed factual statement supported by appropriate documentation and affidavits pursuant to sections 1.16 and 1.80(g)(3) of the Rules.²²⁶ The written response must be filed with the Office of the Secretary, Federal Communications Commission, 45 L Street, NE, Washington, DC 20554, ATTN: Radhika Karmarkar, Chief, Industry Analysis Division, Media Bureau, and **MUST INCLUDE** the NAL/Acct. No. referenced above. A complete copy of any response must also be sent by e-mail to Ty.Bream@fcc.gov, Jeremy.Miller@fcc.gov, and Michael.Richards@fcc.gov to assist in processing the response.

- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
 - Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, DC 20554.

95. The Commission will not consider reducing or canceling a forfeiture in response to a claim of inability to pay unless the respondent submits: (1) federal tax returns for the most recent three-year period; (2) financial statements prepared according to generally accepted accounting practices (GAAP); or (3) some other reliable and objective documentation that accurately reflects the respondent’s current financial status. Any claim of inability to pay must specifically identify the basis for the claim by reference to the financial documentation submitted. Inability to pay, however, is only one of several factors that the Commission will consider in determining the appropriate forfeiture, and we have discretion to not reduce or cancel the forfeiture if other prongs of section 503(b)(2)(E) of the act support that result.²²⁷

96. **IT IS FURTHER ORDERED**, that copies of this *NAL* shall be sent, by First Class and Certified Mail, Return Receipt Requested, to Jason Roberts, Nexstar Media Group, Inc., 545 E. Carpenter Freeway, Irving, TX 75062. A copy shall also be sent to Nexstar’s counsel, Jennifer A. Johnson, by e-mail to jjohnson@covington.com.

97. **IT IS FURTHER ORDERED**, that copies of this *NAL* shall be sent, by First Class and Certified Mail, Return Receipt Requested, to Mission Broadcasting, Inc., 4822 Kemp Blvd. Suite 300,

²²⁵ See 47 CFR § 1.1914.

²²⁶ *Id.* §§ 1.16 and 1.80(g)(3).

²²⁷ 47 U.S.C. § 503(b)(2)(E). See, e.g., *Adrian Abramovich*, Forfeiture Order, 33 FCC Rcd 4663, 4678-79, paras. 44-45 (2018).

Wichita Falls, TX 76308. A copy shall also be sent to Mission's counsel, Gregory L. Masters, Esq., by e-mail to gmasters@wiley.law.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

**STATEMENT OF
CHAIRWOMAN JESSICA ROSENWORCEL**

Re: *In the Matter of Mission Broadcasting, Inc., Licensee of Station WPIX, New York, NY; Nexstar Media Group, Inc.*, Notice of Apparent Liability for Forfeiture.

Under the Communications Act, as amended by Congress in the Consolidated Appropriations Act of 2004, the Federal Communications Commission is prohibited from allowing a company to own or control broadcast stations that in total reach more than 39 percent of the national television audience. The record here reflects a situation where a company exceeds this threshold. Unless and until Congress changes this law, it is the responsibility of this agency to enforce it.

**CONCURRING STATEMENT OF
COMMISSIONER BRENDAN CARR**

Re: In the Matter of Mission Broadcasting, Inc., Licensee of Station WPIX, New York, NY; Nexstar Media Group, Inc., Notice of Apparent Liability for Forfeiture.

In 2019 and 2020, Nexstar and Mission sought FCC approval for transactions that involve TV station WPIX. In the course of those FCC reviews, the parties provided the FCC with express and detailed information about their relationship. In particular, the parties disclosed to the FCC that Nexstar would provide all of the programming for WPIX, that Nexstar would collect all of the revenue from the station (including retransmission consent revenues), and that Nexstar had entered into an option to purchase WPIX, among other specifics. After reviewing those disclosures, the FCC approved the relevant transactions, finding that it would serve the public interest.

Flash forward to today, and in this Notice of Apparent Liability (NAL) the FCC cites to those previously disclosed and reviewed features of the Nexstar – WPIX relationship as indicia that Nexstar may be exercising too much control over WPIX. To be sure, the NAL cites additional features of the relationship, as well as facts that apparently emerged after the relevant FCC approvals. Those FCC allegations will require careful review. But it is concerning to me that the FCC cites as evidence of control those features of the relationship that the FCC previously signed off on. We need to be careful that we do not undermine reasonable reliance on prior FCC decisions.

NALs are not final decisions on the merits. And I will keep an open mind as the FCC reviews the record in response to this document. Part of that will require the FCC to ensure that any remedies the agency finds necessary are ones that are appropriate given the procedural posture of this enforcement action.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Amendment of Section 74.1231(i) of the
Commission's Rules on FM Broadcast Booster
Stations
Modernization of Media Initiative
Amendment of Section 74.1231(i) of the
Commission's Rules on FM Broadcast Booster
Stations
MB Docket No. 20-401
MB Docket No. 17-105
RM-11854

REPORT AND ORDER AND
FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: March 27, 2024

Released: April 2, 2024

Comment Date: (30 days after date of publication in the Federal Register)

Reply Comment Date: (60 days after date of publication in the Federal Register)

By the Commission: Commissioners Carr and Starks issuing separate statements.

TABLE OF CONTENTS

Heading Paragraph #
I. INTRODUCTION..... 1
II. BACKGROUND..... 3
III. DISCUSSION 10
A. Report and Order. 11
1. Definition of a Program Originating FM Booster Station..... 12
2. Public Interest Benefits of Program Originating Boosters. 15
a. Competitive Effects. 16
3. Testing and Potential Interference..... 37
4. Compliance with LCRA Requirements..... 66
5. Part 5 Licensed Operations..... 70
B. Further Notice of Proposed Rulemaking 72
1. Program Origination Notification..... 73
2. Section 74.1204(f)..... 76
3. Synchronization..... 77
4. Notification to EAS Participants 78
5. Part 74 Licensing Issues 80
6. Cap on Program Originating FM Boosters and Other LCRA Issues 81
7. Political Broadcasting and Advertising 84
8. Licensing Issues 89
9. Other Safeguards 90
10. Digital Equity and Inclusion..... 91
IV. PROCEDURAL MATTERS..... 92

| | |
|---|-----|
| A. Regulatory Flexibility Analysis | 92 |
| B. Report and Order | 94 |
| 1. Final Paperwork Reduction Act of 1995 Analysis | 94 |
| 2. Congressional Review Act | 95 |
| C. Further Notice of Proposed Rule Making | 96 |
| 1. Filing Requirements. | 96 |
| 2. Paperwork Reduction Act Analysis..... | 100 |
| D. Providing Accountability Through Transparency Act..... | 101 |
| V. ORDERING CLAUSES..... | 102 |
| APPENDIX A | |
| APPENDIX B | |
| APPENDIX C | |
| APPENDIX D | |
| APPENDIX E | |

I. INTRODUCTION

1. In this *Report and Order*, the Commission adopts changes to the Commission’s rules that will allow FM booster stations to originate programming, subject to future adoption of processing, licensing, and service rules as proposed in the *Further Notice of Proposed Rulemaking* (Further NPRM).¹ For the reasons explained below, we find that it is in the public interest to allow FM and LPFM² broadcasters to use booster stations to originate content on a limited basis, subject to the restrictions set out in the *Report and Order*.³

2. FM boosters currently serve the limited purpose of rebroadcasting primary FM (or LPFM) stations in areas of poor reception. GeoBroadcast Solutions, LLC (GBS) has developed technology that is designed to allow licensees of primary FM broadcast stations to originate content using FM boosters and is intended to do so without raising the potential for harmful co-channel interference to the reception of the primary station’s signal outside the coverage area of the booster station or to previously authorized secondary stations.⁴ GBS proposes that this content origination technology will

¹ We note that some of the proposals in the Further NPRM implicate all boosters, not only program originating boosters. The proposals in the Further NPRM that implicate all boosters include amending section 74.1204(f) to include a mechanism to address predicted interference while booster construction permit applications remain pending; clarifying section 74.1231(j) that grandfathered superpowered FM stations are able to implement booster stations only within the standard maximum contour for their class of station; codifying the requirement that booster stations must suspend operations any time their primary stations are not broadcasting and to file notices of suspended operation; and modifying section 74.1232 to clarify that a booster station may not broadcast programming that is not permitted by its FM primary station’s authorization.

² Both full-service FM and low power FM (LPFM) stations are authorized to operate booster stations. For convenience, we reference below only FM stations. However, our findings herein and the proposals in the Further NPRM apply to both full-service FM and LPFM stations.

³ While we conclude in the Report and Order that program originating boosters serve the public interest and we adopt certain rules herein to govern such booster operations (such as a three-minute per hour cap), stations will not be permitted to construct or operate program originating boosters pursuant to these rules until we adopt final service rules in response to the Further NPRM and such rules have been reviewed by the Office of Management and Budget. Pending adoption and OMB review of such rules, stations can pursue experimental authorizations pursuant to Part 5 of our rules. *See infra* paras. 70-71.

⁴ *See* Petition for Rulemaking of GeoBroadcast Solutions LLC, RM-11854 (filed Mar. 13, 2020) (Petition) at 9-13.

allow broadcasters to air “geo-targeted” content⁵ different from the primary station’s signal to specific areas within the primary station’s service contour. GBS argues that geo-targeted broadcasting can deliver significant value to broadcasters, advertisers, and listeners in distinct communities by broadcasting more relevant localized programming and information.⁶ Stations choosing to use this technology might, for limited portions of each broadcast hour, air advertisements from businesses that wish or can only afford to focus their reach on small geographic areas, and/or might air hyper-local news and weather reports most relevant to a particular community. GBS further observes that many other types of media, such as online content providers, cable companies, ATSC 3.0 television stations, and newspapers are able to differentiate their content geographically, but no such option exists for radio broadcasting.⁷ GBS filed a petition for rulemaking (Petition) seeking a rule change to allow FM boosters to originate such geo-targeted content,⁸ which it argues would enhance the ability of FM broadcasters, especially small and minority broadcasters, to compete in their local advertising markets. Upon consideration of supportive and opposing comments,⁹ we find it would serve the public interest to allow FM broadcasters to originate content on boosters as set out below. Moreover, in order to allow us to authorize broadcasters to offer this service on a permanent basis, we address a number of processing, licensing and service issues through the Further NPRM.

II. BACKGROUND

3. **The FM Booster Service.** FM boosters are low power, secondary stations that operate in the FM broadcast band. The Commission created the FM booster service in 1970¹⁰ and last made significant updates to FM booster rules in 1987.¹¹ The purpose of FM boosters is to improve signal strength of primary FM stations in areas where reception is poor due to terrain shielding or distance from the transmitter.¹² Booster stations must be licensed to the same licensee as the booster’s primary station, operate on the same frequency as the primary station, and rebroadcast the signal of the primary station within the primary station’s protected contour.¹³ The Commission’s rules prohibit booster stations from

⁵ Geo-targeted content, as the term is used herein, is that which can be heard only within a portion of an FM station’s total service area covered by the signal of a co-channel FM booster station. We also refer to the technology generally as geo-casting by a program originating booster.

⁶ Petition at 4.

⁷ *Id.*, Exhibit D at 6-10.

⁸ *Id.*

⁹ Comments regarding the Petition were also filed in the Commission’s Media Modernization docket (MB Docket No. 17-105), and we therefore incorporated the relevant comments from that docket into this proceeding.

¹⁰ *See Amendment of Part 74 of the Commission’s Rules and Regulations to Permit the Operation of Low Power FM Broadcast Translator and Booster Stations*, Report and Order, 20 R.R.2d (P & F) 1538 (1970) (*Low Power FM Broadcast Translator and Booster Stations*).

¹¹ *See Amendment of Part 74 of the Commission’s Rules Concerning FM Booster Stations and Television Booster Stations*, Report and Order, 2 FCC Rcd 4625 (1987) (amending the “FM booster rules to permit substantial increases in the output power of FM booster stations and to eliminate the restriction that such stations may only rebroadcast signals received over-the-air.”). In 2020, the Commission amended its rules to expand the ability of LPFM stations to operate boosters. *Amendments of Parts 73 and 74 to Improve the Low Power FM Radio Service Technical Rules*, Report and Order, 35 FCC Rcd 4115 (2020).

¹² Traditionally, an FM broadcast station transmits its signal from a single, elevated transmission site central to its protected service contour. This results in a stronger signal near the transmitter and a weaker signal as the distance from the transmitter increases. Intervening terrain can also reduce signal strength (i.e., terrain shielding), regardless of the distance from the transmitter. *See* Petition at 7-8.

¹³ 47 CFR § 74.1231(i).

originating content.¹⁴ A primary station can apply at any time for authorization to build any number of FM booster stations but, given the limited purpose of FM boosters and the risk that booster stations will cause co-channel interference to their primary station, the demand has traditionally been quite limited. As a secondary service, FM booster stations are not permitted to cause adjacent channel interference to other primary services or to previously authorized secondary stations.¹⁵ Although the Commission's rules allow a booster to cause some interference to its own primary station outside of its community of license,¹⁶ the Commission has long urged licensees to engineer boosters in a manner that would limit such interference.¹⁷

4. **Petition for Rulemaking and Testing.** GBS filed the Petition on March 13, 2020,¹⁸ proposing to give FM broadcasters the option to use boosters to originate programming to specific zones within their stations' service area.¹⁹ GBS proposes to allow program origination for a limited period totaling three minutes per hour. The Petition recommends that we amend section 74.1231(i) of the Commission's rules, which currently prohibits independent transmissions by FM boosters.²⁰ GBS envisions booster program origination would be voluntary, and the content would be available only in the specific part of the primary station's protected service contour served by the booster station. GBS proposes that we require the programming of the booster station and that of the primary station must remain "substantially similar,"²¹ which GBS defines as the booster's retransmission of the primary station except for five percent of each hour. During that limited period, GBS proposes that we allow the booster

¹⁴ *Id.* Section 74.1201(f) defines an FM booster station as a station "operated for the sole purpose of retransmitting the signals of an FM radio broadcast station, by amplifying and reradiating such signals, without significantly altering any characteristic of the incoming signal other than its amplitude." 47 CFR § 74.1201(f). *See infra* note 20.

¹⁵ *Id.* § 74.1203(a).

¹⁶ *Id.* § 74.1203(c) ("An FM booster station will be exempted from the provisions of paragraphs (a) and (b) of this section to the extent that it may cause limited interference to its primary station's signal, *provided* it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the principal community of its primary station.").

¹⁷ *Low Power FM Broadcast Translator and Booster Stations*, 20 R.R.2d 1538 at para. 20.

¹⁸ The filing was announced by public notice on April 2, 2020. *See* Consumer & Governmental Affairs Bureau Reference Information Center Petition for Rulemakings Filed, Public Notice, Rep. No. 3145 (CGB Apr. 2, 2020).

¹⁹ Stations would create the zones using carefully located and synchronized booster transmitters and appropriately designed antennas to overlay a stronger, geographically localized signal in the targeted region. *See* Petition at 5, 8-9.

²⁰ 47 CFR § 74.1231(i) ("An FM broadcast booster station is authorized to retransmit only the signals of its primary station which have been received directly through space and suitably amplified, or received by alternative signal delivery means including, but not limited to, satellite and terrestrial microwave facilities. The FM booster station shall not retransmit the signals of any other station nor make independent transmissions, except that locally generated signals may be used to excite the booster apparatus for the purpose of conducting tests and measurements essential to the proper installation and maintenance of the apparatus."). Although GBS claims that only a targeted change to section 74.1231(i) is necessary to facilitate this proposal—which does not seek any changes to the rules regarding primary stations or FM translators—and that the proposed booster station operation is compatible with all existing interference rules, Petition at 7-8, we discuss below in the Further NPRM a number of proposed rule changes that we find are necessary in order for us to authorize boosters to originate content.

²¹ Petition at Exh. A ("[T]he programming must be the same except for advertisements, promotions for upcoming programs, and enhanced capabilities including hyper-localized content (e.g., geo-targeted weather, targeted emergency alerts, and hyper-local news)."). The definition of substantially similar advanced by GBS was derived from the rules regarding broadcast television stations' voluntary transition to the ATSC 3.0 transmission standard. *Id.* at 20. Stations that transition to ATSC 3.0 must simulcast their primary signals in ATSC 1.0 format, and that simulcast must be "substantially similar" to the signal aired in ATSC 3.0. *See, e.g.*, 47 CFR § 73.3801(b)(1).

to originate geo-targeted advertisements, promotions for upcoming programs, and other hyper-localized content.²² GBS suggests its proposal would benefit small and minority-owned broadcasters, because potential advertisers that currently find it prohibitively expensive to buy spots reaching a radio station's whole service area might purchase lower-cost airtime reaching a more targeted area, thereby becoming a new source of station revenue. GBS asserts that its proposal would not cause adjacent channel interference to other stations and that any co-channel interference between a booster and its own primary station would be minimal.²³

5. Prior to filing the Petition, GBS tested its technology on a limited basis in the Salt Lake City, Utah, market, an area with mountainous terrain; in Avon Park, Florida, an area with flat terrain; and in the more urban Milwaukee, Wisconsin, area.²⁴ GBS also enlisted NPR Labs and Towson University to conduct listening tests.²⁵ The Petition claimed these initial tests showed that the transition area—*i.e.*, the boundary between the primary station and booster coverage zones—can be minimized to affect only a tiny area, and for a very limited period of time, such that most listeners would never notice the transition.²⁶ The Petition does not propose any changes to our interference standards, propose any remediation requirements to address proposed or actual interference, or identify any new procedures by which stations would apply for new boosters.

6. On December 1, 2020, the Commission released the NPRM seeking comment on whether—and if so, how—to change FM booster station rules to permit origination of content. The NPRM asked whether booster program origination may result in self-interference²⁷ that would be disruptive to listeners and whether there are alternatives to GBS's proposal. The NPRM also invited comment on whether to require programming originated by the FM booster station to be “substantially similar” to the primary station's programming, and how to define that term. The NPRM sought comment on the potential impact of GBS's proposal on primary station broadcasts, the Emergency Alert System (EAS), and HD Radio broadcasts.²⁸ Finally, the NPRM asked commenters to address the potential public interest implications of geo-targeted content on localism, diversity, and competition in the media marketplace.

7. The Commission received supportive and opposing comments from established industry stakeholders, broadcasters (large and small), civil rights advocates, radio engineers, and members of the listening public. Many commenters conclude the GBS proposal is based on sound technology that could provide more locally relevant information to listeners while improving revenues for stations voluntarily adopting it, especially small and minority-owned stations.²⁹ However, numerous other commenters raise technical concerns about co-channel interference that might impede EAS messages,³⁰ disrupt digital HD

²² Letter from Gerard J. Waldron, Counsel, GBS, to Marlene H. Dortch, Secretary, FCC, RM-11854, at 1-2, 4-5 (filed July 17, 2020).

²³ Petition at 9-10.

²⁴ The tests used stations KDUT(FM), Randolph, Utah; WWOJ(FM), Avon Park, Florida; and WIIL(FM), Union Grove, Wisconsin.

²⁵ Petition at 9.

²⁶ *Id.*

²⁷ *Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations*, Notice of Proposed Rulemaking, 35 FCC Rcd 14213 (2020) (NPRM). We use the term “self-interference” to refer to the booster causing interference to the signal of its own primary station.

²⁸ NPRM, 35 FCC Rcd at 14,217-19, paras. 11-17, 14,220, para. 23, and 14,222, para. 31.

²⁹ *See, e.g.*, Comments of Emmis Communications; Comments of Way FM; Comments of BIA Advisory Services (BIA); Comments of Roberson & Associates, LLC (Roberson).

³⁰ Comments of Federal Emergency Management Agency (FEMA).

Radio signals,³¹ raise the overall FM noise floor,³² and generally degrade the listener experience.³³ Opposing commenters also raise concerns about whether broadcasters would be harmed by lower advertising rates in markets where one or more competitors adopt program originating booster technology.

8. After the comment period, which closed on March 21, 2021, GBS responded to concerns about the sufficiency of the pre-NPRM testing by conducting two additional rounds of tests. GBS partnered with the licensees of stations KSJO(FM) and WRBJ-FM to test the technology in San Jose, California, and Jackson, Mississippi, pursuant to experimental authority.³⁴ The new tests examined the performance of program originating boosters under several variables, including reception in vehicles traveling at different speeds, on different roads, and at various times of day. In San Jose, GBS tested the performance of program originating boosters in a hilly, rural area and considered EAS alerts and the primary station's HD Radio transmissions. In contrast, the Jackson test considered performance in a flat area with urban and suburban portions. Because the Jackson primary station operates only in analog, the Jackson test did not consider compatibility with HD Radio transmissions. GBS states that it designed the tests to reflect the full range of geographic features that broadcasters in certain markets may encounter as well as techniques and basic engineering principles that broadcasters typically employ to adapt to those matters.³⁵ GBS reported the results of the San Jose and Jackson tests in September 2021³⁶ and March 2022, respectively.³⁷ Because the test reports contain information that was unavailable during the original public comment cycle, and because GBS submitted those reports to address concerns in the comments about its technology, the Media Bureau (Bureau) invited public comment on the new GBS tests as well as any remaining concerns about GBS's proposed use of booster stations.³⁸

9. Supporters of the GBS proposal assert the San Jose and Jackson tests demonstrated the ability of program originating boosters to minimize self-interference as well as avoid harming EAS alerts or HD Radio broadcasts.³⁹ Opponents disagree, contending the tests were optimized in favor of the GBS proposal and failed to adequately explore many potential zones of interference.⁴⁰

³¹ Comments of Xperi Holding Corp. (Xperi).

³² See Reply Comments of the New York State Broadcasters Ass'n at 3-4; Comments of Alaska Broadcasters Ass'n, Colorado Broadcasters Ass'n, Oregon Ass'n of Broadcasters, and Puerto Rico Broadcasters Ass'n (Alaska Broadcasters Comments) at 7.

³³ See, e.g., Comments of National Association of Broadcasters (NAB).

³⁴ See File Nos. BESTA-20210203AAI (granted Feb. 8, 2021) as extended (San Jose); EXP-20211129AAN (granted Jun. 17, 2021) as extended (Jackson).

³⁵ Reply Comments of GBS at 3.

³⁶ See Roberson and Associates, LLC, KSJO Demonstration System: Geo-Targeted FM/HD Broadcast Technical Report, attached to Letter from Gerard J. Waldron, Covington & Burling LLP, to Marlene H. Dortch, Secretary, FCC (Sept. 17, 2021) (San Jose Test Report) (https://www.fcc.gov/ecfs/file/download/DOC-5cfda36b20400000-A.pdf?file_name=KSJO%20Technical%20Report.pdf).

³⁷ See Roberson and Associates, LLC, WRBJ Demonstration System: Geo-Targeted FM Broadcast Technical Report, attached to Letter from Gerard J. Waldron, Covington & Burling LLP, to Marlene H. Dortch, Secretary, FCC (Mar. 30, 2022) (Jackson Test Report) (https://www.fcc.gov/ecfs/file/download/DOC-5ff6e91e66000000-A.pdf?file_name=GeoBroadcast%20WRBJ%20Technical%20Report%203.30.22.pdf).

³⁸ Media Bureau Seeks Comment on Recent Filings Concerning Use of FM Boosters for Geo-Targeted Content, Public Notice, DA 22-429 (MB Apr. 18, 2022).

³⁹ See, e.g., Comments of Flagstaff Radio, Inc.; Reply Comments of Octave Communications.

⁴⁰ See, e.g., 2022 Comments of NAB.

III. DISCUSSION

10. The issues raised in this proceeding fall into three broad categories: (1) non-technical matters such as the advantages and disadvantages of program originating boosters from an economic and public interest perspective; (2) technical issues such as whether program originating boosters, if properly engineered, would cause harmful interference to their primary station or adjacent channel stations; and (3) administrative matters that the Commission would need to address in order to authorize program originating boosters and respond to any resulting operational issues. The Report and Order portion of this document resolves the first two categories by determining that program originating boosters limited to originating programming for three minutes per hour would serve the public interest and that concerns about the technology's impact on advertising revenue of other broadcasters and harmful interference are speculative and, ultimately, do not counsel against granting the relief provided herein. The Report and Order also concludes that properly engineered program originating boosters will not cause interference to the primary station or adjacent channel stations. Any interference concerns that arise in individual circumstances can be addressed by the Bureau through conditions imposed as part of the authorization process. The Further Notice of Proposed Rulemaking section seeks additional comment on proposed processing, licensing, and service rules required to authorize broadcasters to originate programming on boosters on a permanent basis.

A. Report and Order.

11. In this Report and Order, we conclude that authorizing program originating boosters would advance the public interest by providing broadcasters and listeners options for more targeted and potentially more varied advertising and content that many stations are not able to provide today due to prohibitions in federal law.⁴¹ We also recognize that many parties raise concerns about interference and the impact program originating boosters may have on the radio industry. Based on our review of the record, however, and weighing the competing interests in this proceeding, we find that program origination over boosters will advance the public interest with benefits that outweigh the concerns expressed in the comments, subject to the following safeguards and limitations: a limitation on program origination to three minutes per hour (five percent of each hour); a notification requirement for program originating boosters; a requirement for program originating boosters to receive and broadcast all emergency alerts in the same manner as their primary station; and a limit on the number of boosters a station can operate.⁴² We note this use of boosters will be voluntary, and find that granting this level of flexibility to broadcasters is consistent with our ongoing policy goal of supporting the continued viability of the radio industry for the benefit of the listening public and helping to ensure that radio remains competitive with other technologies and services. To the extent that broadcasters choose to use boosters in this way, however, they will be required to follow the rules that we adopt herein as well as any conditions on operations that the Commission might impose when it grants authorizations.

1. Definition of a Program Originating FM Booster Station

12. We adopt a new definition in our rules to create a distinction between a booster station that serves purely as a fill-in station and a "Program Originating FM Booster Station" that serves primarily as a fill-in station but that also originates programming on a limited basis. Our current rules specify that booster stations are restricted to the retransmission of the existing broadcast of an FM

⁴¹ We note that program originating boosters do not provide the only option for hyper-local programming. The Commission created the LPFM service specifically for that purpose, and it serves the needs of targeted communities of listeners. *See Creation of Low Power Radio Service*, Report and Order, 15 FCC Rcd 2205, 2208 (2000) (subsequent history omitted) (*LPFM Order*). LPFM stations must operate noncommercially and, thus, cannot carry hyper-local (or any type of) advertising.

⁴² In the Further NPRM, we seek comment on the details attendant to certain of these limitations and safeguards as well as on service rules for program originating boosters.

station.⁴³ A booster station may not alter the programming it receives from its primary FM station, and simply rebroadcasts the primary station's programming in its entirety. Program originating booster stations cannot adhere to this existing definition.

13. In the Petition, GBS suggested that the Commission could authorize program origination by boosters with a single change to a rule pertaining to FM boosters.⁴⁴ The NPRM focused on this approach and asked parties to comment on, "[W]hether to require programming originated by the FM booster station to be 'substantially similar' to the primary station's programming, and how to define this term."⁴⁵ Although many of the commenters adopt this "substantially similar" terminology, we conclude that this definition, borrowed from the rules governing the digital television transition from ATSC 1.0 to 3.0, is inapplicable to program originating boosters.⁴⁶ Instead, we adopt a definition of "program originating booster" in new section 74.1201(f)(2) of our Rules, and use that definition to apply other parts of our rules to these types of boosters.

14. The definition we adopt herein limits program originating boosters to no more than three minutes per hour of booster-originated content. Although the Petition proposed the "substantially similar" language borrowed from the ATSC approach, GBS subsequently clarified that program originating boosters should be limited to five percent of each broadcast hour.⁴⁷ GBS asserted this approach would be the most consistent with existing industry practices.⁴⁸ Commenters supporting the proposal for program originating boosters did not raise objections to the three minute per hour limitation. We believe this three minute per hour limitation provides the best balance between the desire to offer broadcasters the flexibility to originate content on boosters and the need to implement safeguards to minimize the risks of interference as we assess the rollout of this new technology. The three-minute limit appears sufficient to achieve the goals of the new technology. The proposed types of public service uses of program originating boosters, such as hyperlocal weather reports and targeted news, are generally of a nature that we expect it would be possible to present such information within brief time periods. With respect to potential advertising and underwriting uses, a three-minute per hour time limit would allow several smaller businesses to advertise in 15- or 30-second spots on commercial radio or to have their underwriting support acknowledged in short announcements on noncommercial stations. Finally, in defining program originating boosters, we do not limit the type of programming boosters can originate, as GBS had proposed.⁴⁹ GBS proposed such language to demonstrate that booster programming could be

⁴³ 47 CFR § 74.1201(f).

⁴⁴ Petition at 6. GBS proposed amending 47 CFR § 74.1231(i) to add the following text: "The programming aired on the FM broadcast booster station must be 'substantially similar' to that aired by its primary station. For purposes of this section, 'substantially similar' means that the programming must be the same except for advertisements, promotions for upcoming programs, and enhanced capabilities including hyper-localized content (e.g., geo-targeted weather, targeted emergency alerts, and hyper-local news)." Petition at Exhibit A.

⁴⁵ NPRM at 5.

⁴⁶ Comments of NAB at 20-23.

⁴⁷ Comments of GBS at 12.

⁴⁸ *Id.* ("we modeled this limit on Nielsen's requirement that a broadcasters' online stream(s) mirror their over-the-air signal at least 95 percent of the time for online and over-the-air ratings to be aggregated. The proposed rule change is designed to be able to work within the existing metrics of the radio industry, so that broadcasters may take advantage of its benefits without jeopardizing important existing structures, such as ratings.").

⁴⁹ GBS proposed to define "substantially similar" as programming that must be the same except for advertisements, promotions for upcoming programs, and enhanced capabilities including hyper-localized content (e.g., geo-targeted weather, targeted emergency alerts, and hyper-local news). Petition, Exh. A. *See supra* n. 44. REC argued that such language was unnecessary. *See* Comments of REC Networks at 14 (stating that "we do not see it necessary to
(continued....)

classified as “substantially similar” to that aired by the primary station, but we are not adopting the “substantially similar” proposed language. We conclude there is no need to implement the approach GBS offered, which we view as mere suggestions of some types of content that broadcasters might, within their own discretion, consider.

2. Public Interest Benefits of Program Originating Boosters.

15. Overall, we find the advantages of program originating boosters outweigh the concerns raised in the comments. Allowing stations to geo-target content potentially increases their ability to create value and deliver it to consumers. The NPRM’s public interest discussion asked commenters to examine the impact of program originating boosters on localism, diversity, and competition. Responsive commenters differ on whether program originating boosters would be beneficial or harmful to stations, advertisers, listeners, the radio industry, and the overall economy. There is general consensus among the commenters that the radio industry has experienced declining revenues over the past decade, and continues to lose advertising market share to other media sources.⁵⁰ However, while supporters view program originating boosters as a solution capable of reversing that trend, opponents believe they would exacerbate these financial difficulties.⁵¹ Given that the technology would be adopted voluntarily and

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provide any specific rule or guidance in respect to what stations can do with their FM Booster stations within those 180 seconds as long as it does not exceed 180 seconds per hour”).

⁵⁰ *E.g.*, Comments of Press Communications, LLC (Press) at 2-4. According to Roberts Radio Broadcasting, LLC (Roberts), radio revenues have decreased from \$18.1 billion to \$9.7 billion in just 15 years. Comments of Roberts at 2.

⁵¹ The National Association of Broadcasters (NAB), which states that many of its members oppose the proposal, suggests that numerous supporting comments are disingenuous because they were filed by the same counsel that also represents GBS and because some of the commenters are small noncommercial broadcasters that NAB believes would have very limited use for program originating boosters. *See* NAB, Notice of Ex Parte Communication (Sept. 22, 2022) at 5-6. We are aware that four licensees indicate they do not support GBS’s proposal, notwithstanding GBS’s counsel’s pleadings on their behalf expressing support for program originating boosters. *See* Letter from Scott Poose, Owner and General Manager, Ranchland Broadcasting, and Warren Epstein, Executive Director of Marketing and Communications, Pikes Peak State College to Marlene H. Dortch, Secretary, FCC, MB Docket No. 20-401 (filed Oct. 11, 2022); Letter from Dan Balla, President, Falls Media LLC, and Andrew DeVall, President, Q-Media Group to Marlene H. Dortch, Secretary, FCC, MB Docket No. 20-401 (filed Oct. 11, 2022). GBS’s counsel, Shainis & Peltzman, Chartered, responds that all of its clients for whom it filed comments, “were supportive of utilizing their names in support of the rulemaking.” Letter from Aaron P. Shainis, Shainis & Peltzman, Chartered, to Marlene H. Dortch, Secretary, FCC, MB Docket No. 20-401, at 2 (filed Oct. 12, 2022). We will treat those four licensees’ comments in support as having been withdrawn. The National Association of Black Owned Broadcasters (NABOB), which had previously supported the Petition, thereafter submitted a notice that it has discontinued its support for program originating boosters. Letter from James L. Winston, President and CEO, National Association of Black Owned Broadcasters, Inc., to Marlene H. Dortch, Secretary, FCC, MB Docket No. 20-401 (filed Oct. 31, 2022). We note that in 2023 NABOB merged with U.S. Black Chambers, Inc. (USBC), which continues to support the GBS proposal. Letter from Ron Busby, Sr., President, U.S. Black Chambers, Inc., to Marlene H. Dortch, Secretary, FCC, MB Docket Nos. 20-401, 171-5 (filed Oct. 30, 2023). Although NABOB has become the USBC Media Network, we will continue to use their name at the time of filing (NABOB). NAB further raises concerns about “fraudulent and deceitful conduct” involving GBS’s principal, Chris Devine, based on past litigation and proceedings before the FCC. NAB, Notice of Ex Parte Communication at 3, citing *Allen v. Devine*, 670 F. Supp. 2d 164 (E.D.N.Y. 2009); *Applications of C. Devine Media, Inc., For Renewal of License of Station KBER-FM, Ogden, Utah; Street Stryder, For Renewal of License of Station KQOL-FM, Spanish Fork, Utah*, Hearing Designation Order and Notice of Forfeiture, MM Docket No. 93-56, File Nos. BRH-19900604YE and BRH-19900601A3, 8 F.C.C.R. 2493 (1993) at 4. NAB’s claims are echoed by Luke Allen, who states he initiated the litigation against Mr. Devine that NAB references. Letter from Luke Allen, to Marlene H. Dortch, Secretary, FCC, RM-11854 (filed Oct. 20, 2022). As an initial matter, most of the claims involve unadjudicated, non-FCC misconduct. *See Policy Regarding Character Qualifications in Broadcast Licensing*, Order and Policy Statement, 102 FCC 2d 1179, 1204-05 (1986) (noting the Commission’s policy to “refrain from taking any action on non-FCC misconduct prior to

(continued....)

would be used for very limited portions of the broadcast day, we find that public interest benefits outweigh these non-technical risks highlighted in the record.

a. Competitive Effects.

16. Based on our review of the comments, we conclude the introduction of program originating boosters has benefits that outweigh the theoretical competitive effects that commenters raise. Commenters focus on the potential effect of program originating boosters on advertising rates, the cost of implementing these boosters, and the impact they may have on women and minorities. They also claim that geo-targeting is not a new concept: advertisers using other media, such as local cable, newspapers, online digital, and even broadcast television, have been able to geo-target their key audiences.⁵² Supporters also emphasize that station operations would change very little because boosters would originate content just three minutes per hour.⁵³ The record reflects that use of program originating boosters is not a one-size-fits-all solution, but rather one with potential costs and benefits that will likely vary from station to station and market to market. Because the use of boosters would be voluntary for stations and potentially beneficial to listeners and consumers, we find that the public interest will be served by providing each individual radio licensee the opportunity to evaluate whether or not program originating booster use would be advantageous under its own unique circumstances.⁵⁴

17. *Advertising Rates and Revenue Opportunities for Broadcasters.* We agree with commenters that commercial FM broadcasters should be allowed to pursue advertising and revenue opportunities from program originating boosters. Supporting commenters view program originating boosters as an important new source of revenue that is critically needed to enhance the financial viability of the radio broadcast industry.⁵⁵ They contend that allowing radio stations to offer geo-targeted content would permit broadcasters to compete effectively with other technologies and services. GBS argues that hyper-local content would help stations maintain audiences because studies have shown that consumers want to listen more and pay greater attention to content directed to their specific area.⁵⁶ The Petition cites

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adjudication by another agency or court”) (subsequent history omitted). As for the one claim involving the FCC, the specified hearing proceeding was terminated without a finding of any violation. *See Chestnut Limited Liability Company*, Memorandum Opinion and Order, 10 FCC Red 1674 (1995). We also note that GBS has supported its proposal with submissions by sources that are well respected in the industry, such as a study of advertising by BIA Advisory Services that is included in the Petition. Moreover, the record reflects support for program originating boosters from commenters that have no known affiliation with GBS. We also note that the Commission is not endorsing GBS or its booster technology, and we make no judgment about GBS’s particular technology or business. We limit our decision to whether to allow booster stations to originate programming, using the equipment of any manufacturer.

⁵² See Comments of GBS at 1-4.

⁵³ *E.g.*, Reply Comments of Goldman Engineering Management, LLC at 2 (Goldman); Comments of Monroe Capital, LLC at 1. The Petition sought authorization for program origination for up to 5% of each broadcast hour. The record and our findings in this Order are based upon that limit.

⁵⁴ Although GBS and some other commenters contend an important benefit of the GBS proposal is that we can authorize program originating boosters through only a minor revision to one of our rules (Comments of GBS at 4; Comments of Shamrock Communications at 2), we disagree. We have set out in the Further NPRM a number of proposed revisions to our rules that we propose to require in order to have a rational and nondisruptive introduction of program originating boosters.

⁵⁵ Comments of BIA at 2-5. According to BIA, radio advertising is decreasing both in terms of overall growth and local market share. Reply Comments of BIA at 2; Comments of JAM Media Solutions at 1. *See* Comments of Shamrock Communications at 1 (new revenue will help small market stations compete with streaming, satellite radio and social media).

⁵⁶ Petition at 13-17.

a BIA study determining that 91 percent of local retailers and 49 percent of national advertisers would put more advertising dollars into radio if program originating boosters were an option.⁵⁷ Among the economically favorable uses of program originating boosters that commenters anticipate is that a broadcaster might air simultaneous commercials from three different advertisers within three different portions of its market or, instead, air three versions of an advertisement from a single advertiser, including one in a different language.⁵⁸ GBS also argues that program originating boosters would be good for the overall economy because they would create jobs to install the boosters, generate the local content, and sell advertising focused on small businesses.

18. Oposing commenters disagree and speak to the negative impact that they believe program originating boosters could have on the advertising revenues of adopting stations as well as their competitors. They predict that program originating boosters will drive down advertising rates, resulting in reduced revenues for all stations, including stations that choose not to use the system, and thereby harm all stations' ability to serve the public with local news, information, and entertainment.⁵⁹ They claim that if one FM station in the market reduces its advertising rates by employing program originating boosters, all stations in that market may have to match the lower rates, including stand-alone AM stations that cannot adopt this FM technology.⁶⁰ Some are concerned that the lower advertising rates charged by program originating boosters will especially hurt small Class A FM broadcasters as well as minority-owned and women-owned broadcasters who operate in smaller markets. Some commenters predict that content origination over boosters "will be a deathblow to the radio broadcast industry" and "devastate local radio marketplace revenues across the US" by lowering advertising rates.⁶¹

19. Oposing commenters also challenge the Petition's premise that program originating boosters will create additional advertising sales for adopting stations to make up for lower, targeted rates. They argue there is no evidence that stations that charge businesses less to advertise to a smaller, more desirable subset of the broadcast area will be able to offset lost revenue by selling targeted ads to other subsets of that area.⁶² They also believe that adoption of targeted advertising would depress advertising rates because advertisers will seek to replace market-wide commercials with less expensive targeted

⁵⁷ BIA, Opportunity Assessment for Local Radio Stations with Zoned Broadcast Coverage (Nov. 20, 2018), submitted as Petition, Exh. D.

⁵⁸ 2022 Comments of Shamrock Communications at 2. Thomas J. Buono, founder of BIA, posits that instead of charging a single advertiser \$100 to cover the full market, a broadcaster could charge two advertisers \$70 each for two simultaneous ads aired on different program originating boosters serving different portions of the market and thereby generate combined revenue of \$140. 2022 Comments of Thomas J. Buono at 2. BIA refers to this pricing phenomenon as the "pizza theory," because buying a pizza one slice at a time is more expensive than buying the whole pizza at once but is a more affordable and less wasteful option for someone wanting only one slice. 2022 Comments of BIA at 4. Commenters also state that program originating boosters would create new opportunities for inclusion of radio stations in cross-media buys by advertising agencies. BIA states that radio spots can currently only be targeted based on listener age, demographics, and preferred format but that advertising agencies have expressed an interest in buying more radio spots if program originating boosters allow them to target by factors such as local topology, population density, commercial areas, and high-traffic thoroughfares. *Id.* at 4.

⁵⁹ 2022 Comments of State Broadcasters Associations at 2. *See* Comments of Rep. Mullin (boosters could destabilize the radio industry).

⁶⁰ 2022 Comments of Audacy at 20-21. *See* Ex Parte Comments of Senators Richard Blumenthal and Benjamin L. Cardin ("broadcasters would be encouraged, if not effectively forced, by advertisers to adopt such technologies and stand up new booster stations to segment their audiences. That would impose a substantial cost on small broadcasters, who would be required to spend money on new boosters and licensing fees for proprietary technologies — shifting scarce funds away from newsrooms and community resources.").

⁶¹ 2022 Comments of Press at 3-4.

⁶² Comments of Connoisseur Media and Neuhoff Communications at 4.

advertisements targeting the most desirable areas.⁶³ Some observe that many radio stations currently have excess inventory of advertising time and contend that increasing supply using program originating boosters will not bring in new advertisers.⁶⁴ Rather, they argue that when supply increases without demand growth, prices fall. Others fear that advertisers will try to leverage lower rates by choosing not to buy full-market ads from stations without boosters unless they match the lower rates offered by program originating boosters.⁶⁵ They believe that such forces could result in a “downward spiral” by introducing new pressure for FM stations to undercut one another to remain competitive.⁶⁶ Given the relationship between a station’s audience ratings and the advertising rates it can command, one commenter is concerned with how program originating boosters would interface with audience rating systems such as Nielsen’s Portable People Meters.⁶⁷

20. Several commenters are especially concerned that program originating boosters could harm stations in small markets that are embedded within or adjacent to large ones. They state that such stations rely on advertising from businesses within their own small markets and that their revenues would fall if program originating booster stations from larger adjacent markets begin to target the smaller areas.⁶⁸ They are concerned that those fringe area stations might be forced to lower their rates and to receive lower overall revenues in order to compete with the distant program originating booster stations.⁶⁹

21. Upon consideration of the record, we agree program originating boosters could further the public interest by enabling radio stations to seek new sources of revenue while providing audiences with hyper-local content. Program originating boosters could enhance the competitiveness of the overall FM radio industry by expanding the range of advertising opportunities available in the relevant geographic areas. We acknowledge the concern in the comments that program originating boosters could drive down advertising rates and thereby could negatively impact radio stations’ revenue, but we do not believe that this concern justifies rejecting the authorization of program originating boosters. We do not think it would advance the public interest for us to reject a new technology based on the fact that it could increase competition among FM stations for advertising revenue and thereby reduce advertising costs. Whether a broadcaster could recoup any lost revenues by selling more spots could vary from market to market and from station to station based on numerous factors. It would, therefore, be up to each broadcaster to weigh its own individual circumstances, market, and needs of its community of license to arrive at a voluntary decision of whether program origination on boosters, subject to our specified limitations, is suitable for its situation. We also reject the argument that program origination will not be voluntary because stations that would otherwise not adopt program originating boosters will allegedly be forced to do so in order to compete with lower advertising rates offered by those stations in a market that have adopted that technology.⁷⁰ We decline to allow such speculative concerns to persuade us to prohibit

⁶³ Comments of NAB at 7-8.

⁶⁴ 2022 Comments of Woof Boom Radio at 1.

⁶⁵ Joint Comments of Urban One, Inc., Davis Broadcasting Inc., Ohana Media Group, LLC, and Riverfront Broadcasting, LLC at 4-5 (Urban One).

⁶⁶ *Id.* at 5.

⁶⁷ 2022 Comments of Audacy at 22.

⁶⁸ Comments of Urban One at 5-6. Letter from Jeffrey D. Warshaw, Chief Executive Officer, Connoisseur Media, LLC, to Marlene H. Dortch, Secretary, FCC, RM-11854, at 4 (filed Oct. 13, 2022).

⁶⁹ 2022 Comments of Woof Boom Radio. For example, the New Jersey Association of Broadcasters predicts that New York and Philadelphia stations would use program originating boosters to sell advertising targeted at New Jersey audiences to the detriment of local New Jersey stations, and that the New Jersey stations would not be able to respond because they do not place strong enough signals over New York or Philadelphia. 2022 Comments of New Jersey Association of Broadcasters at 2.

⁷⁰ *See e.g.* Comments of NAB at 3, 8.

a new technology that offers significant public interest benefits, including increased competition, lower costs for consumers, and hyper-local content for listeners.

22. We also recognize commenters' concern that use of program originating boosters by competitors could affect a few markets differently due to geography and size, such as the example of small New Jersey stations located between the larger markets of New York and Philadelphia. But as noted above, these are speculative concerns that do not counsel in favor of denying regulatory relief given the benefits noted here. We thus decline to prohibit the rollout of a new optional technology solely to address speculations about concerns in one market, and the record contains no alternative suggestions. Additionally, the current absence of a definitive ratings method for including and/or distinguishing between audiences listening to programming originated over a booster versus the primary station is not a present concern. We would not expect ratings organizations to have developed methods for counting programming originated over boosters prior to our approval of such origination. We anticipate that market forces will cause ratings organizations to address such matters once program originating boosters are in regular use.

23. *Implementation Costs and Ownership Issues.* We find that the potential cost of implementing an effective network of program originating boosters is not an impediment to affording broadcasters the option to use this technology. We recognize adoption of program originating boosters is completely voluntary and may not be an attractive choice for some broadcasters. Commenters note even if booster use causes advertising revenues to increase, as supporters predict, those gains may be offset by increased costs. Commenters identify several potential costs associated with new boosters, and we agree that the cost of building and operating multiple boosters may be too significant for some broadcasters. In many ways, this concern is not different than the decisions that broadcasters routinely make about investment in technologies. Alpha Media USA, LLC (Alpha), licensee of WIIL(FM), which hosted GBS's Milwaukee tests, provides the most detailed information in the record about the costs broadcasters would confront. Alpha estimates that a broadcaster operating four boosters would incur initial costs of about \$51,000 and annual costs of about \$59,000 for infrastructure alone, which Alpha asserts would be beyond the reach of small and midsized stations.⁷¹ Other commenters identify additional expenses for the purchase of FM booster transmitting equipment, audio processors, additional content management systems to feed the secondary programming to the boosters, new sales software to handle sub-areas, additional sales staff to handle increased micro-volume, and sales staff retraining.⁷² One commenter thus questions how small station owners could realistically take advantage of program originating boosters when they currently barely afford much smaller expenses.⁷³

24. We acknowledge the concerns of commenters who fear they will be at a competitive disadvantage if they choose not to or are unable to make the large investment to implement program originating boosters, especially for the limited portion of the programming day they could be utilized under the proposal before us. We conclude this theoretical risk does not outweigh the potential public interest benefits outlined above. Such concerns about competitive disadvantage are merely speculation at this point. Additionally, the costs of new technologies tend to fall over time as they diffuse through a

⁷¹ Comments of Alpha Media USA, LLC at 2.

⁷² 2022 Comments of Audacy, Inc., Beasley Media Group, LLC, Cumulus Media New Holdings Inc., iHeart Communications, Inc., New York Public Radio, Salem Media Group, Inc. (Joint Commenters) at iv, 22. These parties earlier expressed concerns about substantial changes to a station's advertising sales chain, from proposal, to scheduling and placement, to billing and collection, imposing "non-trivial" costs likely beyond the means of all but the largest broadcasters. Joint Comments of Joint Commenters at 24.

⁷³ Zimmer believes that the GBS proposal would require stations to invest tens or more likely hundreds of thousands of dollars to cover the costs of infrastructure, licensing the technology from GBS, the permitting processes, and power bills. 2022 Ex Parte Comments of Zimmer at 2.

market and the scale of production increases. Therefore, concerns about the cost of implementation may be temporary in nature and otherwise do not counsel in favor of denying the regulatory action taken here.

25. Commenters concerned about the cost of implementing boosters also note that GBS is a single vendor with a proprietary technology and that even if GBS initially offers small broadcasters favorable terms when trying to gain a foothold in the market, it might offer unfavorable rates for late adopters.⁷⁴ In response to the NPRM's question of whether vendor financing would make the technology available to smaller broadcasters, including minorities and women, some say that it would not.⁷⁵ They argue that the Commission cannot enforce non-discriminatory financing terms. We note that our conclusions about program originating boosters are not tied to GBS's technology, and we do not limit broadcasters to use of the GBS system. Other solutions that comply with our interference rules may be options for broadcasters.⁷⁶ Accordingly, we find that concerns about GBS's status as a single vendor are not a basis to preclude the authorization of program originating boosters at this time.

26. In a similar vein, we have no reason to conclude that providers of program originating booster technologies will have a relationship with a broadcast licensee that is materially different from any other technology vendor. Nonetheless, we take this opportunity to emphasize that our existing broadcast ownership rules will continue to apply to licensees, including those that use program originating boosters, and that licensees will remain subject to the FCC's existing broadcast ownership rules, including our existing attribution rules.

27. *Minority and Female Broadcast Ownership.* We find the record does not provide clear evidence concerning a potentially unfavorable impact of program originating boosters on minority and female broadcasters specifically, and we therefore do not rely on this issue in reaching our conclusion. An underlying premise upon which GBS relies is that program originating boosters would be helpful to stations owned by minorities and women by creating more advertising opportunities in smaller markets.⁷⁷ This is a matter of commenter debate. For example, several members of Congress describe program originating boosters as potentially beneficial to minority-owned radio stations that could sell more advertising to small businesses that could advertise at lower costs, and to listeners that would receive more curated cultural content.⁷⁸ Similarly, former FCC Commissioner Andrew Barrett (Barrett) endorses the proposal, contending it would create significant advantages to broadcasters and businesses, especially for small Black-owned businesses that have been historically unable to afford broadcast advertising.⁷⁹

28. Other members of Congress are concerned that program originating boosters would disadvantage small broadcasters in rural communities and note those communities lack alternative communications infrastructure.⁸⁰ One commenter cautions that, even if program originating boosters

⁷⁴ Comments of Urban One at 5-6.

⁷⁵ *Id.*

⁷⁶ The Commission is not endorsing GBS's proprietary technology. Accordingly, we are not passing judgment on the merits of GBS's particular system, what prices it might charge, or any other GBS-specific concern raised in the comments. If there is significant interest in adopting program originating boosters, other businesses could enter the market and design their own solutions, and GBS recognizes this possibility. *See* Comments of GBS at 10.

⁷⁷ 2020 Reply Comments of GBS at 3-4.

⁷⁸ Comments of Reps. Johnson, Thompson, Lee, Brown, Beatty, Carter, Davis, Cleaver, Swalwell, and Scott; Comments of Reps. Horsford and Thompson.

⁷⁹ Comments of Andrew Barrett at 2. Barrett states that the plight of Black businesses was discussed often when he was a Commissioner and that he views program originating boosters as a solution.

⁸⁰ Comments of Reps. Duncan, Hudson, Upton, Pence, Johnson, Dunn, McKinley, Lesko, Long, Walberg, Griffith, Carter, and Bucshon.

were to make existing minority-owned stations more profitable, they would not increase diversity of ownership because they would not bring new entrants into the market.⁸¹ Some minority and female-owned licensees argue that program originating boosters would actually hurt minority broadcasters by lowering advertising revenue, making it harder for new entrants to be viable, and further “slicing up the pie” of potential revenue,⁸² though we note that one of these licensees previously expressed its support for the proposal.⁸³ There is concern that declining spot rates will hurt small Class A FM broadcasters as well as minority-owned and women-owned broadcasters who operate in smaller markets.⁸⁴ Specifically, they contend that smaller, minority-owned and woman-owned radio stations would suffer disproportionately because they would have to either (1) bear significant new costs to adopt the technology or (2) not adopt the technology but nevertheless sell their market-wide ads at lower prices to match those of program originating booster stations that target smaller areas.

29. As discussed previously, the impact of program originating boosters will vary from market to market. As with the overall impact, the potential effect on stations owned by minorities and women is based on theoretical competitive effects that are currently speculative and, when weighed against all other considerations noted here, is not a consideration that counsels against the relief provided here. We thus decline to rely on this factor in reaching our decisions today.

30. *Noncommercial Stations.* We will allow full-service noncommercial educational FM (NCE) and LPFM stations to implement program originating boosters in addition to commercial stations. Although most commenters focus on the potential for commercial FM stations to originate programming over boosters, some see similar opportunities for NCE and LPFM stations. These commenters assert that program originating boosters could attract more underwriters,⁸⁵ or originate targeted underwriting acknowledgements and local announcements for school closings and hyper-local weather.⁸⁶ Others question why a noncommercial station would be interested in this technology.⁸⁷

31. We believe program originating boosters would primarily be of interest to commercial FM stations by providing them with new options for selling advertising. Because NCE and LPFM stations are not permitted to air commercials and generally have fewer resources for start-up costs, they would likely find program originating boosters of lesser benefit.⁸⁸ Nevertheless, we recognize that some noncommercial stations might use program originating boosters to attract new underwriting from local

⁸¹ Comments of REC at 14-16.

⁸² See e.g. Comments of Urban One at 3. These comments were jointly filed on February 10, 2021 with Davis Broadcasting Inc., Ohana Media Group, LLC, and Riverfront Broadcasting, LLC. See also Comments of Small Radio Broadcaster Coalition at 2.

⁸³ See Letter from Karen Wishart, Chief Administrative Officer, Urban One, to Marlene H. Dortch, Secretary, FCC, RM-11854 (filed May 4, 2020) (previously arguing before changing its position that geo-targeting presents a “means of advancing diversity of broadcast ownership” and that GBS’s “proposed change in the booster rules” is “certainly worthy of adoption”).

⁸⁴ 2022 Comments of Press.

⁸⁵ Comments of WAY-FM at 1.

⁸⁶ Comments of REC Networks at 12; Comments of Radio By Grace at 1.

⁸⁷ NAB, Notice of Ex Parte Communication (Sept. 22, 2022) at 6 (“It strains credulity that any of these stations could possibly attract enough underwriters to fund a ZoneCasting play,” and noting that National Public Radio has opposed the proposal).

⁸⁸ Section 399B of the Communication's Act of 1934, as amended, (Act) and section 73.503(d) of our rules proscribe noncommercial stations from broadcasting announcements which promote the sale of goods and services of for-profit entities in return for consideration paid to the station. However, contributors may receive on-air acknowledgements.

businesses. Use of program originating boosters might also enable stations associated with educational institutions to personalize short portions of their content to students at different campuses. Accordingly, we will make program origination over boosters an option for all FM radio stations, whether commercial or noncommercial, as well as LPFM stations.

b. Consumer Impacts

32. We conclude that program originating boosters may provide tangible benefits for advertisers and consumers in addition to the benefit of potential revenue opportunities for broadcasters that we already identified. Program originating boosters will provide advertisers with better opportunities to direct their messages at the listeners they want to reach. They also hold the potential to provide listeners with more relevant advertising and targeted information.

33. The record indicates that program originating boosters would benefit listeners by delivering content that is more relevant and engaging. One Arizona broadcaster whose market population is 7.8 percent Native American comments that it plans to use program originating boosters to reach that community, which it says is largely ignored in programming directed to the market as a whole.⁸⁹ Others note that small businesses in areas with vibrant minority communities may view program originating boosters as an opportunity to tailor messages to interests and languages of those communities.⁹⁰ Commenters also identify geo-targeted ads as particularly useful for political advertising because a radio station's contour may contain many election districts but a candidate's message may only be relevant to one of them.⁹¹ Organizations representing minority and female station owners focus on the benefits to those communities. They believe that program originating boosters would enable smaller broadcasters to innovate, better serve their local constituencies with relevant content, and compete more effectively with larger national broadcasters.⁹²

34. Commenters claim program originating boosters will have a similar positive impact on minority business and advertisers. If they result in lower advertising rates to reach subsets of an existing market, program originating boosters may allow minority businesses that are currently priced out of the radio advertising market to run new advertisements and reach new targets.⁹³ The most recent filings in this proceeding, *i.e.*, *ex parte* submissions from 2023, focus on this potential benefit of the proposal.⁹⁴

35. The record also contains comments arguing that program originating boosters could have a negative impact on minority communities. Commenters raise a concern that targeted programming or advertising could result in intentional or inadvertent socio-economic "redlining."⁹⁵ Some argue that

⁸⁹ 2022 Comments of Flagstaff Radio, Inc. at 2.

⁹⁰ Comments of Emmis Communications at 1.

⁹¹ Comments of Shainis at 1.

⁹² See Comments of Future Visions Entertainment, LLC at 1; Vision Multimedia Group LLC, Ex Parte Comments (Aug. 29, 2022) at 1. Commenters also state that program originating boosters are better able to target different demographics and would, thus, create new opportunities for inclusion of radio stations in cross-media buys by advertising agencies. See *supra* n. 58 for demographic factors identified in the 2022 Comments of BIA.

⁹³ See Comments of Reps. Johnson, Thompson, Lee, Brown, Beatty, Carter, Davis, Cleaver, Swalwell, and Scott.

⁹⁴ See, e.g., Ex Parte Comments of U.S. Black Chambers, Inc. (Dec. 1, 2023); Ex Parte Comments of Benjamin F. Chavis (Nov. 8, 2023); Ex Parte Comments of International Black Broadcasters Ass'n (Nov. 7, 2023).

⁹⁵ See Rev. Dean Nelson, How 'zonecasting' could harm minority neighborhoods, The Hill (Mar. 9, 2021) submitted with Comments of iHeart Media (Oct. 14, 2021). Redlining, is a term used when private or public actors limit or deny services to poor or minority communities. It occurred most frequently in the 1970s when banks and financial institutions marked up maps with red lines around neighborhoods that they deemed undeserving of loans and insurance coverage.

stations could perpetuate stereotypes by assuming that hyper-local news and public affairs programming about minority-related issues are only of interest within a zone populated primarily by minority groups and that people in the minority-populated zone do not travel in and out of the zone in the course of daily activities.⁹⁶ Others argue that geo-targeting would make it easier for advertisers to discriminate based on the location of listeners, even if the discrimination is unintended.⁹⁷ For example, these commenters are concerned that geo-targeting is likely to marginalize minority and low-income communities by giving advertisers a new way to avoid advertising to them.⁹⁸ Such commenters say that advertisers would have the means and motivation to serve more “desirable” areas and to overlook other neighborhoods or niche markets.⁹⁹ Some parties note this is particularly problematic in light of the fact that minority communities rely heavily on broadcasting for news and other information.¹⁰⁰ BIA, however, contradicts these arguments, stating it was unable to find any documentation of redlining by any other local media offering geo-targeted advertising.¹⁰¹ GBS responds that broadcasters will not ignore portions of the market because program originating boosters can only result in more, not less, content.¹⁰²

36. The Commission has long recognized the public interest benefits of hyper-local content, such as when it created the LPFM service.¹⁰³ We conclude that allowing limited adoption of program origination on boosters may expand the availability of hyper-local service. In reaching our conclusion to allow program originating boosters, we have given careful consideration to the concerns of commenters that such boosters can be used to disadvantage certain communities or geographic areas. We rely on BIA’s unrebutted research finding that the business and academic literature contains no documentation of redlining by any other local media offering geo-targeted advertising. The record contains no evidence of factors unique to radio broadcasting that would cause radio-specific redlining by advertisers or licensees of program originating booster stations. However, while we appreciate GBS’s suggestion that broadcasters have every economic incentive to serve all parts of their service area,¹⁰⁴ we will continue to actively monitor the marketplace to ensure these stations are not used to disadvantage particular communities or locations.

3. Testing and Potential Interference.

37. We conclude that program originating boosters offer significant benefits that outweigh the interference concerns raised in the record. We recognize, however, that the question of whether program originating boosters will cause interference has been of concern among commenters in this proceeding. As is discussed in greater detail below, the record demonstrates the main interference concern posed by program originating boosters is interference to the primary station. Based on the record

⁹⁶ Comments of Alaska Association of Broadcasters at 5-6.

⁹⁷ Comments of NAB at 15.

⁹⁸ Comments of Connoisseur at 8. *See* Ex Parte Comments of Senators Richard Blumenthal and Benjamin L. Cardin (“Geographic targeting of advertisements creates a foreseeable risk that certain neighborhoods or communities will not receive ads for employment, education, and other economic opportunities. We also fear that broadcasters who have invested in building listenership in lower income communities could be punished by such proposals if advertisers shift their spending toward more lucrative audience segments.”).

⁹⁹ Comments of WBR at 2. Comments of Audacy at 27 (advertisers will use geo-casting to target zones that are perceived as more valuable, *i.e.*, “Gold Coast neighborhoods” leaving less desirable zones ignored and unsold).

¹⁰⁰ Ex Parte Comments of Reps. Clark and Soto; Ex Parte Comments of Reps. Cárdenas and Horsford.

¹⁰¹ 2022 Comments of BIA at 5.

¹⁰² Comments of GBS at 14-15.

¹⁰³ *See LPFM Order*, 15 FCC Rcd at 2208, para. 4.

¹⁰⁴ Comments of GBS at 6-7; 2022 Reply Comments of GBS at 6-7.

in this proceeding, adjacent channel interference is not a significant concern. We find the test record has shown that properly engineered program originating boosters can be implemented without causing harmful interference. Moreover, our decision to limit program origination to three minutes per hour combined with the economic incentive broadcasters have to minimize self-interference will help to reduce any ongoing risk of interference. We will continue to monitor concerns about interference as broadcasters adopt program originating boosters and will revisit this issue if we receive reports of widespread interference.¹⁰⁵

38. Concerns of potential interference from FM boosters is neither a new concern nor limited to the current proceeding. When the Commission increased the power of FM boosters to their current levels in 1987, it was particularly concerned that boosters not cause interference to co-channel and adjacent channel full service stations.¹⁰⁶ The Commission originally proposed to address this concern by establishing interference protection standards based on desired to undesired signal ratios of co-channel and adjacent channel stations to that of the booster.¹⁰⁷ Ultimately, however, the Commission adopted the current standards in order to minimize the administrative burden on licensees and its own resources.¹⁰⁸ Under those standards, a booster's signal must be at least 6 dB less than the signal of a first-adjacent channel full-service station.¹⁰⁹ There are no protection requirements for co-channel, second-adjacent channel, or third-adjacent channel stations. An FM booster station is allowed to cause "limited interference" to its primary station's signal provided it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the primary station's principal community of license.¹¹⁰

39. Commenters' interference concerns fall within four general categories: (1) adjacent channel interference to stations licensed to others; (2) co-channel, self-interference that a booster might cause to its own primary FM station (or to another booster rebroadcasting that primary station); (3) interference to EAS alerts; and (4) interference to HD Radio transmissions. We analyze separately each of these interference scenarios.

40. *Adjacent Channel Interference.* The test reports and the record as a whole do not contain any evidence that allowing boosters to originate programming increases their risk of generating adjacent channel interference.¹¹¹ Existing booster stations have not created adjacent channel interference concerns because booster station signals must be contained within the coverage area of the primary station. Potential interference from the booster to adjacent channel stations is substantially masked by the higher power co-channel signal from the primary station. Using the booster to originate programming will not change this interference scenario. Our experience with boosters over many years has demonstrated our existing booster rules, including the requirement in section 74.1204(i) for a booster's signal to be at least

¹⁰⁵ A few commenters also expressed concern about the impact of program originating boosters on the overall noise floor in the FM band. See Reply Comments of the New York State Broadcasters Ass'n at 3-4; Alaska Broadcasters Comments at 7. We believe our decision to impose a cap on the number of boosters each broadcaster can own will minimize this issue. See *infra* para. 81. We seek further comment on the details of that cap in the Further Notice.

¹⁰⁶ See *Amendment Concerning FM Booster Stations*, Report and Order, 2 FCC Rcd 4625 (1987) (*1987 Booster Report*). We note that one of the rules concerning booster power, 47 CFR § 74.1235(b), misspells the word "radial", and we have corrected that rule herein. See Appendix B.

¹⁰⁷ *Id.* at 4626, para. 10.

¹⁰⁸ *Id.* at 4629-30, paras. 26-34.

¹⁰⁹ 47 CFR § 74.1204(i).

¹¹⁰ *Id.* § 74.1203(c).

¹¹¹ The record also does not contain any reports of complaints from adjacent channel stations during the tests.

6 dB less than the signal of a first-adjacent channel full-service station¹¹² and our framework in section 74.1203 to address claims of actual interference caused by boosters,¹¹³ provide adequate protection to ensure boosters do not cause adjacent channel interference. As an additional safeguard, we find it imperative to adopt a notification requirement so that the Commission and interested parties are able to identify which booster stations are originating content, which will allow us to address more quickly any reports of interference or other issues that may arise through the introduction of program originating boosters.¹¹⁴ Therefore, we conclude program originating boosters will not create a risk of adjacent channel interference.

41. The limited number of comments in the record that address adjacent channel interference support our conclusion that program originating boosters will not cause harmful interference to first-adjacent or second adjacent channel stations.¹¹⁵ Those comments also note that the Commission's existing rules already provide interference protection to adjacent channel stations.¹¹⁶ GatesAir, a booster manufacturer, argues that booster technology has improved so substantially since creation of the service that existing booster interference rules are no longer necessary.¹¹⁷

42. The NPRM sought comment on whether we should impose second adjacent channel interference protections for program originating boosters.¹¹⁸ However, replacing the primary station's programming with booster-originated programming does not change the technical characteristics of the signal the booster transmits. Factors such as the frequency, modulation and bandwidth occupancy of the booster's signal, all of which could impact an adjacent channel station, should not change. We therefore conclude that program origination by itself will not increase the likelihood of adjacent channel interference. We also note that program originating boosters are subject to the same technical rules which already provide protections against adjacent channel interference. As a secondary service, boosters must protect full-service stations and previously authorized secondary service stations from any interference.¹¹⁹ We therefore conclude we do not need to impose any protection for second adjacent channel interference. The NPRM also asked whether we should adopt any changes to section 74.1204(i) of our rules to better protect first-adjacent channel stations.¹²⁰ Consistent with our analysis of second adjacent channel interference, we are confident that our existing rule requiring booster applicants to site their stations so that the signal of a first adjacent channel station exceeds the signal of the booster by 6 dB will prevent broadcasters from implementing program originating boosters that will cause first adjacent channel interference.¹²¹

43. REC asserts that existing rules requiring the booster to remediate interference would be of little help if a well-funded primary station employing boosters fails to respond to a pre-existing,

¹¹² 47 CFR § 74.1204(i).

¹¹³ 47 CFR § 74.1203.

¹¹⁴ In the accompanying Further NPRM, we seek comment on the details of this notification requirement as well as whether any adjustments to section 74.1203 are appropriate in the context of program originating boosters.

¹¹⁵ See, e.g., Comments of GBS at 4.

¹¹⁶ *Id.* at 11.

¹¹⁷ GatesAir specifically references technology that it developed in partnership with GBS and which it says is used in 13 markets. Comments of GatesAir at 2-3.

¹¹⁸ NPRM at 5.

¹¹⁹ 47 CFR § 74.1203(a)(3). If interference to a primary or pre-existing station occurs, an FM booster must eliminate the interference or cease broadcasting.

¹²⁰ NPRM at 6.

¹²¹ *Id.* § 74.1204(i).

adjacent channel LPFM with superior rights because the LPFM licensee has more limited resources to pursue the matter.¹²² We note that the Commission has recently updated its interference complaint process, and we believe these procedures are effective, even for stations with limited resources, and will be sufficient to address this concern.¹²³ But as noted above, we will continue to monitor concerns about interference as broadcasters adopt program originating boosters and will revisit this issue if necessary.

44. *Co-Channel Self-Interference.* Based on our review of the test reports and the extensive record on self-interference, we conclude broadcasters can implement program originating boosters without harmful interference to the public's ability to receive the primary station outside the booster's coverage area. As is discussed in detail below, the record reflects competing views of the potential for self-interference. Based on our detailed review of the record, we conclude there are viable options for broadcasters to minimize self-interference. Moreover, we believe broadcasters have a strong economic incentive to engineer program originating boosters to reduce any potential for self-interference. We further limit the potential for interference by limiting program origination to only three minutes per hour.

45. Due to the fact that boosters operate on the same channel as the primary station and within the primary station's coverage area, there always is a risk of self-interference. Our rules currently take this into account and permit a booster to cause "limited interference" to its primary station provided it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the principal community of its primary station.¹²⁴ In the NPRM, we sought comment on whether this rule is sufficient to address self-interference concerns associated with program originating boosters and whether broadcasters are sufficiently incentivized to address such concerns.¹²⁵ We focus, as commenters have, on the question of whether the interference zone between the booster and its primary station creates an unacceptable level of self-interference. We credit GBS's argument that program originating boosters can be configured to ensure that any such interference will be brief and that broadcasters have a business incentive to avoid more than a limited amount of self-interference.¹²⁶

46. The record and GBS's tests focus primarily on the question of self-interference. In its most recent set of comments, GBS contends that the San Jose and Jackson tests demonstrate the efficacy of program originating boosters in flat and hilly settings, rural and urban areas, with analog and digital signals.¹²⁷ GBS reports there can be some limited "signal instability"¹²⁸ or interference but that there are no "dead zones." Although GBS's comments on the San Jose and Jackson tests acknowledge a limited amount of self-interference in transition regions between boosters and the primary station, GBS argues

¹²² 2022 Comments of REC at 8 and 10; 2022 Ex Parte Comments of REC at 3. *See also* Comments of NAB (agreeing that program originating boosters should be required to protect previously authorized secondary stations).

¹²³ *See* 47 CFR § 74.1203(a)(3).

¹²⁴ *Id.* § CFR 74.1203(c).

¹²⁵ NPRM para. 13.

¹²⁶ Comments of GBS at 6-7; 2022 Reply Comments of GBS at 6-7. *See also* Comments of Wennes Communications Stations, Inc. at 1.

¹²⁷ The different environments in which GBS conducted these tests is important because hilly areas have natural terrain shielding and, similarly, signal propagation in urban areas is affected by buildings. In contrast, flat and rural areas lack the features that can be used to contain signal propagation.

¹²⁸ GBS uses the phrase "signal instability" rather than interference because it defines interference as an "effect of unwanted energy" whereas a broadcaster engaging in geo-casting is transmitting two signals that it wants to be received. *See* Jackson Test Report at 3.2; GBS Ex Parte Notice (Apr. 12, 2022) at 50. Accordingly, GBS does not consider any performance degradation, misinterpretation, or loss of information by program originating boosters to be interference because it is caused by energy that is wanted by the broadcaster. *Id.* We disagree and use the term interference to describe any situation where one transmission degrades the signal of another.

that the size of the transition region is entirely within the control of the broadcaster and can be designed to be small, infrequent, transitory, and unobjectionable.¹²⁹ GBS contends that noticeable interference would mean the broadcaster erred in designing the system, and such an error would be rare because broadcasters would not place their businesses at risk with bad signal quality.¹³⁰ GBS further argues that interference areas only appear during the short time intervals each hour when different content is broadcast in the booster zone. GBS thus contends that originating programming on boosters is technically sound. Supporters of program originating boosters, including several groups that retained their own engineering consultants to review the San Jose and Jackson test results, agree that the tests' methodology, analysis, and conclusions are sound.¹³¹ Those commenters are satisfied that the tests were designed to reflect the full range of features that broadcasters may encounter.¹³²

47. However, many commenters reject GBS's assertions, and are concerned that self-interference might diminish the audience experience and lead to listeners becoming frustrated, tuning away, and suspecting that their car radios are defective.¹³³ These comments focus primarily on the concern that the tests were optimized to avoid showing interference and inadequate by omitting critical scenarios. As a result, some commenters fear dramatic long-term consequences such as listeners abandoning broadcast radio altogether and/or car manufacturers no longer including radios as standard equipment.¹³⁴ Even commenters that do not completely oppose the Petition urge the Commission to proceed cautiously and to require further testing.¹³⁵

48. NAB contends that the tests were not objective but rather were designed to put the system's "best foot forward" and "to cover up the blemishes."¹³⁶ NAB identifies what it views as numerous problems at each test location, argues that the tests leave critical questions unanswered, and claims that GBS's tests, including the most recent ones in San Jose and Jackson, are not "a reasonable simulation of what would be expected under normal or common conditions."¹³⁷ Critiques of the tests in Salt Lake City highlight they did not consider mobile receivers and involved boosters that were separated

¹²⁹ GBS Ex Parte Presentation (Apr. 12, 2022). Specifically, GBS states that altering the distance between an FM booster and the border of a zone reduces the respective transition area. Jackson Test Report at 2.

¹³⁰ For example, GBS states that transition areas frequently can be designed to fall over water or in unpopulated areas without roads, as was done in Jackson. Jackson Test Report at 4.

¹³¹ Those supporters that retained engineers include the National Association of Black Owned Broadcasters and the Multicultural Media, Telecom and Internet Council.

¹³² For example, BIA, which states that it has 38 years of experience in the broadcast industry, describes as "reasonable and compelling" the conclusion of the test reports that program originating boosters work from a technical perspective and from an audience perspective. 2022 Comments of BIA at 6.

¹³³ See, e.g., Comments of NAB at 18-19; Comments of Alaska Broadcasters Association at 8; Comments of Xperi at 7; Comments of Ron Zlotnick at 2.

¹³⁴ See, e.g., Comments of NAB at 20.

¹³⁵ 2022 Comments of Xperi at 4-5.

¹³⁶ 2022 Comments of NAB at 2. NAB more recently characterized this as the tests being conducted in "cherry-picked testing environments" that were "carefully designed to produce only positive results, and that do not simulate real-world conditions." 2022 Comments of NAB at 3 and 25. See also 2022 Comments of the Joint Commenters at 4-10.

¹³⁷ 2022 Comments of NAB at 5. For example, NAB questions what a listener would experience travelling near or along the intersection between two zones while the primary station and booster are airing different content, and how stationary listeners located in homes near this intersection would be impacted. It also asks how geo-casting would impact radio listening beyond the small listening area tested and impact listeners travelling away from the primary signal on the far side of a booster. 2022 Comments of NAB at 23.

by terrain, with little or no overlap between the boosters and the main signal.¹³⁸ A similar analysis of the Milwaukee tests notes GBS did not disclose underlying data such as vehicle speed and tested only west-to-east routes.¹³⁹ Commenters also dispute GBS's characterization of an interference zone in Milwaukee as minimal based on the ability of listeners to move through that area (of a few city blocks) within about 15 seconds. The analysis argues that 15 seconds of interference represents fully half of a typical 30-second message, and would be especially significant if the message contained emergency information.¹⁴⁰ Commenters note that the San Jose test reveals that a listener traveling an ideal, terrain shielded route at 10 mph would be subject to interference for more than 11 seconds and that for stations without natural terrain shielding like that in the Jackson test, a listener travelling at 20 mph would suffer a disruption for an average of 8 seconds, with many exceeding 16 seconds and some longer than 20 seconds.¹⁴¹

49. Although GBS conducted the San Jose and Jackson tests to address issues raised in response to the earlier tests, opponents continue to cite objections to the methodology used and the test results. NAB and NPR characterize the test results as misleading because the potential for interference in the test areas was limited by natural terrain shielding and low population.¹⁴² They also argue that the tests only examined back-to-back boosters located very close to a highway¹⁴³ (instead of larger, more realistic travel zones), measured the system's performance only on very small portions of the roadways, and tested for interference only to cars travelling at high speeds along the most ideal driving routes. NAB contends that this methodology constrains the resulting interference and fails to recognize predicted interference in large regions outside the small test area. Moreover, it argues that GBS should have conducted listener studies with actual measurements, but instead used hypothetical thresholds to estimate the degradation of sound quality. NAB states that, at best, cars traveling at 60 mph could experience outages for up to 7 seconds and, at worst, cars stuck in traffic and crawling in bad weather could lose coverage for long periods, which they argue would be dangerous. Thus, it argues that the tests are an attempt by GBS to skew the record by submitting only glowing results for extremely circumscribed, specifically engineered situations and claiming those results to be representative of all circumstances. GBS responds that the criticisms of its tests are baseless.¹⁴⁴

50. NPR analyzed the impact of GBS's technology on audio fidelity of the primary station's broadcast. Their report focuses on subjective listening evaluations of the audio captured in the interference zone between the booster and the primary station. NPR concludes "that listeners respond

¹³⁸ Comments of Joint Commenters at 4-5.

¹³⁹ *Id.* at 10, n.25.

¹⁴⁰ *Id.* at 18.

¹⁴¹ 2022 Reply Comments of NAB at 9-10. Four engineers who work for the Joint Commenters previously worked with GBS to design the tests. However, they are now critical of how the tests were carried out and say that the San Jose and Jackson tests did not take measurements that they recommended and considered vital. Ex Parte Comments of John D. Kennedy, *et. al.* (Sept. 1, 2022) at 2-3. For example, they say that the tests did not consider whether the boosters caused interference to the main station's actual signal, but rather only whether there was interference to the main station's programming as simulcast on one of the boosters included in the test. *Id.* GBS conducted its tests using paired boosters—one retransmitting the primary station and one originating content. These engineers contend the test should have looked for interference to the primary station's signal rather than the signal rebroadcast on one of the two paired boosters.

¹⁴² 2022 Comments of NAB at 16-17 and 22; 2022 Comments of NPR at 5-7.

¹⁴³ NAB characterizes the locations as an attempt to "stack the deck" by placing back-to-back, highly directional antennas right on top of where the measurements were made. 2022 Comments of NAB at 15.

¹⁴⁴ For example, GBS states that it is true that the tests were designed to avoid listeners traveling tangentially or diagonally to a transition area but submits that is a good outcome, consistent with the Commission's rules. 2022 Comments of GBS at 6-7.

extremely negatively to ZoneCasting™ interference” to the extent it occurs with somewhere between 71% and 91% of listeners indicating they would change the station rather than listening to the interference.¹⁴⁵

51. Although opponents raise a long list of concerns about all the tests GBS conducted, we are persuaded that the self-interference concerns raised in the record are not sufficient to bar the use of program originating boosters. GBS has tested various aspects of the performance of program originating boosters in five markets under a variety of conditions. The multiple test reports show that program originating boosters work well under the varied, but not exhaustive, circumstances presented in those tests. In 2023, GBS also notes that geo-casting is being used in India. The record contains no specific details or test data about that deployment, but we note that the record also does not contain any mention of interference experienced by listeners or stations there or what standards that government applies to address any such interference. While we recognize some commenters have raised concerns about self-interference, we believe it is ultimately the decision of individual broadcasters to determine whether or not the purported benefits of program originating boosters are worth causing self-interference.¹⁴⁶ In evaluating the record, we agree that broadcasters implementing program originating boosters have an economic incentive to properly engineer their systems to maintain the quality of their primary signal and minimize interference.¹⁴⁷ Furthermore, under the rules we adopt today, boosters may originate programming for only a small percentage of the listening hour, which substantially reduces any potential for harmful interference from a booster’s airing of programming different from that of the primary station.

52. To further reduce the risk of self-interference, we will apply section 74.1203(c) to program originating boosters with a clarification and an amendment. Section 74.1203(c) addresses interference from a booster to its primary station. A booster is permitted to cause “limited interference to its primary station’s signal” but may not “disrupt the existing service of its primary station” or cause any interference “within the boundaries of the principal community of its primary station.”¹⁴⁸ In the NPRM, we sought comment on whether this existing rule is sufficient to address any concern with self-interference¹⁴⁹ and on other changes to our booster station rules necessary to enable geo-targeting.¹⁵⁰ GBS favors retaining section 74.1203(c) without change based on its interpretation that the rule permits stations to deploy program originating boosters anywhere within the primary station’s service contour so long as doing so would result in no more than limited self-interference.¹⁵¹ Kirchner Broadcast Services offers a different interpretation, arguing that the rule necessarily prohibits program originating boosters because they transmit content different from that of the primary station and could be deployed within the principal community of the primary station.¹⁵² We reject the view that a booster’s transmission of

¹⁴⁵ 2022 Comments of NPR at 8.

¹⁴⁶ Broadcasters also assert the introduction of program originating boosters will harm the overall radio industry. *See e.g.* Comments of NAB at 19-20 (“[B]roadcasters have global concerns that any interference, including ‘self-interference,’ will reflect negatively on FM radio service and spur listeners to change to a plethora of competitors. Nothing less than the reputation of FM radio service is at stake . . .”). We believe broadcasters have a strong economic incentive to avoid self-interference and other problems that could prompt listeners to turn to other sources of information and entertainment.

¹⁴⁷ Comments of GBS at 6-7; 2022 Reply Comments of GBS at 6-7; Comments of Wennes Communications Stations, Inc. at 1.

¹⁴⁸ *Id.* § 74.1203(c).

¹⁴⁹ NPRM para. 13.

¹⁵⁰ *Id.* paras 1, 4, 10, 18.

¹⁵¹ *See* GBS Aug. 11 2022 ex parte at 2; GBS March 2021 Reply Comments at n.3.

¹⁵² *See* Comments of Kirschner Broadcast Services, LLC at 2-3.

programming different from that of the primary station, for only three minutes per hour, qualifies as interference with or disruption to the existing service of the primary station. That view does not account for the limited duration of booster-originated programming or for the public interest benefits of that programming. Furthermore, listeners in the booster's coverage area would still receive the programming intended by the broadcaster. At the same time, we also reject GBS's view that section 74.1203(c) permits a booster to produce "limited interference" even within the boundaries of the principal community of its primary station. The rule as written states that even with respect to the permissible "limited interference," the booster cannot "cause such interference within the boundaries of the principal community of its primary station." In light of these findings, we clarify that a booster's limited origination of programming does not cause interference into or "disrupt the existing service" of the primary station solely because it originates programming different from that of the primary station. We also amend the rule to eliminate the specific prohibition on interference within the primary station's principal community as applied to program originating boosters. As we noted elsewhere in this Report and Order, we believe broadcasters have a sufficient economic incentive to avoid self-interference, and that negates the ongoing need for this restriction as applied to program originating boosters. Furthermore, retaining the restriction would impede the voluntary deployment of program originating boosters, and the corresponding public interest benefits, in cases where even a well-engineered transition zone were located within the primary station's principal community. However, we retain the requirement that all boosters may provide only "limited" interference to emphasize that we expect booster stations to minimize their impact on their primary station wherever possible. While we believe broadcasters will have every incentive to comply with that standard, we will not hesitate to address non-compliance when poorly engineered program originating booster systems result in unduly large transition zones or otherwise cause excessive interference.

53. *EAS Compatibility.* To ensure that listeners to program originating boosters receive timely emergency alerts, we will require program originating boosters to receive and broadcast all emergency alerts in the same manner as their primary station. We codify this requirement by amending section 11.11 of the Rules.¹⁵³ As the San Jose and Jackson tests demonstrated, constructing a program originating booster with full EAS capability is the best way to ensure those stations deliver emergency messages to listeners. Moreover, this requirement is consistent with the approach that GBS and its supporters used to demonstrate the compatibility of program originating boosters and the EAS.

54. Consistent with our findings about overall interference from program originating boosters, we conclude these stations can be implemented without causing harmful interference to the EAS. The San Jose Test Report and Jackson Test Report document successful reception of EAS tones from both the primary station and the program originating booster. The record does not contain any evidence that the booster's substitution of programming caused a dead zone unable to receive an emergency alert. Nor has any commenter presented definitive evidence that program originating boosters are incompatible with the EAS. In light of the significant concerns that interested parties have expressed about the EAS, and the importance of the EAS to public safety, we will carefully monitor the implementation of program originating boosters and may revisit this issue if commercial operations result in reports of interference.

55. In the San Jose and Jackson tests, both the primary station and at least one program originating booster were equipped to broadcast an emergency alert.¹⁵⁴ In the San Jose test, GBS demonstrated that the program originating booster switched from its own programming to the appropriate EAS alert tone. In addition, the test demonstrated simultaneous reception of the EAS tone from both the primary station and the program originating booster.¹⁵⁵ GBS replicated these results in its Jackson test.

¹⁵³ See Appendix B.

¹⁵⁴ San Jose Test Report at 34; Jackson Test Report at 37-38.

¹⁵⁵ San Jose Test Report at 34-35.

Again, radios in separate locations successfully received the EAS tone from both the primary station and the program originating booster.¹⁵⁶

56. In addition to the concerns expressed above that the San Jose and Jackson tests were optimized and inadequate,¹⁵⁷ opponents also argue that the interference zones between the primary station and the program originating booster could be significantly larger than is shown in the test reports.¹⁵⁸ Larger zones of interference could have a greater impact on the EAS. Commenters also express concerns that individuals crossing an interference zone at a slower rate (which may be likely during an emergency situation when traffic would be heavier), could experience longer interruptions to emergency alerts.¹⁵⁹ One commenter cautions that the proponents of program originating boosters have not addressed “the significant technical and engineering risks, that are still unknown, as they relate to the incredibly important Integrated Public Alert and Warning System (IPAWS) and [EAS].”¹⁶⁰ NPR questioned whether the insertion of an emergency alert for the booster would add complexity, “thereby increasing the risk of errors and malfunctions during alert messages.”¹⁶¹ FEMA and other commenters called for additional testing of GBS’s technology to determine the potential impact on EAS.¹⁶²

57. GBS counters that its tests used standard industry configurations, represented a real-world environment, and demonstrated conclusively that an emergency signal would override any booster-originated programming and allow a program originating booster to fulfill its obligation, “to transmit national level EAS messages and required tests.”¹⁶³ Meintel, Sgrignoli & Wallace, LLC (MSW) were hired by supporters to analyze the San Jose and Jackson tests. MSW concludes, “[t]he EAS signal operated as normal and [was] re-transmitted appropriately by the FM Boosters. The tests demonstrate that no adverse impacts to EAS operations should be experienced.”¹⁶⁴ A consultant hired by GBS states that when the EAS equipment at the primary station is activated, all broadcasts, whether from the primary or the booster, are overridden.¹⁶⁵ He believes that program originating boosters will not harm EAS signals because the signals and data contained within the EAS tones would override any booster-originated content before it is delivered to the booster.¹⁶⁶

58. Based on the San Jose and Jackson tests, we conclude program originating boosters can

¹⁵⁶ Jackson Test Report at 37-39.

¹⁵⁷ *See supra* paras. 47-48.

¹⁵⁸ *See e.g.* 2022 Comments of NAB; 2022 Comments of Press.

¹⁵⁹ 2022 Comments of Joint Commenters at 9-10; 2022 Comments of Woof Boom. The State Broadcasters Associations note, “Drivers stuck in slow traffic caused by an emergency will take longer to traverse the area in which ZoneCasting disrupts radio service as the radio signal transfers from one booster to another. Listeners in this situation could lose clear radio service for an extended period of time, and at the worst possible time.” 2022 Comments of State Broadcasters Associations at 2.

¹⁶⁰ 2022 Comments of Press at 3.

¹⁶¹ 2022 Comments of NPR at 9.

¹⁶² *See e.g.* Comments of FEMA. C. Patrick Roberts (Roberts), President of the Florida Association of Broadcasters, acknowledged potential benefits of the GBS Petition but urged the Commission to proceed with caution until the impact on EAS is tested. He stated that even 15-30 seconds of interference could jeopardize the resiliency of EAS, upon which Florida relies during severe weather. Comments of C. Patrick Roberts at 1.

¹⁶³ 2022 Reply Comments of GBS at 8-10.

¹⁶⁴ MMTTC Test Report at 2.

¹⁶⁵ Comments of Gregory Cooke at 2-3.

¹⁶⁶ *Id.* at 3.

be designed to minimize disruptions to emergency alerts if the booster transmits the emergency alert simultaneously with the primary station. These tests confirm the stations can be engineered to allow the EAS signal to override programming from both the primary station and program originating booster. Also, the transmission of the EAS signal on both the primary station and the booster ensures that the booster's program origination does not create a dead zone without an EAS signal. The booster's broadcast of the EAS signal should address FEMA's concern that there would be a three-minute time period when emergency messages would not be received in the booster's zone. Moreover, as discussed above, the relatively small zones between reception of the primary signal and the program originating booster would minimize any geographic disruption of the public's ability to receive an emergency alert. While we conclude that the EAS rule we adopt today will ensure that these emergency messages are passed through, we will closely monitor the rollout of these boosters and may revisit this issue, in consultation with FEMA, if we receive reports that program originating boosters disrupt emergency alerts.¹⁶⁷

59. *Impact On HD Radio.* Consistent with our findings about self-interference and EAS compatibility, we conclude that it is possible for program originating boosters to minimize disruption to HD Radio. The test reports demonstrate that boosters can originate programming, without material degradation of the listener's experience, when deployed with optimal system design and successful synchronization. The record lacks any evidence that program originating boosters cause actual degradation to the digital signal. However, we are cognizant of commenters' concerns regarding potential untested interference scenarios and note that we will monitor implementation of the proposed technology, and remain willing to address reports of HD Radio interference.

60. GBS's San Jose test concluded that transition zones made up a very small portion of the service area and the HD signal was stable inside the transition zones.¹⁶⁸ The test also found that listeners experience an almost instantaneous transition between zones, and there was no evidence that zone transitions cause noticeable variation in the receiver's performance.¹⁶⁹

61. Despite its reservations due to limited testing, discussed further below, a technical report produced by HD Radio developer Xperi concludes that the listener experience for station KSJO(FM) was "generally good" when characterized by well-designed booster antennas to diminish transition zone size, and absent synchronization issues.¹⁷⁰ Further, independent engineers specializing in HD Radio deployment reviewed the San Jose Technical Report and agree that when professionally designed and deployed with successful synchronization, the technology causes "no appreciable degradation" to HD Radio signals.¹⁷¹

¹⁶⁷ In the accompanying Further NPRM, we seek comment on whether to require FM primary stations implementing program originating boosters to notify all EAS participants monitoring that primary station of the booster's program origination and whether to require broadcasters using program originating boosters to report EAS-related problems or interference to the FCC. *See infra* para. 79.

¹⁶⁸ San Jose Technical Report at 3 and 28-29. The San Jose Test report states that HD1 transitions were almost instantaneous, without noticeable audio degradation, but that there were short audio dropouts of the HD2 signal in the interference zone. The report states that these brief HD2 issues were due partially to the current use of unsynchronized HD Exporters for HD2, 3 and 4 programming. The report anticipates that the duration of this dropout can be reduced through future use of synchronized exporters.

¹⁶⁹ *Id.* at 3 and 29-31.

¹⁷⁰ 2022 Xperi Technical Report at 5, 12, and 33.

¹⁷¹ 2022 Comments of Anderson at 1-2; 2022 Comments of Flagstaff at 2-3 and Attach. C, Technical Statement; 2022 Comments of Octave at 2.

62. Yet, a number of commenters raise concerns that the impact of program originating boosters on digital radio has not been sufficiently examined because the one digital station used for testing was protected by terrain obstructions,¹⁷² and because the test failed to assess HD3 and HD4 subchannels.¹⁷³ Commenters also argue that program originating boosters could cause significant disruption to HD Radio in transition regions between the booster and primary signals, causing listener dissatisfaction and ultimately rejection of broadcast radio.¹⁷⁴ Xperi is also concerned about the size and design of potential “dead” zone regions in which the digital content is entirely compromised.¹⁷⁵ Specifically, Xperi asserts that its own testing confirmed signal degradation in transition zones due to frequent switching between main and zone audio programs, and loss of both physical and digital synchronization, resulting in audio outages.¹⁷⁶

63. Commenters therefore request further testing and propose potential scenarios that have not yet been tested. In particular, commenters suggest that transition zones between the primary station and the program originating booster could be significantly larger than those studied in the San Jose test.¹⁷⁷ Further, commenters maintain that the San Jose test demonstrated clear disruption to the HD2 signal.¹⁷⁸ NAB also argues that the testing provided inadequate results in and around transition zones.¹⁷⁹

64. GBS counters that it resolved physical synchronization issues working with Xperi and GatesAir, and further, booster systems designed with optimal transition zones will minimize switching between main and booster signals.¹⁸⁰ GBS also explains that Xperi observed, and submitted comments based on synchronization-related signal disruptions, or gaps in HD coverage, prior to their resolution.¹⁸¹ GBS’s engineering consultant adds that after working with Xperi and GatesAir, coverage between the synchronized boosters is now seamless.¹⁸² GBS relies on Xperi’s conclusion that HD3 and HD4 channels would operate consistent with HD2 results,¹⁸³ and notes that disruption, if any, would only occur in the transition zone during “the nominal three minutes of geo-targeted broadcasting.”¹⁸⁴ GBS maintains that

¹⁷² 2022 Comments of Xperi at 7 and 10; 2022 Comments of NAB at 10 and 19; 2022 Comments of Joint Commenters at 4 and 7.

¹⁷³ 2022 Comments of Xperi at 6; 2022 Comments of Joint Commenters at 14-15, 2022 Reply Comments of Joint Commenters at 5; 2022 Comments of NAB at 21; 2022 Comments of Press at 3.

¹⁷⁴ 2022 Comments of Xperi at 2-4 and 9; 2022 Comments of NAB at 21, 2022 Comments of Joint Commenters at 17-18; 2022 Reply Comments of Joint Commenters at 14; 2022 Comments of Joint Public Radio at 3; 2022 Comments of Press at 3.

¹⁷⁵ 2022 Comments of Xperi at 5-6 and 9.

¹⁷⁶ *Id.* at 5-7 (“because the use of geo-targeted programming is likely to result in different analog and digital signals in parts of the transition zone, it could disrupt the carefully designed audio blending between the analog and digital portions of the HD Radio signal.”).

¹⁷⁷ 2022 Reply Comments of NAB at 10 and 16; 2022 Comments of Joint Commenters at 13-14.

¹⁷⁸ 2022 Comments of NAB at 21; 2022 Comments of Joint Commenters at 15.

¹⁷⁹ 2022 Comments of NAB at 20-21.

¹⁸⁰ 2022 Reply Comments of GBS, Roberson Analysis at 10-11; San Jose Test Summary at 4, San Jose Technical Report at 3 and 36-37. GBS’s San Jose Technical Report acknowledges that the technology caused HD-2 dropouts of up to seven seconds, however GBS states that successful synchronization significantly reduced the duration of signal loss.

¹⁸¹ 2022 Reply Comments of GBS, Roberson Analysis at 10-11.

¹⁸² 2022 Reply Comments of at 4-5.

¹⁸³ 2022 Reply Comments of GBS at 8, *citing* 2022 Comments of Xperi at 6, Roberson Analysis at 11.

¹⁸⁴ 2022 Reply Comments of GBS, Roberson Analysis at 2 and 10-11.

licensees are incentivized to prevent signal degradation, and will therefore position transition zones in optimal locations, i.e. areas of low population, away from major roads, or at terrain obstructions.¹⁸⁵ GBS asserts that it is in the licensee's best interest to ensure that its transmitters are synchronized in order to maintain an optimal signal.¹⁸⁶ Lastly, GBS and Goldman state that certain concerns put forth by commenters are independent of program originating boosters, and are in fact characteristic of any HD Radio and booster design, including HD2 and HD3 incoming and outgoing interference to other stations and improper booster synchronization.¹⁸⁷

65. Based on the San Jose test, and the resulting report, we conclude that program originating boosters can be designed to minimize interference to or disruption of HD Radio signals. We find it significant that Xperi, the developer of HD Radio, has not opposed the adoption of program originating boosters even though it has a strong incentive to prevent interference to digital operations. We also based our conclusion on the fact that we have determined the only potential interference concern of any significance from program originating boosters is co-channel interference from the booster to the primary station. Broadcasters that find they are unable to engineer boosters to avoid co-channel interference to their HD Radio operations can opt not to implement those boosters. Moreover, our definition of program originating boosters, which limits program origination to three minutes per hour, further reduces the risk of widespread interference to HD Radio broadcasts. Finally, we note the majority of FM stations have not yet adopted HD Radio, and therefore would not have this concern if they are considering the use of program originating boosters.¹⁸⁸ We therefore find that optimal, minimized transition zones between the primary station and program originating booster do not bar the introduction of program originating boosters. Nonetheless, we recognize the commenters asserting that testing to date has not examined many typical digital radio implementations. While we continue to believe that there is sufficient reason to find that program originating boosters are in the public interest, to the extent that we receive reports of significant disruption to digital broadcasts, we may revisit this issue.

4. Compliance with LCRA Requirements

66. A limit on the number of program originating boosters that a station can operate or other measures may be needed to ensure that an increase in booster stations resulting from our decision to authorize program originating boosters is consistent with the Local Community Radio Act of 2010 (LCRA).¹⁸⁹ Since current use of boosters is a response to weak signals caused by terrain, few stations use multiple boosters currently, and it is rare for a station to use three or four. The new use of program originating boosters could potentially increase booster use significantly. Therefore, in the Further NPRM, we seek comment on a program originating booster cap or other measures and whether they will be necessary for program originating booster stations to ensure compliance with the LCRA. Specifically, section 5 of the LCRA (Section 5) requires the Commission to ensure, when licensing new FM translators, FM boosters, or LPFM stations, that: (1) "licenses are available" to FM translator stations, LPFM stations, and FM booster stations; (2) licensing decisions are made "based on the needs of the local community"; and (3) FM translator stations, LPFM stations, and FM booster stations remain "equal in

¹⁸⁵ *Id.* at 1 and 7-8.

¹⁸⁶ *Id.* at 12 and 16.

¹⁸⁷ *Id.* at 9 and 16-17; 2022 Goldman Reply Comments at 6.

¹⁸⁸ The Commission's database indicates 2,125 stations, representing 25% of all FM stations, have notified us that they intended to convert to digital operations. Because stations are not required to notify the Commission if they cease digital operations, the number of stations currently broadcasting digitally may be lower.

¹⁸⁹ Pub. L. 111-371, 124 Stat. 4072 (2011). Because our decision here with respect to program originating boosters does not change the status quo regarding other boosters and the LCRA, we are limiting our discussion of the LCRA here to program originating boosters.

status” and secondary to existing and modified full-service FM stations.¹⁹⁰

67. In considering the first requirement of the LCRA, ensuring future licensing opportunities, we note that our existing rules requiring booster stations to operate within the service area of their primary station, and to broadcast on the same channel as the primary, already limit the impact of booster stations on other secondary service licensing opportunities. The primary station, which is not subject to the LCRA, imposes the greatest constraint on licensing additional secondary services in that area. Despite this, we do not yet know the extent of demand for program originating FM booster stations, nor the impact that potentially large numbers of such stations in a market could have on spectrum availability on adjacent channels where new FM translators and LPFM stations might conceivably wish to locate. To address any concerns about the impact new booster stations will have on the availability of licenses for FM translator and LPFM stations, we will limit to 25 the number of program originating boosters licensed to each full-service FM station during the FCC’s consideration of these issues in response to the FNPRM.¹⁹¹ We take this interim step because we may conclude that a limitation is necessary to ensure our secondary service licensing satisfies the LCRA.¹⁹² Moreover, this is in accordance with our more recent determination that Section 5 does not require a singular solution to ensure future licensing opportunities. Instead, we must use solutions appropriate for each licensing round we undertake.¹⁹³

68. With respect to the second requirement of the LCRA, we disagree with REC’s proposal to implement a “technical needs” solution to be employed on an application-by-application basis. Specifically, REC defines “needs of the local community” from the second prong of Section 5 as the need to serve populations that cannot receive at least a 54 dB μ signal from the primary FM station’s transmitter.¹⁹⁴ It therefore urges us to require that all FM booster applicants include a “local community needs” showing demonstrating that at least 40% of the population within the proposed booster’s 60 dB μ contour cannot receive at least a 54 dB μ signal from the primary station’s main transmitter.¹⁹⁵ We concluded above that program originating boosters could advance the public interest by enabling radio stations to gain new sources of revenue while providing audiences with hyper-local content. We further found that these public interest benefits, while accruing mostly to commercial FM stations, would also be of interest to NCE and LPFM stations. We believe that the provision of such hyper-local content, including, for example, advertisements for locally owned businesses and focused material tailored to the

¹⁹⁰ LCRA, Section 5.

¹⁹¹ We note that LPFM stations already have a cap of two boosters. 47 CFR § 73.860(b). In the Further NPRM, we propose that 25 is an appropriate per-station cap for each covered full-service FM station.

¹⁹² For example, in Auctions 99 and 100, the Commission advanced the local community need by supporting the local programming AM stations offer and ensured future licensing opportunities by implementing a cap of one FM translator per AM station. *Revitalization of the AM Radio Service*, Notice of Proposed Rule Making, 28 FCC Rcd 15221 (2013); *Revitalization of the AM Radio Service*, First Report and Order, Further Notice of Proposed Rule Making, and Notice of Inquiry, 30 FCC Rcd 12145 (2015). The Commission adopted a different approach in Auction 83 where it used preclusion studies to limit the number of translator applications in order to preserve future licensing opportunities. *Creation of a Low Power Radio Service*, Fourth Report and Order and Third Order on Reconsideration, 27 FCC Rcd 3364 (LPFM Fourth R&O), clarified, *Fifth Order on Reconsideration and Sixth Report and Order*, 27 FCC Rcd 15402 (2012) (LPFM Sixth R&O).

¹⁹³ *Capstar TX, LLC*, Memorandum Opinion and Order, 37 FCC Rcd 11073 (2022) (*Capstar*). We also note the Part 5 authorizations are on a noninterference basis and would not preclude future licensing of LPFM or FM translator stations.

¹⁹⁴ REC describes a 54 dB μ signal as being “internationally accepted” as the minimum usable signal in rural areas, citing *Planning Standards for Terrestrial FM Sound Broadcasting at VHF*, International Telecommunications Union, ITU-R BS.412-9 (Dec. 1998), at § 1.1. REC Comments at 4.

¹⁹⁵ REC Comments at 6. No commenters or reply commenters addressed REC’s “local community needs showing” proposal.

interests and needs of the individual areas within a community, is responsive to the Section 5 requirement that we make licensing decisions based on the “needs of the local community.” We therefore find that the potential for hyper-local programming satisfies this criterion of Section 5 of the LCRA when licensing new program originating FM booster stations, and will not require a special showing by those seeking to originate programming via boosters.

69. Finally, with regard to the third criterion, requiring that FM booster stations remain “equal in status” to FM translators and LPFM stations, our decision to allow program originating boosters does not alter the booster’s status as a secondary service. We therefore find this criterion of Section 5 of the LCRA is satisfied when licensing new program originating FM booster stations.

5. Part 5 Licensed Operations

70. As of the effective date of this *Report and Order and Further Notice of Proposed Rulemaking* (i.e., 30 days following publication in the Federal Register) and until the effective date of final service rules based on the proposals in the Further NPRM, a licensed booster station may originate programming on a booster station as explained herein. The mechanism we will use to authorize those operations during this period of time will be a one-year, experimental authorization, which may be renewed, obtained through Part 5 of the Commission’s rules.¹⁹⁶ Our rules provide an existing process for renewing these licenses, and we expect that the Commission will renew them promptly after the initial, one-year term as needed by the licensee.¹⁹⁷ We view experimental use of program-originating boosters as an appropriate mechanism to use during the pendency of the Further NPRM because it allows the FCC to closely monitor the rollout of the technology. We direct the Media Bureau to provide expedited treatment for any such request for Part 5 authorization.

71. Broadcasters may file an application requesting experimental authorization for a licensed broadcast station to originate programming on booster stations. A licensee that already operates an existing booster station and seeks to use it to originate programming should request experimental authorization pursuant to section 5.203 of the Commission’s rules.¹⁹⁸ An FM or LPFM station licensee that seeks new booster stations for the purpose of originating programming, must obtain a construction permit and license for the booster stations pursuant to Part 74 of the Commission’s rules and concurrently file a separate request for experimental authorization to originate programming. Because one of the main purposes of program originating boosters is to allow targeted advertising and underwriting, we direct the Media Bureau to include in any grant of experimental authorization for program origination a waiver of sections 5.215 and 5.203(c)(4) which would otherwise prevent an experimental station to charge for commercials or to accept underwriting donations. We do not believe that the data gained through this Part 5 experimental authorization would be as useful if participating stations could not be used fully in the manner intended. We further direct the Media Bureau to condition any experimental authorization for program origination on the licensee’s adherence to certain rules proposed in the Further NPRM¹⁹⁹ and to place any additional appropriate conditions on the authorizations. We require the Media Bureau’s conditions to reflect that experimental authorizations to originate programming are time-limited and subject to the outcome of the Commission’s decisions in the Further Notice of Proposed Rulemaking.

¹⁹⁶ 47 CFR § 5.71(c).

¹⁹⁷ *Id.*

¹⁹⁸ 47 CFR § 5.203.

¹⁹⁹ The application for experimental authorization will provide the Media Bureau with notification of program origination pending adoption of final notification procedures. The Media Bureau will place appropriate conditions in any experimental authorization for program origination to ensure EAS and OPIF compliance.

B. Further Notice of Proposed Rulemaking

72. While the Order we adopt today authorizes program originating boosters and uses a Part 5 process in the near term, we also propose to modify some of our existing rules. Also, as noted in the Report and Order above, our conclusion that it is in the public interest to provide broadcasters flexibility to use program originating boosters is based on certain safeguards to address concerns raised in the record. This Further NPRM seeks comment on the details of implementing additional potential rule changes and sets out a number of proposed changes to our rules detailed in Appendix C. We seek comment on these proposed rule changes as well as a number of additional questions set out below.

1. Program Origination Notification

73. In order to address concerns in the comments about the impact of program originating boosters on existing FM service, we conclude in the Report and Order that it is imperative for the Commission to adopt a notification requirement for program originating boosters. This will enable the Media Bureau to keep track of which stations are using boosters to originate content and to respond to any complaints that may arise. Program originating boosters authorized pursuant to experimental authority prior to finalized rules will satisfy the notification requirement through the application for experimental authority. We do not propose, however, to subject broadcasters to filing windows specifically for program originating booster stations; rather, we propose to continue to process booster applications, whether now with program origination under experimental authority or in the future pursuant to adopted rules, on a first come/first served basis using our existing application procedures.²⁰⁰ In the NPRM we sought comment on how to deal with mutually exclusive FM booster station applications, such as two proposed program originating boosters that are short-spaced under section 74.1204(g) and filed the same day.²⁰¹ The record is not yet developed on this question and we again invite commenter input.

74. With respect to the notification requirement, we propose to require licensees of authorized booster stations to file a notification, in machine-readable, open format, of their intention to originate programming rather than implementing a separate application process for boosters that originate programming that could introduce greater delay for broadcasters seeking to operate such booster stations. We seek comment on the details of this notification framework for program originating boosters. We propose to adopt new section 74.1206 that sets out the requirement for a FM Booster Origination Notification.²⁰² Our proposed rule would require broadcasters commencing originating programming on a booster to file a notification 15 days prior to commencing origination. Our proposed rule would also require broadcasters that permanently discontinue originating programming on a booster to file a notification within 30 days after termination. We believe these simple notification requirements will provide adequate notice to the Commission and interested parties while minimizing the regulatory burden for broadcast stations. We seek comment on this proposal and the proposed text of section 74.1206 set out in Appendix C.

75. *OPEN Government Data Act.* The OPEN Government Data Act,²⁰³ requires agencies to make “public data assets” available under an open license and as “open Government data assets,” *i.e.*, in machine-readable, open format, unencumbered by use restrictions other than intellectual property rights, and based on an open standard that is maintained by a standards organization.²⁰⁴ This requirement is to be

²⁰⁰ See 47 CFR § 74.1233.

²⁰¹ NPRM para. 18.

²⁰² Our proposed rule would require filers to submit the required information in machine-readable format.

²⁰³ Congress enacted the OPEN Government Data Act as Title II of the Foundations for Evidence-Based Policymaking Act of 2018, Pub. L. No. 115-435 (2019), §§ 201-202.

²⁰⁴ 44 U.S.C. §§ 3502(20), (22) (definitions of “open Government data asset” and “public data asset”), 3506(b)(6)(B) (public availability).

implemented “in accordance with guidance by the Director” of the Office of Management and Budget. (OMB).²⁰⁵ The term “public data asset” means “a data asset, or part thereof, maintained by the Federal Government that has been, or may be, released to the public, including any data asset, or part thereof, subject to disclosure under [the Freedom of Information Act (FOIA)].”²⁰⁶ A “data asset” is “a collection of data elements or data sets that may be grouped together,”²⁰⁷ and “data” is “recorded information, regardless of form or the media on which the data is recorded.”²⁰⁸ Would the information collected in the proposed FM Booster Notification constitute “data assets” for purposes of the OPEN Government Data Act? If so, would the collected information constitute “public data assets”? Is there any reason the Commission should not make such information publicly available?

2. Section 74.1204(f)

76. Section 74.1204(f) of the Rules addresses claims of predicted interference outside a protected station’s contour when a translator station construction permit application is pending.²⁰⁹ Unlike the actual interference rule in section 74.1203, which addresses both translator and booster stations, the predicted interference rule in section 74.1204(f) addresses only translator stations. We seek comment on whether we should modify section 74.1204(f) to include a mechanism to address predicted interference while booster construction permit applications remain pending. We believe this could help ensure that broadcasters do not invest in developing booster stations that will cause interference that must be resolved under section 74.1203 once the booster commences broadcasts. We also propose to apply this new mechanism to any booster applications that are pending at the time the modifications to section 74.1204 are adopted. We seek comment on these proposals.²¹⁰

3. Synchronization

77. We seek comment on whether we should adopt a requirement that broadcasters synchronize their primary station and booster signals to reduce and eliminate self-interference. GBS’s engineering consultant emphasized in the comments that synchronization is critical to successful booster implementation.²¹¹ Further, Anderson notes, “It is imperative that all transmitters/boosters within any booster system, but particularly in a ZoneCasting, system, be synchronized in carrier frequency, pilot phase, and audio frames for analog FM.”²¹² In the Report and Order, we concluded that broadcasters have strong economic incentives to avoid self-interference to their primary station’s signal.²¹³ In light of that conclusion, we believe broadcasters deploying program originating boosters will employ a technology

²⁰⁵ OMB has not yet issued final guidance.

²⁰⁶ 44 U.S.C. § 3502(22).

²⁰⁷ 44 U.S.C. § 3502(17).

²⁰⁸ 44 U.S.C. § 3502(16).

²⁰⁹ *Id.* § 74.1204(f). Also, to conform to the publishing conventions of the National Archives and Records Administration’s Office of the Federal Register, we propose to move the Note to paragraph (a)(4) of section 74.1204 into a new subsection (a)(5). *See* Appendix C.

²¹⁰ We also propose a minor editorial change to the translator rule in section 74.1204(f)(1) to conform to the proposed changes to our booster rules in section 74.1204(f)(2). *See* Appendix C.

²¹¹ Comments of Goldman at 5. *See also* Reply Comment of TBA Communications, LLC at 2 (“if the main and zone boosters are not properly synchronized, disruptive digital audio outages and degradation will occur within the transition zones.”).

²¹² Reply Comment of TBA Communications, LLC at 2. *See also* Comments of Goldman at 5 (“in order to implement a FM booster . . . with minimal self-interference, several things must be precisely engineered: Carrier frequency and pilot, pilot phase, antenna design, timing and modulation with 0.25dB.”).

²¹³ *See supra* para.44.

that uses synchronization. Is there any need to adopt a separate synchronization requirement as an additional safeguard? If we were to adopt a synchronization requirement, we seek comment on what level of synchronization would be appropriate. Should we adopt any standards with regard to synchronizing any or all of the elements discussed by Anderson? Would stations require new or specialized equipment to maintain proper synchronization or is that a routine part of existing booster station operations? Do station signals change enough to require constant monitoring and recalibration and if so, how does this affect our ability to develop and apply a standard? Or would a synchronization requirement impose an unnecessary burden on booster station operations? We seek comment on these questions.

4. Notification to EAS Participants

78. In the Report and Order, we require program originating boosters to receive and broadcast all emergency alerts in the same manner as their primary station.²¹⁴ As we stated in the Report and Order, we have codified this requirement by amending section 11.11 of our Rules to explicitly make all requirements concerning EAS applicable to full-service AM and FM stations and LPFM stations²¹⁵ equally applicable to program originating FM boosters.

79. In its comments, FEMA recommended that we require FM primary stations implementing program originating boosters to notify all EAS participants monitoring that primary station of the booster's program origination.²¹⁶ We seek comment on this proposal. Does our proposal to require all program originating boosters to broadcast emergency alerts negate the need for this proposal? As we stated in the Report and Order, we believe our requirement that program originating boosters broadcast all emergency alerts will ensure no disruptions to the EAS, but we will monitor the rollout of program originating boosters to ensure they do not cause interruptions to the EAS. Should we adopt any requirement for broadcasters using program originating boosters to report EAS-related problems or interference to us? What would be the best means for broadcasters to provide this information to us? Should we require that licensees also submit this information to FEMA?

5. Part 74 Licensing Issues

80. We propose to clarify certain operational issues for program originating boosters. We propose to reorganize and clarify section 74.1231 of our rules by changing the current Note to a new paragraph (j), which clarifies grandfathered superpowered FM stations will be able to implement booster stations only within the standard (i.e., non-superpowered) maximum contour for their class of station.²¹⁷ We believe this helps to minimize interference risks by further isolating program originating boosters from adjacent FM broadcast stations. Also, we propose to add a new paragraph (k) that requires booster stations to suspend operations any time their primary stations are not broadcasting and to file notices of suspended operations pursuant to section 73.1740 of our rules. This change codifies more explicitly existing requirements. Finally, we propose to modify section 74.1232 to clarify that a booster station may

²¹⁴ See *supra* paras. 53-58.

²¹⁵ We propose an administrative update to section 73.801 of our rules to cross-reference the EAS obligation for LPFM stations contained in section 11.11 of the rules.

²¹⁶ Comments of FEMA at 2.

²¹⁷ The current version of section 74.1231 includes a Note following paragraph (i) that reads: "In the case of an FM broadcast station authorized with facilities in excess of those specified by § 73.211 of this chapter, an FM booster station will only be authorized within the protected contour of the class of station being rebroadcast as predicted on the basis of the maximum powers and heights set forth in that section for the applicable class of FM broadcast station concerned." We propose to re-categorize the Note into new paragraph (j), and to make clear that "an FM broadcast station authorized with facilities in excess of those specified by § 73.211 of this chapter" refers to superpowered FM facilities. See Appendix C.

not broadcast programming that is not permitted by its FM primary station's authorization. This will ensure that program originating boosters are not used in a manner that is inconsistent with the primary station. We take this opportunity to remind broadcasters that licensees of noncommercial FM stations may not use booster stations for commercial broadcasts. We seek comment on these proposed rule changes.

6. Cap on Program Originating FM Boosters and Other LCRA Issues

81. We further propose to amend section 74.1232(g) of our rules²¹⁸ to limit full-service FM stations to 25 program originating booster stations. This cap on the number of program originating FM booster stations would represent a change from the current rule, which imposes no numerical limit on FM booster stations.²¹⁹ The ability of other secondary service applicants to locate within an existing full-service FM station's service contour is ordinarily constrained by the full-service FM primary station itself. Despite this, we do not yet know the extent of demand for program originating FM booster stations, nor the impact that potentially large numbers of such stations in a market could have on spectrum availability on adjacent channels where new FM translators and LPFM stations might conceivably wish to locate. Accordingly, in the Report and Order we conclude that a limit on the number of program originating FM boosters a station can operate may be needed to ensure that an increase in booster stations resulting from our decision to authorize program originating boosters is consistent with the LCRA. We noted in the Report and Order that some commenters have expressed concern about the effect of additional boosters on the FM noise floor.²²⁰ Would a program originating FM booster cap address such concerns? We tentatively conclude that a limit of 25 program originating boosters per full-service FM primary station is a reasonable compromise. In seeking comment on this number, we also note that imposing an artificially low number of program originating boosters could make it harder for licensees to design and deploy boosters in a way that minimizes the risks of interference. We do not propose an overall per market limit. We seek comment on these tentative conclusions as well as any alternative number for the cap. GBS's studies evaluated geotargeting deployments with up to nine boosters.²²¹ Thus, we tentatively conclude that a 25 program originating booster station cap should not impose an undue burden on the rollout of this technology while at the same time ensuring consistency with the LCRA. We also seek input on any alternatives. We ask that any alternative proposals be accompanied by detailed justifications, as well as a discussion of the effect any alternative program originating booster cap or alternative approach to limiting program originating boosters might have on other stations, both full-service and secondary, and on the local FM noise floor generally.

82. We also seek comment on whether there are other requirements needed to ensure compliance with the LCRA. As noted in the Report and Order, we conclude our authorization of program originating boosters is consistent with the LCRA. However, we seek input on any remaining concerns about compliance with the LCRA. We note that currently, LPFM stations are permitted to originate programming 100 percent of the time, while FM translators and boosters do not originate programming. What difference, if any, does allowing some FM boosters to originate programming for five percent of each broadcast hour make to the relative status of the secondary services? We seek comment on these matters.

83. Additionally, in discussing any proposed LCRA-based requirements in licensing program

²¹⁸ 47 CFR § 74.1232(g).

²¹⁹ Non-Tribal LPFM stations are already limited to attributable interests in two FM translators, two FM boosters, or one translator and one booster. 47 CFR § 73.860(b). Tribal Applicants may hold attributable interests in up to two LPFM stations and four FM translators. *Id.* § 73.860(c). We do not propose to change these caps.

²²⁰ *See supra* n. 105.

²²¹ Jackson Test Report at 10.

originating FM booster stations, we ask commenters specifically to enumerate the costs and benefits of their proposals or any alternatives set forth by commenters. This should include the costs of preparing any proposed application showings, or of licensing an FM booster in such a manner as to comply with the LCRA. Commenters should also quantify projected costs and benefits, identify supporting evidence and any underlying assumptions, and explain any difficulties faced in trying to quantify benefits and costs of the proposals and how the Commission might nonetheless evaluate them.

7. Political Broadcasting and Advertising

84. If program originating boosters are widely adopted, candidates and issue advertisers may seek to use program originating booster stations to target their message to particular subsets of a market, which has political broadcasting and recordkeeping implications. As an initial matter, we tentatively conclude that, to the extent an FM booster station originates programming, it should be subject to the full array of political programming requirements that are applicable to full power broadcast stations.²²² These obligations ensure that candidates for elective office have access to broadcast facilities and certain other media platforms and foster transparency about entities sponsoring advertisements. We therefore propose to adopt a new provision at section 74.1290 of the Commission's rules²²³ to explicitly make all political programming requirements applicable to program originating FM booster stations. We also propose to obligate broadcasters originating programming on a booster to maintain a political file for the booster in the same political file as the booster's primary station. Thus, we propose to amend section 73.3526 of the Commission's rules (online public inspection file of commercial stations)²²⁴ and section 73.3527 of the Commission's rules (online public inspection file of noncommercial educational stations)²²⁵ to appropriately reflect the obligation of licensees of program originating FM booster stations to maintain an online political file for each such station. LPFM stations operating program originating boosters will need to maintain a physical political file consistent with existing requirements. We invite comment on this proposal.

85. *Political Files.* Applying the full array of political programming requirements to program originating FM booster stations raises several additional issues on which we seek comment. First, we seek comment on how licensees should comply with the political file requirements in section 73.1943 of the Commission's rules and section 315(e) of the Act for program originating booster stations.²²⁶ For example, these sections require commercial licensees to maintain online political files for requests for the purchase of broadcast time by or on behalf of all legally qualified candidates for public office and by or on behalf of issues advertisers whose ads communicate a message relating to any political matter of national importance. The requirement applies to both full service noncommercial stations and LPFM stations to the extent that they make time available without charge for use by a candidate.²²⁷ What is the best location for records of such commercial and noncommercial use of broadcast time on a program originating booster station? We note that booster stations are not required to maintain a public file.²²⁸ Should records of political use of broadcast time on a program originating

²²² See 47 CFR §§ 73.1212 (Sponsorship identification), 73.1940 (Legally qualified candidates for public office), 73.1941 (Equal opportunities), 73.1942 (Candidate rates), 73.1943 (Political file), 73.1944 (Reasonable access); 47 U.S.C. §§ 312(a)(7), 315, and 317.

²²³ 47 CFR § 74.1290 (currently "Reserved").

²²⁴ *Id.* § 73.3526.

²²⁵ *Id.* § 73.3527.

²²⁶ *Id.* § 73.1943 and 47 U.S.C. § 315(e).

²²⁷ 47 CFR §§ 73.3527(e)(5), 73.1943(c).

²²⁸ *Id.* § 73.3526(a)(2) ("Every permittee or licensee of an AM, FM, TV or Class A TV station in the commercial broadcast services shall maintain a public inspection file. . ."); *Id.* § 73.3527(a)(2) ("Every permittee or licensee of
(continued....)

booster station be commingled with records of requests for the use of broadcast time on the licensee's primary station so long as they are appropriately labeled to identify the station on which the use was made? Alternatively, should licensees be required to create a political file subfolder for each of its booster stations into which it would place records of requests for the purchase or free use of broadcast time? Would candidates and members of the public know that a political message that they have heard originated on a booster station (as opposed to the licensee's primary station) and know where to locate records of the message in the station's political file? How should LPFM stations, which are not currently required to have an online public inspection file, keep publicly available records of political use of their program originating boosters? For example, should they keep a physical file for the booster with the LPFM station's files consistent with requirements for political use of the LPFM station?²²⁹ We invite comment on all of these questions and any additional issues that follow from requiring licensees to maintain records of requests for the purchase of political time and of time made available without charge for use by a candidate on their program originating booster stations.

86. *Equal Opportunities.* Targeted advertising also raises questions about how licensees should comply with obligations related to equal opportunities. Under section 73.1941 of the Commission's rules and section 315(a) of the Act, if a licensee permits a legally qualified candidate for any public office to use its station, it must, with some exceptions, permit all other legally qualified candidates for the same office to also use its station.²³⁰ Should candidates who are requesting equal opportunities in response to an advertisement or noncommercial announcement that was broadcast on a particular program originating booster station be entitled to use only that booster station, essentially treating individual booster stations and a licensee's primary station as separate facilities for equal opportunities purposes?

87. *Reasonable Access.* Similar questions arise with respect to how licensees should entertain requests for reasonable access by Federal candidates on program originating booster stations. Under section 73.1944 of the Commission's rules and section 312(a)(7) of the Act, commercial broadcast stations must permit candidates for Federal office to purchase reasonable amounts of advertising time.²³¹ In determining what is "reasonable" for reasonable access purposes, should licensees treat their program originating booster and primary stations as separate facilities? For example, should the amount of time that a Federal candidate has purchased on a licensee's primary station affect the amount of time to which the same candidate is entitled to purchase on one of the licensee's program originating booster stations, and vice versa?

88. *Candidate Rates.* Program originating booster stations raise additional questions about how licensees should apply candidate rates. Pursuant to section 73.1942 of the Commission's rules and section 315(b) of the Act,²³² during the 45-day period preceding a primary or primary run-off election, and the 60 day period preceding a general or special election, stations must charge candidates in connection with their campaigns no more than the station's lowest unit charge for the same class and amount of time during the same period. In determining lowest unit charges, should licensees treat their program originating booster stations and primary stations as separate facilities? Is it reasonable to expect

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an AM, FM, or TV station in the noncommercial educational broadcast services shall maintain a public inspection file. . .").

²²⁹ *Creation of a Low Power Radio Service*, Report and Order, 15 FCC Rcd 2205, para. 176 (2000) ("[W]e will require LPFM licensees to maintain a political file, if needed, to record the requisite particulars. The political file shall be maintained for public inspection at an accessible place in the station's community.").

²³⁰ 47 CFR § 73.1941 and 47 U.S.C. § 315(a).

²³¹ 47 CFR § 73.1944 and 47 U.S.C. § 312(a)(7).

²³² 47 CFR § 73.1942 and 47 U.S.C. § 315(b).

that the lowest unit rates on a licensee's program originating booster station would be different from the lowest unit rates on its primary station?

8. Licensing Issues

89. We also seek comment on whether we should require vendors of program originating technology and patent owners in program originating technology to abide by the Commission's patent policy²³³ or any other guidelines common to open standards, which require that licenses be available to all parties on fair, reasonable and nondiscriminatory terms.²³⁴ Would such a step be necessary or an appropriate exercise of Commission authority in light of the fact that the Report and Order does not endorse a particular technical approach? Parties suggesting that we do consider any requirements should provide detailed information, including how long such requirements should last and our authority to adopt such requirements.

9. Other Safeguards

90. Are there any other non-technical safeguards on program originating boosters that might be useful? For example, two members of Congress who support geo-targeted content, nevertheless suggest that the Commission should consider requiring licensees of program originating boosters to certify that they are being responsive to needs and issues of their service areas, especially minority communities.²³⁵ This appears to be a response to concerns of a non-technical nature, such as the potential for redlining by advertisers or licensees. Although, as discussed above, we find no evidence of factors to cause redlining,²³⁶ we seek comment on whether a safeguard in the form of a reporting condition might generally be useful to address non-technical concerns. If so, what information should licensees certify to, and how often?

10. Digital Equity and Inclusion

91. The Commission, as part of its continuing effort to advance digital equity for all,²³⁷ including people of color, persons with disabilities, persons who live in rural or Tribal areas, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty or inequality, invites comment on any equity-related considerations²³⁸ and benefits (if any) that may be

²³³ Revised Patent Procedures of the Federal Communications Commission, 3 FCC 2d 26 (1966).

²³⁴ See American National Standards Institute, ANSI Essential Requirements: Due process requirements for American National Standards at section 3.1 (March 2, 2022), [https://share.ansi.org/Shared%20Documents/About%20ANSI/Current Versions Proc Docs for Website/ER Pro current.pdf](https://share.ansi.org/Shared%20Documents/About%20ANSI/Current%20Versions%20Proc%20Docs%20for%20Website/ER_Pro_current.pdf) (essential patents must be made available, "under reasonable terms and conditions that are demonstrably free of any unfair discrimination.").

²³⁵ Comments of Reps. Horsford and Thompson at 1-2 ("While we support the proceeding, we also believe the adoption of a Public Interest Certification should be required by all licensees of FM booster stations under this new authority, requiring the licensee to be responsive to the needs and issues of the people in their service area. This certification will provide an additional layer of oversight for the Commission and provide minority communities with a certainty that geotargeting will be deployed equitably.").

²³⁶ See *supra*, paras. 35-36.

²³⁷ Section 1 of the Communications Act of 1934 as amended provides that the FCC "regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex." 47 U.S.C. § 151.

²³⁸ The term "equity" is used here consistent with Executive Order 13985 as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual,

(continued....)

associated with the proposals and issues discussed herein. Specifically, we seek comment on how our proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well the scope of the Commission's relevant legal authority.

IV. PROCEDURAL MATTERS

A. Regulatory Flexibility Analysis

92. *Regulatory Flexibility Act.* The Regulatory Flexibility Act of 1980, as amended (RFA),²³⁹ requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.”²⁴⁰ Accordingly, we have prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the possible impact of the rule changes contained in this Report and Order. The FRFA is set forth in Appendix D.

93. We have also prepared an Initial Regulatory Flexibility Analysis (IRFA) concerning the potential impact of the rule and policy changes contained in the Further NPRM. The IRFA is set forth in Appendix E. Written public comments are requested on the IRFA. Comments must be filed by the deadlines for comments on the Further NPRM indicated on the first page of this document and must have a separate and distinct heading designating them as responses to the IRFA.

B. Report and Order

1. Final Paperwork Reduction Act of 1995 Analysis

94. This document does not contain new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. In addition, therefore, it does not contain any new or modified information collection burdens for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4).

2. Congressional Review Act

95. The Commission has determined, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, concurs, that these rules are non-major under the Congressional Review Act, 5 U.S.C. § 804(2). The Commission will send a copy of the Report and Order to Congress and the Government Accountability Office pursuant to 5 U.S.C. § 801(a)(1)(A).

C. Further Notice of Proposed Rule Making

1. Filing Requirements.

96. *Ex Parte Rules.* This proceeding shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission's *ex parte* rules.²⁴¹ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies).

(Continued from previous page) _____
transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. See Exec. Order No. 13985, 86 Fed. Reg. 7009, Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (January 20, 2021).

²³⁹ 5 U.S.C. §§ 601–612. The RFA has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

²⁴⁰ 5 U.S.C. § 605(b).

²⁴¹ 47 CFR §§ 1.1200 *et seq.*

Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

97. *Filing Requirements—Comments and Replies.* Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
 - Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington DC 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.²⁴²

98. *People with Disabilities.* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

99. *Additional Information.* For additional information on this proceeding, contact Albert Shuldiner, Audio Division, Media Bureau at Albert.Shuldiner@fcc.gov or 418-2721, or James Bradshaw, Audio Division, Media Bureau at James.Bradshaw@fcc.gov or (202) 418-2739.

2. Paperwork Reduction Act Analysis.

100. This document contains proposed new or modified information collection requirements.

²⁴² See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, 35 FCC Red 2788 (2020).

The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. § 3506(c)(4), we seek specific comment on how we might “further reduce the information collection burden for small business concerns with fewer than 25 employees.”

D. Providing Accountability Through Transparency Act

101. Consistent with the Providing Accountability Through Transparency Act, Public Law 118-9, a summary of this document will be available on <https://www.fcc.gov/proposed-rulemakings>.²⁴³

V. ORDERING CLAUSES

102. Accordingly, IT IS ORDERED that pursuant to the authority contained in sections 1, 2, 4(i), 7, 301, 302, 303, 307, 308, 309, 316, 319, and 324 of the Communications Act of 1934, 47 U.S.C. §§151, 154, 157, 301, 302, 303, 307, 308, 309, 316, 319, and 324, this Report and Order IS ADOPTED.

103. IT IS FURTHER ORDERED that the *Report and Order* and the amendments to the Commission’s rules set forth in Appendix B SHALL BE EFFECTIVE 30 days after publication of a summary in the Federal Register.

104. IT IS FURTHER ORDERED that, pursuant to sections 1, 2, 4(i), 7, 301, 302, 303, 307, 308, 309, 316, 319, 324, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154, 157, 301, 302, 303, 307, 308, 309, 316, 319, 324, and 403, this Further Notice of Proposed Rule Making IS ADOPTED.

105. IT IS FURTHER ORDERED that, pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission’s rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments on the Further Notice of Proposed Rulemaking in MB Docket No. 20-401 on or before thirty (30) days after publication in the *Federal Register* and reply comments on or before sixty (60) days after publication in the *Federal Register*.

106. IT IS FURTHER ORDERED that the Commission’s Office of the Secretary, Reference Information Center SHALL SEND a copy of this Report and Order and Further Notice of Proposed Rulemaking, including the Final and Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration, and shall cause it to be published in the Federal Register.

107. IT IS FURTHER ORDERED that Office of the Managing Director, Performance Program Management, SHALL SEND a copy of this Report and Order and Further Notice of Proposed Rulemaking in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

²⁴³ 5 U.S.C. § 553(b)(4). The Providing Accountability Through Transparency Act, Pub. L. No. 118-9 (2023), amended section 553(b) of the Administrative Procedure Act.

APPENDIX A
List of Commenters

Commenters to Notice of Proposed Rule Making in MB Docket 20-401

Aaron Read

Alaska Broadcasters Association, Colorado Broadcasters Association, Oregon Association of Broadcasters, Puerto Rico Broadcasters Association**

Alpha Media USA LLC**

Andrew C. Barrett

Ashley Communications, Inc.

Ashley Communications, Inc., Evans Broadcasting, Inc.**

Ashley County Broadcasters, Inc.

Beasley Media Group, LLC, Cumulus Media New Holdings Inc., Entercom Communications Corp.,

iHeart Communications, Inc., New York Public Radio, Salem Media Group, Inc.*

Best Media, Inc.

BIA Advisory Services, LLC*

Boswell Media, LLC

Broadsouth Communications, Inc.

Center Broadcasting Company, Inc.

Cheyenne Mountain Public Broadcast House, Inc.

Connoisseur Media, Neuhoff Communications

Country Gold Broadcasting, Inc.

Covington & Burling LLP***

Cromwell Group, Inc

Dockins Broadcast Group, LLC

Dockins Communications, Inc.

Double-R Communications, LLC

Educational Communications of Colorado Springs, Inc.

Emmis Communications
Evans Broadcasting, Inc.
Falls Media, LLC
Federal Emergency Management Agency
Flagstaff Radio, Inc.
Florida Association of Broadcasters
Future Visions Entertainment LLC
GatesAir Inc.
GeoBroadcast Solutions, LLC*
Goldman Engineering Management, Inc.
Hazard Broadcasting, Inc.
HubCast Broadcasting, Inc.
Intercambio*
Johnny Boswell Radio LLC
Juan Carlos Matos Barreto*
Kath Broadcasting Co., LLC
Keyhole Broadcasting, LLC
Kirschner Broadcast Services, LLC*
KM Broadcasting of Guam, L.L.C.
KM Communications, Inc.
KM Radio of Atlanta, L.L.C.
KM Radio of Breese, L.L.C.
KM Radio of Earlville, L.L.C.
KM Radio of Independence, L.L.C.
KM Radio of Lovelady LLC*
KM Radio of St. Johns, L.L.C.

Lake Broadcasting, Inc.
Lazo Media LLC
Leslie County Broadcasting, Inc.
LHTC Media of West Virginia, Inc.
Marshall University Board of Governors
Midway Broadcasting Corporation***
M & M Broadcasting
Monroe Capital LLC
Monticello-Wayne County Media, Inc.
Mountain Broadcasting Service, Inc.
Multicultural Media, Telecom and Internet Council***
National Association of Broadcasters*
National Newspaper Publishers Association
New Life Broadcasting, Inc.
New York State Broadcasters Association, Inc.**
Peak Radio, LLC
Phillips Broadcasting Company, Inc.
Pikes Peak Community College
Q Media Group, LLC
Q Media Properties, LLC
Quantum Advertising/Design Inc.**
Ranchland Broadcasting Company, Inc.
REC Networks*
Resort Broadcasting Company LLC
Revenue Developers/Media Negotiator, LLC**
R&M Broadcasting

Roberson and Associates, LLC**

Roberts Broadcasting, L.L.C. **

Ronald Zlotnik

Sam Sylk**

Shamrock Communications Inc.

Sky Media, LLC

Small Radio Broadcaster Coalition

Southark Broadcasters, Inc.

Southwest Media, Inc.

Southwestern Diabetic Foundation, Inc., d/b/a Camp Sweeney

State Broadcaster Associations**

Steven L. White

The Evans Broadcast Company, Inc.*

Truckee Tahoe Radio, LLC,

Two Black Cadillacs, Inc.

Urban One, Inc., David Broadcasting Inc., Ohana Media Group, LLC, and Riverfront Broadcasting LLC

USA Radio*

WAY Media, Inc.

W. Craig Fugate

Wennes Communications Stations, Inc.

Xperi Holding Corporation

Yeary Broadcasting, Inc.

* Filed comments and reply comments

** reply comments only

*** Filed ex parte notice only

Commenters to Public Notice in MB Docket No. 20-401

Alpha Media USA LLC

Alta Communications

Audacy, Inc., Beasley Media Group, LLC, Cumulus Media New Holdings Inc., iHeart Communications, Inc., New York Public Radio, Salem Media Group, Inc.*

BIA Advisory Services, LLC

Center for the Economics of the Internet at the Hudson Institute

Cup O'Dirt, LLC

Evans Broadcast Company, Inc.; Ashley County Broadcasters, Inc. Best Media, Inc., Boswell Media, LLC, BroadSouth Communications, Inc., Southwestern Diabetic Foundation, Inc., d/b/a Camp Sweeney, Center Broadcasting Company, Inc., Cheyenne Mountain Public Broadcast House, Inc., Country Gold Broadcasting, Inc., Datatech Digital LLC, Dockins Broadcast Group, LLC, Dockins Communications, Inc., Double-R Communications, LLC, Educational Communications of Colorado Springs, Inc., Evans Broadcasting, Inc., Ashley Communications, Inc., Falls Media, LLC, Hazard Broadcasting, Inc., Flagstaff Radio, Inc., HubCast Broadcasting, Inc., Johnny Boswell Radio LLC, Kath Broadcasting Co., LLC, Keyhole Broadcasting LLC, KM Broadcasting of Guam, L.L.C., KM Communications, Inc., KM Radio of Atlanta, L.L.C, KM Radio of Breese, L.L.C, KM Radio of Earlville, L.L.C., KM Radio of Independence, L.L.C, KM Radio of Lovelady LLC, KM Radio of St. Johns, L.L.C., Lake Broadcasting, Inc., Lazo Media LLC, Leslie County Broadcasting, Inc., LHTC Media of West Virginia, Inc., M&M Broadcasting, Marshall University Board of Governors, Monticello-Wayne County Media, Inc., Mountain Broadcasting Service, Inc., Peak Radio, LLC, Phillips Broadcasting Company, Inc., Pikes Peak Community College, Q Media Group LLC, Q Media Properties, LLC, R&M Broadcasting, Ranchland Broadcasting Company, Inc., Sky Media, LLC, Southark Broadcasters, Inc., Southwest Media, Inc., Truckee Tahoe Radio, LLC, Two Black Cadillacs, Inc., Yeary Broadcasting, Inc.*

Flagstaff Radio, Inc.

Friendship Broadcasting

GeoBroadcast Solutions, LLC**

Goldman Engineering Management,**

Gregory Cooke

JAM Media Solutions, LLC

KCUR, WBUR, WSHU, and New England Public Media

Kevin M. Fitzgerald*

Members of Congress, Henry C. "Hank" Johnson, Jr., Bennie Thompson, Barbara Lee, Anthony Brown

Members of Congress, Henry C. "Hank" Johnson, Jr., Bennie Thompson, Barbara Lee, Anthony Brown, Joyce Beatty, Troy Carter, Eric Swalwell, Danny Davis, Emanuel Cleaver, Robert C. "Bobby" Scott**

Multicultural Media, Telecom and Internet Council; National Association of Black Owned Broadcasters,

Inc.*

National Association of Black Owned Broadcasters, Inc.

National Association of Broadcasters*

National Public Radio, Inc.*

Octave Communications**

Press Communications, LLC

REC Networks

TBA Communications, LLC

Vision Multimedia Group LLC WUFO

Woof Boom Radio

Xperi Holding Corporation

* Filed comments and reply comments

** Filed reply comments only

Commenters that Filed Ex Parte Notices and Submissions in MB Docket No. 20-401 After Conclusion of 2022 Comment Period

AlwaysMountain Time, LLC

Benjamin F. Chavis, Jr.

Colorado Broadcasters Association (on behalf of Ranchland Broadcasting and Pikes Peak State College)

Connoisseur Media LLC

Core Communicators Broadcasting, Core Radio Group, LLC

Davis Broadcasting Inc., Perry Publishing & Broadcasting

Geobroadcast Solutions, LLC

International Black Broadcasters Association

iHeartMedia

JAM Media Solutions, LLC

Luke Allen

Jonanthan Mason

MMTC (Multicultural Media, Telecom and Internet Council)

Members of Congress, Tony Cárdenas, Steven Horsford

Members of Congress, Yvette D. Clark, Darren Soto

Members of Congress, Jeff Duncan, Richard Hudson, Fred Upton, Greg Pence, Bill Johnson, Neal P. Dunn, M.D., David B. McKinley, P.E., Debbie Lesko, Billy Long, Tim Walberg, H. Morgan Griffith, Earl L. “Buddy” Carter, Larry Bueshon, M.D.

Members of Congress, Steven Horsford, Bennie G. Thompson

Member of Congress, Robin Kelly

Member of Congress, Markwayne Mullin

National Association of Black Owned Broadcasters, Multicultural Media, Telecom and Internet Council, National Newspaper Publishers Association, JAM Media Solutions, LLC, Spotset, GeoBroadcast Solutions, LLC

National Public Radio

New Jersey Broadcasters Association

Radio By Grace

Roberson and Associates, LLC

Roberts Radio Broadcasting, LLC, JAM Media Solutions, LLC

Salem Media Group

Senators, Richard Blumenthal, Benjamin L. Cardin

Senator Chris Van Hollen

Shainis & Peltzman, Chartered

State Broadcasters Associations

Texas Association of Broadcasters (on behalf of Falls Media LLC and Q-Media Group)

Urban One, Federal Street Strategies

U.S. Black Chambers, Inc.

Zimmer Midwest Communications, Inc., Zimmer Radio of Mid-Missouri

APPENDIX B

Final Rules

Deleted text is marked with a strikethrough and new text is bolded. Other text is current and remains part of the Commission's rules.

Part 11 of Chapter I of Title 47 of the Code of Federal Regulations is amended as follows:

PART 11 – EMERGENCY ALERT SYSTEM (EAS)

1. The authority citation for Part 11 continues to read as follows:

Authority: 47 U.S.C. 151, 154(i) and (o), 303(r), 544(g), 606, 1201, 1206.

2. Amend Section 11.11 by revising paragraph (a) and Table 1 to paragraph (a), and revising paragraph (b), to read as follows:

§11.11 The Emergency Alert System (EAS).

- (a) The EAS is composed of analog radio broadcast stations including AM, FM, ~~and~~ Low-power FM (LPFM), **and program originating FM booster stations**; digital audio broadcasting (DAB) stations, including digital AM, FM, LPFM, and program originating FM booster stations; Class A television (CA) and Low-power TV (LPTV) stations; digital television (DTV) broadcast stations, including digital CA and digital LPTV stations; analog cable systems; digital cable systems which are defined for purposes of this part only as the portion of a cable system that delivers channels in digital format to subscribers at the input of a Unidirectional Digital Cable Product or other navigation device; wireline video systems; wireless cable systems which may consist of Broadband Radio Service (BRS), or Educational Broadband Service (EBS) stations; DBS services, as defined in § 25.701(a) of this chapter (including certain Ku-band Fixed-Satellite Service Direct to Home providers); and SDARS, as defined in § 25.201 of this chapter. These entities are referred to collectively as EAS Participants in this part, and are subject to this part, except as otherwise provided herein. At a minimum EAS Participants must use a common EAS protocol, as defined in § 11.31, to send and receive emergency alerts, and comply with the requirements set forth in § 11.56, in accordance with the following tables:

Table 1 - Analog and Digital Broadcast Station Equipment Deployment Requirements

| EAS Equipment Requirement | AM & FM & Program originating FM booster station | Digital AM & FM & Program originating FM booster station | Analog & Digital FM class D | Analog & Digital LPFM & Program originating FM booster station | DTV | Analog & Digital Class A TV | Analog & Digital LPTV |
|---------------------------|---|---|-----------------------------|---|-----|-----------------------------|-----------------------|
| EAS Decoder ¹ | Y | Y | Y | Y | Y | Y | Y |
| EAS Encoder | Y | Y | N | N | Y | Y | N |
| Audio message | Y | Y | Y | Y | Y | Y | Y |

| | | | | | | | |
|---------------|-----|-----|-----|-----|---|---|---|
| Video message | N/A | N/A | N/A | N/A | Y | Y | Y |
|---------------|-----|-----|-----|-----|---|---|---|

¹ EAS Participants may comply with the obligations set forth in § 11.56 to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device, as specified in § 11.56(b).

* * *

(b) Analog class D non-commercial educational FM stations as defined in § 73.506 of this chapter, digital class D non-commercial educational FM stations, analog LPFM stations as defined in §§ 73.811 and 73.853 of this chapter, digital LPFM stations, analog LPTV stations as defined in § 74.701(f), and digital LPTV stations as defined in § 74.701(k) of this chapter are not required to comply with § 11.32. Analog and digital LPTV stations that operate as television broadcast translator stations, as defined in § 74.701(b) of this chapter, are not required to comply with the requirements of this part. FM broadcast booster stations as defined in § 74.1201(f)(1) of this chapter and FM translator stations as defined in § 74.1201(a) of this chapter which entirely rebroadcast the programming of other local FM broadcast stations are not required to comply with the requirements of this part. **Program originating FM booster stations as defined in § 74.1201(f)(2) of this chapter must comply with the requirements of this part as set forth in Table 1 to paragraph (a) of this section.** International broadcast stations as defined in § 73.701 of this chapter are not required to comply with the requirements of this part. Analog and digital broadcast stations that operate as satellites or repeaters of a hub station (or common studio or control point if there is no hub station) and rebroadcast 100 percent of the programming of the hub station (or common studio or control point) may satisfy the requirements of this part through the use of a single set of EAS equipment at the hub station (or common studio or control point) which complies with §§ 11.32 and 11.33.

* * * * *

Part 73 of Chapter I of Title 47 of the Code of Federal Regulations is amended as follows:

PART 73 – RADIO BROADCAST SERVICES

1. The authority citation for Part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 155, 301, 303, 307, 309, 310, 334, 336, 339.

2. Amend Section 73.860 by adding new paragraph (b)(5), to read as follows:

§ 73.860 Cross-ownership.

* * * * *

(b) * * * * *

* * *

(5) Booster stations commonly owned by LPFM stations may conduct transmissions independent of those broadcast by the primary LPFM station for a period not to exceed three minutes of each broadcast hour. This is a strict hourly limit that may not be exceeded by aggregating unused minutes of program origination.

* * * * *

Part 74 of Chapter I of Title 47 of the Code of Federal Regulations is amended as follows:

PART 74 – EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTIONAL SERVICES

1. The authority citation for part 74 continues to read as follows:
Authority: 47 U.S.C. 154, 302a, 303, 307, 309, 310, 325, 336, and 554.

2. Amend Section 74.1201 by revising paragraph (f), to read as follows:

§ 74.1201 Definitions.

* * * * *

(f) **(1) *FM broadcast booster station.*** A station in the broadcasting service operated for the sole purpose of retransmitting the signals of an FM radio broadcast station, by amplifying and reradiating such signals, without significantly altering any characteristic of the incoming signal other than its amplitude. Unless specified otherwise, this term includes LPFM boosters as defined in paragraph (l) of this section.

(2) *Program Originating FM booster station.* An FM broadcast booster station that retransmits the signals of an FM radio broadcast station or a low-power FM broadcast station, and that may replace the content of the incoming signal by originating programming for a period not to exceed three minutes of each broadcast hour. This is a strict hourly limit that may not be exceeded by aggregating unused minutes of program origination. A program originating FM booster station is subject to the same technical and interference protection requirements as are all FM broadcast booster stations, including but not limited to those set forth in §§ 74.1203 – 74.1262 of this part.

* * * * *

3. Amend Section 74.1203 by revising paragraph (c), to read as follows:

§ 74.1203 Interference.

* * * * *

(c) An FM **broadcast** booster station will be exempted from the provisions of paragraphs (a) and (b) of this section to the extent that it may cause limited interference to its primary station's signal, *provided* it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the principal community of its primary station. **A program originating FM booster station will be exempted from the provisions of paragraphs (a) and (b) of this section to the extent that it may cause limited interference to its primary station's signal.** A properly synchronized program originating FM booster station transmitting programming different than that broadcast by the primary station, subject to the limits set forth in § 74.1201(f)(2) of this part, is not considered to cause interference to its primary station solely because such originated programming differs from that transmitted by the primary station.

* * * * *

4. Amend Section 74.1231 by revising paragraph (i), by removing the Note to paragraph (i), and by

adding new paragraph (j), to read as follows:

§ 74.1231 Purpose and permissible service.

* * * * *

(i) FM broadcast booster stations provide a means whereby the licensee of an FM broadcast station may provide service to areas in any region within the primary station's predicted authorized service contours. An FM broadcast booster station is authorized to retransmit only the signals of its primary station which have been received directly through space and suitably amplified, or received by alternative signal delivery means including, but not limited to, satellite and terrestrial microwave facilities. The FM booster station shall not retransmit the signals of any other station nor make independent transmissions **except as set forth in § 74.1201(f)(2) of this part, and** except that locally generated signals may be used to excite the booster apparatus for the purpose of conducting tests and measurements essential to the proper installation and maintenance of the apparatus.

~~Note: In the case of an FM broadcast station authorized with facilities in excess of those specified by § 73.211 of this chapter, an FM booster station will only be authorized within the protected contour of the class of station being rebroadcast as predicted on the basis of the maximum powers and heights set forth in that section for the applicable class of FM broadcast station concerned.~~

(j) In the case of an FM broadcast station authorized with facilities in excess of those specified by § 73.211 of this chapter, an FM booster station will only be authorized within the protected contour of the class of station being rebroadcast as predicted on the basis of the maximum powers and heights set forth in that section for the applicable class of FM broadcast station concerned.

5. Amend Section 74.1232 by revising paragraph (f), to read as follows:

§ 74.1232 Eligibility and licensing requirements.

* * * * *

(f) An FM broadcast booster station will be authorized only to the licensee or permittee of the FM radio broadcast station whose signals the booster station will retransmit, to serve areas within the protected contour of the primary station, subject to ~~Note, § 74.1231(h)~~ **§ 74.1231(j)** of this part.

* * * * *

6. Amend Section 74.1235 by revising paragraph (b), to read as follows:

§ 74.1235 Power limitations and antenna systems.

* * * * *

(b) An application for an FM translator station, other than one for fill-in service which is covered in paragraph (a) of this section, will not be accepted for filing if it specifies an effective radiated power (ERP) which exceeds the maximum ERP (MERP) value determined in accordance with

this paragraph. The antenna height above average terrain (HAAT) shall be determined in accordance with § 73.313(d) of this chapter for each of 12 distinct radials, with each radial spaced 30 degrees apart and with the bearing of the first radial bearing true north. Each ~~radial~~ **radial** HAAT value shall be rounded to the nearest meter. For each of the 12 radial directions, the MERP is the value corresponding to the calculated HAAT in the following tables that is appropriate for the location of the translator. For an application specifying a nondirectional transmitting antenna, the specified ERP must not exceed the smallest of the 12 MERP's. For an application specifying a directional transmitting antenna, the ERP in each azimuthal direction must not exceed the MERP for the closest of the 12 radial directions.

* * *

* * * * *

APPENDIX C
Proposed Rules

Deleted text is marked with a strikethrough and new text is bolded. Other text is current and remains part of the Commission's rules.

Part 73 of Chapter I of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 73 – RADIO BROADCAST SERVICES

1. The authority citation for part 73 continues to read as follows:
Authority: 47 U.S.C. 154, 155, 301, 303, 307, 309, 310, 334, 336, 339.
2. Amend Section 73.801 by removing all text following the introductory sentence, and adding paragraphs (a), (b), and (c), to read as follows:

§ 73.801 Broadcast regulations applicable to LPFM stations.

The following rules are applicable to LPFM stations:

~~Section 73.201 Numerical definition of FM broadcast channels.~~

~~Section 73.220 Restrictions on use of channels.~~

~~Section 73.267 Determining operating power.~~

~~Section 73.277 Permissible transmissions.~~

~~Section 73.297 FM stereophonic sound broadcasting.~~

~~Section 73.310 FM technical definitions.~~

~~Section 73.312 Topographic data.~~

~~Section 73.318 FM blanketing interference.~~

~~Section 73.322 FM stereophonic sound transmission standards.~~

~~Section 73.333 Engineering charts.~~

~~Section 73.503 Licensing requirements and service.~~

~~Section 73.508 Standards of good engineering practice.~~

~~Section 73.593 Subsidiary communications services.~~

~~Section 73.1015 Truthful written statements and responses to Commission inquiries and correspondence.~~

~~Section 73.1030 Notifications concerning interference to radio astronomy, research and receiving~~

~~installations.~~

~~Section 73.1201 Station identification.~~

~~Section 73.1206 Broadcast of telephone conversations.~~

~~Section 73.1207 Rebroadcasts.~~

~~Section 73.1208 Broadcast of taped, filmed, or recorded material.~~

~~Section 73.1210 TV/FM dual language broadcasting in Puerto Rico.~~

~~Section 73.1211 Broadcast of lottery information.~~

~~Section 73.1212 Sponsorship identification; list retention; related requirements.~~

~~Section 73.1213 Antenna structure, marking and lighting.~~

~~Section 73.1216 Licensee conducted contests.~~

~~Section 73.1217 Broadcast hoaxes.~~

~~Section 73.1250 Broadcasting emergency information.~~

~~Section 73.1300 Unattended station operation.~~

~~Section 73.1400 Transmission system monitoring and control.~~

~~Section 73.1520 Operation for tests and maintenance.~~

~~Section 73.1540 Carrier frequency measurements.~~

~~Section 73.1545 Carrier frequency departure tolerances.~~

~~Section 73.1570 Modulation levels: AM, FM, and TV aural.~~

~~Section 73.1580 Transmission system inspections.~~

~~Section 73.1610 Equipment tests.~~

~~Section 73.1620 Program tests.~~

~~Section 73.1650 International agreements.~~

~~Section 73.1660 Acceptability of broadcast transmitters.~~

~~Section 73.1665 Main transmitters.~~

~~Section 73.1692 Broadcast station construction near or installation on an AM broadcast tower.~~

~~Section 73.1745 Unauthorized operation.~~

~~Section 73.1750 Discontinuance of operation.~~

~~Section 73.1920 Personal attacks.~~

~~Section 73.1940 Legally qualified candidates for public office.~~

~~Section 73.1941 Equal opportunities.~~

~~Section 73.1943 Political file.~~

~~Section 73.1944 Reasonable access.~~

~~Section 73.3511 Applications required.~~

~~Section 73.3512 Where to file; number of copies.~~

~~Section 73.3513 Signing of applications.~~

~~Section 73.3514 Content of applications.~~

~~Section 73.3516 Specification of facilities.~~

~~Section 73.3517 Contingent applications.~~

~~Section 73.3518 Inconsistent or conflicting applications.~~

~~Section 73.3519 Repetitious applications.~~

~~Section 73.3520 Multiple applications.~~

~~Section 73.3525 Agreements for removing application conflicts.~~

~~Section 73.3539 Application for renewal of license.~~

~~Section 73.3542 Application for emergency authorization.~~

~~Section 73.3545 Application for permit to deliver programs to foreign stations.~~

~~Section 73.3550 Requests for new or modified call sign assignments.~~

~~Section 73.3561 Staff consideration of applications requiring Commission consideration.~~

~~Section 73.3562 Staff consideration of applications not requiring action by the Commission.~~

~~Section 73.3566 Defective applications.~~

~~Section 73.3568 Dismissal of applications.~~

~~Section 73.3580 Local public notice of filing of broadcast applications.~~

~~Section 73.3584 Procedure for filing petitions to deny.~~

~~Section 73.3587 Procedure for filing informal objections.~~

~~Section 73.3588 Dismissal of petitions to deny or withdrawal of informal objections.~~

~~Section 73.3589 Threats to file petitions to deny or informal objections.~~

~~Section 73.3591 Grants without hearing.~~

~~Section 73.3593 Designation for hearing.~~

~~Section 73.3598 Period of construction.~~

~~Section 73.3599 Forfeiture of construction permit.~~

~~Section 73.3999 Enforcement of 18 U.S.C. 1464 restrictions on the transmission of obscene and indecent material.~~

(a) Part 11 – Emergency Alert System (EAS)

(1) Section 11.11 The Emergency Alert System (EAS).

(b) Part 73 – Radio Broadcast Services

(1) Section 73.201 Numerical definition of FM broadcast channels.

(2) Section 73.220 Restrictions on use of channels.

(3) Section 73.267 Determining operating power.

(4) Section 73.277 Permissible transmissions.

(5) Section 73.297 FM stereophonic sound broadcasting.

(6) Section 73.310 FM technical definitions.

(7) Section 73.312 Topographic data.

(8) Section 73.318 FM blanketing interference.

(9) Section 73.322 FM stereophonic sound transmission standards.

(10) Section 73.333 Engineering charts.

(11) Section 73.503 Licensing requirements and service.

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- (12) Section 73.508 Standards of good engineering practice.
 - (13) Section 73.593 Subsidiary communications services.
 - (14) Section 73.1015 Truthful written statements and responses to Commission inquiries and correspondence.
 - (15) Section 73.1030 Notifications concerning interference to radio astronomy, research and receiving installations.
 - (16) Section 73.1201 Station identification.
 - (17) Section 73.1206 Broadcast of telephone conversations.
 - (18) Section 73.1207 Rebroadcasts.
 - (19) Section 73.1208 Broadcast of taped, filmed, or recorded material.
 - (20) Section 73.1210 TV/FM dual-language broadcasting in Puerto Rico.
 - (21) Section 73.1211 Broadcast of lottery information.
 - (22) Section 73.1212 Sponsorship identification; list retention; related requirements.
 - (23) Section 73.1213 Antenna structure, marking and lighting.
 - (24) Section 73.1216 Licensee-conducted contests.
 - (25) Section 73.1217 Broadcast hoaxes.
 - (26) Section 73.1250 Broadcasting emergency information.
 - (27) Section 73.1300 Unattended station operation.
 - (28) Section 73.1400 Transmission system monitoring and control.
 - (29) Section 73.1520 Operation for tests and maintenance.
 - (30) Section 73.1540 Carrier frequency measurements.
 - (31) Section 73.1545 Carrier frequency departure tolerances.
 - (32) Section 73.1570 Modulation levels: AM, FM, and TV aural.
 - (33) Section 73.1580 Transmission system inspections.
 - (34) Section 73.1610 Equipment tests.
 - (35) Section 73.1620 Program tests.

- (36) Section 73.1650 International agreements.
- (37) Section 73.1660 Acceptability of broadcast transmitters.
- (38) Section 73.1665 Main transmitters.
- (39) Section 73.1692 Broadcast station construction near or installation on an AM broadcast tower.
- (40) Section 73.1745 Unauthorized operation.
- (41) Section 73.1750 Discontinuance of operation.
- (42) Section 73.1920 Personal attacks.
- (43) Section 73.1940 Legally qualified candidates for public office.
- (44) Section 73.1941 Equal opportunities.
- (45) Section 73.1943 Political file.
- (46) Section 73.1944 Reasonable access.
- (47) Section 73.3511 Applications required.
- (48) Section 73.3512 Where to file; number of copies.
- (49) Section 73.3513 Signing of applications.
- (50) Section 73.3514 Content of applications.
- (51) Section 73.3516 Specification of facilities.
- (52) Section 73.3517 Contingent applications.
- (53) Section 73.3518 Inconsistent or conflicting applications.
- (54) Section 73.3519 Repetitious applications.
- (55) Section 73.3520 Multiple applications.
- (56) Section 73.3525 Agreements for removing application conflicts.
- (57) Section 73.3539 Application for renewal of license.
- (58) Section 73.3542 Application for emergency authorization.
- (59) Section 73.3545 Application for permit to deliver programs to foreign stations.
- (60) Section 73.3550 Requests for new or modified call sign assignments.

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- (61) Section 73.3561 Staff consideration of applications requiring Commission consideration.
 - (62) Section 73.3562 Staff consideration of applications not requiring action by the Commission.
 - (63) Section 73.3566 Defective applications.
 - (64) Section 73.3568 Dismissal of applications.
 - (65) Section 73.3580 Local public notice of filing of broadcast applications.
 - (66) Section 73.3584 Procedure for filing petitions to deny.
 - (67) Section 73.3587 Procedure for filing informal objections.
 - (68) Section 73.3588 Dismissal of petitions to deny or withdrawal of informal objections.
 - (69) Section 73.3589 Threats to file petitions to deny or informal objections.
 - (70) Section 73.3591 Grants without hearing.
 - (71) Section 73.3593 Designation for hearing.
 - (72) Section 73.3598 Period of construction.
 - (73) Section 73.3599 Forfeiture of construction permit.
 - (74) Section 73.3999 Enforcement of 18 U.S.C. 1464 (restrictions on the transmission of obscene and indecent material).
- (c) Part 74 – Experimental Radio, Auxiliary, Special Broadcast and Other Program Distributional Services
- (1) Section 74.1201 Definitions.
 - (2) Section 74.1203 Interference.
 - (3) Section 74.1206 Program originating FM booster station notifications.
 - (4) Section 74.1231 Purpose and permissible service.
 - (5) Section 74.1232 Eligibility and licensing requirements.
 - (6) Section 74.1290 Political programming rules applicable to program originating FM booster stations.

3. Amend Section 73.3526 by adding paragraph (a)(3), to read as follows:

§ 73.3526 Online public inspection file of commercial stations.

(a) * * *

(3) Every permittee or licensee of a program originating FM booster station, as defined in § 74.1201(f)(2) of this chapter, shall maintain in the political file of its primary station the records required in § 73.1943 of this part for each such program originating FM booster station.

* * * * *

4. Amend Section 73.3527 by adding paragraph (a)(3), to read as follows:

§ 73.3527 Online public inspection file of noncommercial educational stations.

(a) * * *

(3) Every permittee or licensee of a program originating FM booster station, as defined in § 74.1201(f)(2) of this chapter, in the noncommercial educational broadcast service shall maintain in the political file of its primary station the records required in § 73.1943 of this part for each such program originating FM booster station.

* * * * *

Part 74 of Chapter I of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 74 – EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTIONAL SERVICES

1. The authority citation for part 74 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, 307, 309, 310, 325, 336, and 554.

2. Amend Section 74.1204 by removing the Note to paragraph (a)(4), adding paragraph (a)(5), revising paragraph (f)(1), adding new paragraphs (f)(2) and (f)(3), renumbering current paragraphs (f)(1) – (f)(5) as paragraphs (f)(3)(i) – (f)(3)(v), revising paragraph (f)(3)(iv), and revising paragraph (i), to read as follows:

§ 74.1204 Protection of FM broadcast, FM Translator and LP100 stations.

(a) * * *

~~Note to paragraph (a)(4): LP100 stations, to the purposes of determining overlap pursuant to this paragraph, LPFM applications and permits that have not yet been licensed must be considered as operating with the maximum permitted facilities. All LPFM TIS stations must be protected on the basis of a nondirectional antenna.~~

(5) For the purposes of determining overlap pursuant to this paragraph, LP100 stations, LPFM applications, and LPFM permits that have not yet been licensed must be considered as operating with the maximum permitted facilities. All LPFM TIS stations must be protected on the basis of a nondirectional antenna.

* * * * *

(f) **(1)** An application for an FM translator station will not be ~~accepted for filing~~ **granted** even though the proposed operation would not involve overlap of field strength contours with any other station, as set forth in paragraph (a) of this section, if grant of the authorization will result in interference to the reception of a regularly used, off-the-air signal of any authorized co-channel, first, second or third adjacent channel broadcast station, including previously authorized secondary service stations within the 45 dB μ field strength contour of the desired station. ~~Interference is demonstrated by:~~

~~(1) The required minimum number of valid listener complaints as determined using Table 1 to § 74.1203(a)(3) of this part and defined in § 74.1201(k) of this part;~~

~~(2) A map plotting the specific location of the alleged interference in relation to the complaining station's 45 dB μ contour;~~

~~(3) A statement that the complaining station is operating within its licensed parameters;~~

~~(4) A statement that the complaining station licensee has used commercially reasonable efforts to inform the relevant translator licensee of the claimed interference and attempted private resolution; and~~

~~(5) U/D data demonstrating that at each listener location the undesired to desired signal strength exceeds -20 dB for co-channel situations, -6 dB for first adjacent channel situations or 40 dB for second or third adjacent channel situations, calculated using the methodology set out in paragraph (b) of this section.~~

(2) An application for an FM broadcast booster station will not be granted even though the proposed operation would not involve overlap of field strength contours with any other station, as set forth in paragraph (i) of this section, if grant of the authorization will result in interference to the reception of a regularly used, off-the-air signal of any authorized co-channel, first, second or third adjacent channel broadcast station, other than the booster's primary station, but including previously authorized secondary service stations within the 45 dB μ field strength contour of the desired station.

(3) Interference, with regard to either an FM translator station or an FM broadcast booster station application, is demonstrated by:

(4i) The required minimum number of valid listener complaints as determined using Table 1 to § 74.1203(a)(3) of this part and defined in § 74.1201(k) of this part;

(2ii) A map plotting the specific location of the alleged interference in relation to the complaining station's 45 dB μ contour;

- (3iii) A statement that the complaining station is operating within its licensed parameters;
- (4iv) A statement that the complaining station licensee has used commercially reasonable efforts to inform the relevant translator **or booster** licensee of the claimed interference and attempted private resolution; and
- (5v) U/D data demonstrating that at each listener location the undesired to desired signal strength exceeds -20 dB for co-channel situations, -6 dB for first-adjacent channel situations or 40 dB for second- or third-adjacent channel situations, calculated using the methodology set out in paragraph (b) of this section.

* * * * *

(i) FM **broadcast** booster stations shall be subject to the requirement that the signal of any first adjacent channel station must exceed the signal of the booster station by 6 dB at all points within the protected contour of any first adjacent channel station, except that in the case of FM stations on adjacent channels at spacings that do not meet the minimum distance separations specified in § 73.207 of this chapter, the signal of any first adjacent channel station must exceed the signal of the booster by 6 dB at any point within the predicted interference free contour of the adjacent channel station.

* * * * *

3. Add new Section 74.1206, to read as follows:

§ 74.1206 Program originating FM booster station notifications.

- (a) A program originating FM booster station must electronically file an FM Booster Program Origination Notification with the Commission in LMS, before commencing or after terminating the broadcast of booster-originated content subject to the provisions of § 74.1201(f)(2) of this part. Such a notification must be filed within 15 days before commencing origination, or within 30 days after terminating origination.
- (b) Every FM Booster Program Origination Notification must include the following information in machine-readable format:
 - (1) The call sign and facility identification number of the program originating FM booster station;
 - (2) If applicable, the date on which the program originating FM booster station will commence or has terminated originating content;
 - (3) The name and telephone number of a technical representative the Commission or the public can contact in the event of interference;
 - (4) A certification that the program originating FM booster station complies with all Emergency Alert System (EAS) requirements in part 11 of this chapter;
 - (5) A certification that the program originating FM booster station will originate programming for no more than three minutes of each broadcast hour; and
 - (6) A certification that the program originating FM booster station has been properly synchronized to minimize interference to the primary station.

4. Amend Section 74.1231 by revising paragraph (j) and adding new paragraph (k), to read as

follows:

§ 74.1231 Purpose and permissible service.

* * * * *

(j) In the case of ~~an~~ **a superpowered** FM broadcast station, authorized with facilities in excess of those specified by § 73.211 of this chapter, an FM booster station will only be authorized within the protected contour of the class of station being rebroadcast as predicted **based on the basis of** the maximum ~~powers and heights~~ **facilities** set forth in ~~that section~~ **§ 73.211** for the applicable class of FM broadcast station ~~concerned~~ **being rebroadcast.**

(k) An FM broadcast booster station, as defined in § 74.1201(f)(1) or (f)(2) of this part, must suspend operations at any time its primary station is not operating. If a full-service FM broadcast station suspends operations, in addition to giving the notification specified in § 73.1740(a)(4) of this chapter, each FM broadcast booster station and program originating FM booster station must also file a notification under § 73.1740(a)(4) that it has suspended operations.

5. Amend Section 74.1232 by revising the first sentence of paragraph (g), adding new paragraph (h), and redesignating paragraph (h) as paragraph (i), to read as follows:

§ 74.1232 Eligibility and licensing requirements.

* * * * *

(g) No numerical limit is placed upon the number of FM booster stations which may be licensed to a single licensee. **No more than twenty five (25) program originating FM booster stations may be licensed to a single full-service FM broadcast station.** * * *

(h) A program originating FM booster station, when originating programming pursuant to the limits set forth in § 74.1201(f)(2) of this part, may not broadcast programming that is not permitted by its primary station's authorization (e.g., a program originating FM booster station licensed to a noncommercial educational primary station may only originate programming consistent with § 73.503 of this chapter).

~~(hi)~~ Any authorization for an FM translator station issued to an applicant described in paragraphs (d) and (e) of this section will be issued subject to the condition that it may be terminated at any time, upon not less than sixty (60) days written notice, where the circumstances in the community or area served are so altered as to have prohibited grant of the application had such circumstances existed at the time of its filing.

6. Add new Section 74.1290, to read as follows:

§ 74.1290 Political programming rules applicable to program originating FM booster stations.

To the extent a program originating FM booster station originates programming different than that broadcast by its primary station, pursuant to the limits set forth in § 74.1201(f)(2) of this part, it shall comply with the requirements in §§ 73.1212 (Sponsorship identification), 73.1940 (Legally qualified candidates for public office), 73.1941 (Equal opportunities), 73.1942 (Candidate rates), 73.1943 (Political file), and 73.1944 (Reasonable access), of this chapter.

APPENDIX D

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA)¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations, Notice of Proposed Rulemaking (NPRM)*, released in December 2020.² The Federal Communications Commission (Commission) sought written public comment on the proposals in the *NPRM*, including comment on the IRFA. No comments were filed addressing the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need For, and Objectives of, the Report and Order

2. In the *Report and Order*, the Commission finds that it is in the public interest to allow FM and low power FM (LPFM) broadcasters to use FM booster stations to provide booster-originated content on a voluntary, limited basis, subject to certain restrictions described in the *Report and Order*, and further subject to the adoption of licensing, interference and service rules for origination of content on boosters as proposed in a concurrently adopted *Further Notice of Proposed Rulemaking (FNPRM)*. In order to distinguish between a fill-in station and a Program Originating FM booster station, the *Report and Order* adopts a new definition of program originating boosters.⁴ The ability to originate content will enable broadcasters to serve geographic segments of their broadcast areas, could open up more affordable advertising to smaller and minority-owned businesses, and will generally provide broadcasters and listeners options for more targeted and varied advertising and content that many stations are not able to provide today.

3. The issues raised in this proceeding fall into three broad categories: (1) non-technical matters such as the advantages and disadvantages of program originating boosters from an economic and public interest perspective; (2) technical issues such as whether program originating boosters, if properly engineered, would cause harmful interference to their primary station or adjacent channel stations; and (3) administrative matters the Commission would need to address in order to authorize program originating boosters and respond to any resulting operational issues. The *Report and Order* resolves the first category by adopting a rule that determines program originating boosters limited to originating programming for three minutes per hour would serve the public interest. In addition, the *Report and Order* determines concerns about the technology's impact on advertising revenue of other broadcasters and harmful interference are not supported by the record. It also addresses the second category about interference by concluding that properly engineered program originating boosters will not cause interference to the primary station or adjacent channel stations. The *Report and Order* also requires that program originating boosters receive and broadcast all emergency alerts in the same manner as their primary station.⁵ While stations will not be permitted to construct or operate program originating boosters pursuant to these rules until we adopt final service rules in response to the Further NPRM and such rules have been reviewed by the Office of Management and Budget, the Commission provides that pending adoption and OMB review of such rules, stations can pursue experimental authorizations pursuant to Part 5 of our rules. In the *FNPRM*, the Commission seeks comment on the proposed

¹ 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601-612, was amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 847 (1996).

² *Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations, Notice of Proposed Rulemaking*, 35 FCC Rcd 14213 (2020).

³ 5 U.S.C. § 604.

⁴ See *Report and Order*, paras. 12-14.

⁵ See *Report and Order*, paras. 53.

processing, licensing, and service rules required to authorize broadcasters to originate programming on boosters on a permanent basis.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

4. Parties that filed comments did not specifically reference the IRFA in their comments. Some commenters, however, expressed concern about increased costs, such as the cost of building and operating multiple boosters, particularly for smaller broadcasters, and the initial outlay to cover infrastructure and maintenance expenses, and additional expenses to hire and train staff, and purchase content management systems to feed secondary programming to the boosters.⁶ In addition, commenters claim GeoBroadcast Solutions' (GBS) proprietary technology could ultimately lead to unfavorable rates for small entities that are late adopters of the technology.⁷ These and other concerns are discussed in section F of this FRFA.

C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration

5. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.⁸ The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

D. Description and Estimate of the Number of Small Entities to Which the Rules Apply

6. The RFA directs the agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.⁹ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small government jurisdiction."¹⁰ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.¹¹ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.¹²

7. *Radio Stations.* This industry is comprised of "establishments primarily engaged in broadcasting aural programs by radio to the public."¹³ Programming may originate in their own studio, from an affiliated network, or from external sources.¹⁴ The SBA small business size standard for this

⁶ See *Report and Order*, paras. 23-24.

⁷ See *Report and Order*, para. 25.

⁸ 5 U.S.C. § 604(a)(3).

⁹ *Id.* § 604(a)(4).

¹⁰ *Id.* § 601(6).

¹¹ *Id.* § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

¹² 15 U.S.C. § 632.

¹³ See U.S. Census Bureau, *2017 NAICS Definition, "515112 Radio Stations,"* <https://www.census.gov/naics/?input=515112&year=2017&details=515112>.

¹⁴ *Id.*

industry classifies firms having \$41.5 million or less in annual receipts as small.¹⁵ U.S. Census Bureau data for 2017 show that 2,963 firms operated in this industry during that year.¹⁶ Of this number, 1,879 firms operated with revenue of less than \$25 million per year.¹⁷ Based on this data and the SBA's small business size standard, we estimate a majority of such entities are small entities.

8. The Commission estimates that as of September 30, 2023, there were 4,452 licensed commercial AM radio stations and 6,670 licensed commercial FM radio stations, for a combined total of 11,122 commercial radio stations.¹⁸ Of this total, 11,120 stations (or 99.98 %) had revenues of \$41.5 million or less in 2022, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Database (BIA) on October 4, 2023, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates that as of September 30, 2023, there were 4,263 licensed noncommercial (NCE) FM radio stations, 1,978 low power FM (LPFM) stations, and 8,928 FM translators and boosters.¹⁹ The Commission however does not compile, and otherwise does not have access to financial information for these radio stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of radio station licensees, we presume that all of these entities qualify as small entities under the above SBA small business size standard.

9. We note, however, that in assessing whether a business concern qualifies as "small" under the above definition, business (control) affiliations²⁰ must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. In addition, another element of the definition of "small business" requires that an entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific radio or television broadcast station is dominant in its field of operation. Accordingly, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and is therefore possibly over-inclusive. An additional element of the definition of "small business" is that the entity must be independently owned and operated. Because it is difficult to assess these criteria in the context of media entities, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the

¹⁵ See 13 CFR § 121.201, NAICS Code 515112 (as of 10/1/22 NAICS Code 516110).

¹⁶ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 515112, <https://data.census.gov/cedsci/table?y=2017&n=515112&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>. We note that the US Census Bureau withheld publication of the number of firms that operated for the entire year.

¹⁷ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in the individual categories for less than \$100,000, and \$100,000 to \$249,999 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

¹⁸ *Broadcast Station Totals as of September 30, 2023*, Public Notice, DA 23-921 (rel. Oct. 3, 2023) (*October 2023 Broadcast Station Totals PN*), <https://docs.fcc.gov/public/attachments/DA-23-921A1.pdf>.

¹⁹ *Id.*

²⁰ "[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has the power to control both." 13 CFR § 21.103(a)(1).

definition of a small business on this basis and similarly may be over-inclusive.

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

10. The *Report and Order* adopts rules requiring compatibility between program originating boosters and the Emergency Alert System (EAS) as well as rules establishing a limitation on program origination to three minutes per hour. Stations that wish to originate programming on a booster station may request experimental authorization pursuant to section 5.203 of the Commission's rules, which would require an application describing the nature, purpose, and duration of the experimental authorization, and require the station to file any supplemental reports that flow from this authorization. The Media Bureau (MB) is required to provide expedited treatment for any such requests. As discussed previously, the use of program originating boosters will be voluntary. To the extent that broadcasters choose to use boosters in this way, they will be required to follow the rules adopted in the *Report and Order*. We also note the Commission concurrently adopted an *FNPRM* in this proceeding, which proposes modified reporting requirements for FM booster stations.

F. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered

11. The RFA requires an agency to provide, "a description of the steps the agency has taken to minimize the significant economic impact on small entities...including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected."²¹ In the *Report and Order*, the Commission adopted measures authorizing program originating boosters to benefit the public by providing broadcasters and listeners with increased options for more targeted and varied advertising and content that many stations are not able to currently provide. We sought to weigh the impact of these measures on small entities against the public interest benefits gained from them and have determined that the benefits outweigh the costs. Commenters have asserted that while booster use causes advertising revenues to increase, the gains may be offset by increased costs.²² Other commenters claim purchasing program originating boosters will necessitate additional expenses, such as purchasing additional content management systems to feed the secondary programming to the boosters, new sales software to handle sub-areas, and hiring and retraining staff.²³ In contrast, supporters of FM geotargeting claim the technology will enable small, minority-owned broadcasters to become more competitive by attracting new advertisers and listeners, and offer targeted advertisements relevant to the local community.²⁴

12. Commenters also raised concerns about the potential of GBS' proprietary technology to create unfavorable rates for small entities who are late adopters, however, we do not require broadcasters to use GBS' system.²⁵ Other, more economical solutions that are in compliance with our interference rules may be viable options for broadcasters. Lastly, we considered concerns regarding the potential impact of program originating boosters on minority and female broadcasters, however, the record does

²¹ 5 U.S.C. § 604(a)(6).

²² See *Report and Order*, para. 23.

²³ *Id.*

²⁴ See Letter from U.S. Black Chambers, Inc. to Marlene H. Dortch, Secretary, MB Docket Nos. 20-401, 17-105, (filed Oct. 30, 2023); Letter from Roberts Broadcasting to Marlene H. Dortch, Secretary, MB Docket Nos. 20-401, 17-105, (filed Nov. 1, 2023).

²⁵ *Report and Order*, at para. 25.

not provide clear evidence concerning the potential impact to these entities.²⁶ While we acknowledge and have considered these concerns, we have determined that the public interest benefits of localism, diversity, and competition obtained by the adopted rules outweigh those potential risks.

G. Report to Congress

13. The Commission will send a copy of the *Report and Order*, including this FRFA, in a report to Congress pursuant to the Congressional Review Act.²⁷ In addition, the Commission will send a copy of the *Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Report and Order* and FRFA (or summaries thereof) will also be published in the *Federal Register*.²⁸

²⁶ *Id.* at paras. 26-27.

²⁷ *Id.* § 801(a)(1)(A).

²⁸ *Id.* § 604(b).

APPENDIX E

Initial Regulatory Flexibility Act Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Federal Communications Commission (Commission) has prepared this Initial Regulatory Flexibility Act Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the *Further Notice of Proposed Rulemaking (FNPRM)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided on the first page of the *FNPRM*. The Commission will send a copy of the *FNPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the *FNPRM* and IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need for, and Objectives of, the Proposed Rules

2. The *FNPRM* seeks further comment on processing, licensing, and service rules for program originating FM booster stations, or program originating boosters, which provide targeted programming to specific areas within their primary FM stations' service areas. Through the *FNPRM*, the Commission sets out a number of proposed changes to the rules, detailed in Appendix C, and seeks comment on these proposed rule changes.

3. In the *FNPRM*, the Commission proposes to retain the requirement that a booster station may cause only limited interference to its primary station's signal, but also proposes to eliminate the current rule provision barring any interference to the primary station's signal within the boundaries of the community of license. Additionally, the Commission proposes a notification requirement in which licensees of authorized booster stations will be required to file a notification of their intention to originate programming rather than implementing a separate application process for boosters that originate programming that could introduce greater delay for broadcasters seeking to operate such booster stations. The Commission also asks whether it should codify technical specifications for synchronization of the program originating booster's signal with that of the FM primary station, as well as whether imposing such a requirement would be an unnecessary burden on broadcasters.

4. The *FNPRM* seeks comment regarding whether any additional requirements will be needed regarding the interaction of program originating boosters and the Emergency Alert System (EAS). In the *Report and Order*, we required program originating boosters to receive and broadcast all emergency alerts in the same manner as their primary station, by codifying this requirement through an amendment of section 11.11 of the rules.⁴

5. Additionally, the Commission proposes to add a new section 74.1206 to the rules, requiring that a program originating booster formally notify the Commission through the Media Bureau's Licensing and Management System (LMS) of the commencement and suspension of operations. Other proposed rule additions and amendments include a requirement that a program originating booster suspend operations when its FM primary station suspends operations, and to so notify the Commission. The *FNPRM* also proposes that the programming originated by an FM booster station must conform to that broadcast by the FM primary station, e.g., a booster re-transmitting a noncommercial educational (NCE) FM station may also only broadcast NCE content. The *FNPRM* also seeks comment on whether

¹ 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996). The SBREFA was enacted as Title II of the Contract with America Advancement Act of 1996 (CWAAA).

² 5 U.S.C. § 603(a).

³ *Id.*

⁴ 47 CFR § 11.11.

information collected in the proposed FM Booster Notification constitute “data assets” for purposes of the OPEN Government Data Act and, if so, whether the collected information constitutes “public data assets.”

6. The Commission further proposes to amend section 74.1232(g), limiting full-service FM stations to 25 FM booster stations. This cap represents a change from the current rule, which imposes no numerical limit on FM booster stations. This proposal is based on the decision in the Report and Order that a limit on the number of boosters a station can operate is needed to ensure that an increase in booster stations resulting from our decision to authorize program originating boosters is consistent with the Local Community Radio Act of 2010 (LCRA).⁵

7. The *FNPRM* also addresses issues regarding political broadcasting. To the extent that political advertising may be broadcast over a program originating booster, the Commission proposes that such a booster station must follow all of the Commission’s political broadcasting rules. These would include rules requiring the maintenance of an online political file, provision of equal opportunity and reasonable access to political candidates, and limiting the rates charged to political candidates for air time.

8. Finally, the *FNPRM* also asks whether vendors of these technologies should abide by the Commission’s patent policy or any other guidelines common to open standards, which require that licenses be available to all parties on fair, reasonable, and nondiscriminatory terms.

B. Legal Basis

9. The proposed action is authorized pursuant to sections 1, 2, 4(i), 7, 301, 302, 303, 307, 308, 309, 316, 319, 324, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154, 157, 301, 302, 303, 307, 308, 309, 316, 319, 324, and 403.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

10. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.⁶ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁷ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act (SBA).⁸ A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.⁹

11. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* Our actions, over time, may affect small entities that are not easily categorized at present. We therefore, describe three broad groups of small entities that could be directly affected herein.¹⁰ First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration’s (SBA) Office of Advocacy, in general a small business is

⁵ Pub. L. 111-371, 124 Stat. 4072 (2011).

⁶ 5 U.S.C. § 603(b)(3).

⁷ 5 U.S.C. § 601(6).

⁸ *See id.* § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632(a)(1)). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

⁹ 15 U.S.C. § 632.

¹⁰ *See* 5 U.S.C. § 601(3)-(6).

an independent business having fewer than 500 employees.¹¹ These types of small businesses represent 99.9% of all businesses in the United States, which translates to 33.2 million businesses.¹²

12. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”¹³ The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations.¹⁴ Nationwide, for tax year 2020, there were approximately 447,689 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.¹⁵

13. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”¹⁶ U.S. Census Bureau data from the 2017 Census of Governments¹⁷ indicate there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.¹⁸ Of this number, there were 36,931 general purpose governments (county,¹⁹ municipal, and town or township²⁰) with populations of

¹¹ See SBA, Office of Advocacy, “What’s New With Small Business?”, <https://advocacy.sba.gov/wp-content/uploads/2023/03/Whats-New-Infographic-March-2023-508c.pdf> (Mar. 2023).

¹² *Id.*

¹³ See 5 U.S.C. § 601(4).

¹⁴ The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C § 601(5) that is used to define a small governmental jurisdiction. Therefore, the IRS benchmark has been used to estimate the number of small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations – Form 990-N (e-Postcard), “Who must file,” <https://www.irs.gov/charities-non-profits/annual-electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard>. We note that the IRS data does not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.

¹⁵ See Exempt Organizations Business Master File Extract (EO BMF), “CSV Files by Region,” <https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf>. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO BMF data for businesses for the tax year 2020 with revenue less than or equal to \$50,000 for Region 1-Northeast Area (58,577), Region 2-Mid-Atlantic and Great Lakes Areas (175,272), and Region 3-Gulf Coast and Pacific Coast Areas (213,840) that includes the continental U.S., Alaska, and Hawaii. This data does not include information for Puerto Rico.

¹⁶ See 5 U.S.C. § 601(5).

¹⁷ See 13 U.S.C. § 161. The Census of Governments survey is conducted every five (5) years compiling data for years ending with “2” and “7”. See also Census of Governments, <https://www.census.gov/programs-surveys/cog/about.html>.

¹⁸ See U.S. Census Bureau, 2017 Census of Governments – Organization Table 2. Local Governments by Type and State: 2017 [CG1700ORG02], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). See also tbl.2. CG1700ORG02 Table Notes_Local Governments by Type and State_2017.

¹⁹ See *id.* at tbl.5. County Governments by Population-Size Group and State: 2017 [CG1700ORG05], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 2,105 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

²⁰ See *id.* at tbl.6. Subcounty General-Purpose Governments by Population-Size Group and State: 2017 [CG1700ORG06], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 18,729 municipal and 16,097 town and township governments with populations less than 50,000.

less than 50,000 and 12,040 special purpose governments—independent school districts²¹ with enrollment populations of less than 50,000.²² Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of “small governmental jurisdictions.”²³

14. *Radio Stations.* This industry is comprised of “establishments primarily engaged in broadcasting aural programs by radio to the public.”²⁴ Programming may originate in their own studio, from an affiliated network, or from external sources.²⁵ The SBA small business size standard for this industry classifies firms having \$41.5 million or less in annual receipts as small.²⁶ U.S. Census Bureau data for 2017 show that 2,963 firms operated in this industry during that year.²⁷ Of this number, 1,879 firms operated with revenue of less than \$25 million per year.²⁸ Based on this data and the SBA’s small business size standard, we estimate a majority of such entities are small entities.

15. The Commission estimates that as of September 30, 2023, there were 4,452 licensed commercial AM radio stations and 6,670 licensed commercial FM radio stations, for a combined total of 11,122 commercial radio stations.²⁹ Of this total, 11,120 stations (or 99.98 %) had revenues of \$41.5 million or less in 2022, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Database (BIA) on October 4, 2023, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates that as of September 30, 2023, there were 4,263 licensed noncommercial (NCE) FM radio stations, 1,978 low power FM (LPFM) stations, and 8,928 FM

²¹ See *id.* at tbl.10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2017 [CG1700ORG10], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 12,040 independent school districts with enrollment populations less than 50,000. See also tbl.4. Special-Purpose Local Governments by State Census Years 1942 to 2017 [CG1700ORG04], CG1700ORG04 Table Notes_Special Purpose Local Governments by State_Census Years 1942 to 2017.

²² While the special purpose governments category also includes local special district governments, the 2017 Census of Governments data does not provide data aggregated based on population size for the special purpose governments category. Therefore, only data from independent school districts is included in the special purpose governments category.

²³ This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,931) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (12,040), from the 2017 Census of Governments - Organizations tbls. 5, 6 & 10.

²⁴ See U.S. Census Bureau, *2017 NAICS Definition, “515112 Radio Stations,”* <https://www.census.gov/naics/?input=515112&year=2017&details=515112>.

²⁵ *Id.*

²⁶ See 13 CFR § 121.201, NAICS Code 515112 (as of 10/1/22 NAICS Code 516110).

²⁷ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 515112, <https://data.census.gov/cedsci/table?y=2017&n=515112&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>. We note that the US Census Bureau withheld publication of the number of firms that operated for the entire year.

²⁸ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in the individual categories for less than \$100,000, and \$100,000 to \$249,999 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

²⁹ *Broadcast Station Totals as of September 30, 2023*, Public Notice, DA 23-921 (rel. Oct. 3, 2023) (*October 2023 Broadcast Station Totals PN*), <https://docs.fcc.gov/public/attachments/DA-23-921A1.pdf>.

translators and boosters.³⁰ The Commission however does not compile, and otherwise does not have access to financial information for these radio stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of radio station licensees, we presume all of these entities qualify as small entities under the above SBA small business size standard.

16. We note, however, that in assessing whether a business concern qualifies as "small" under the above definition, business (control) affiliations³¹ must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. In addition, another element of the definition of "small business" requires that an entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific radio or television broadcast station is dominant in its field of operation. Accordingly, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and is therefore possibly over-inclusive. An additional element of the definition of "small business" is that the entity must be independently owned and operated. Because it is difficult to assess these criteria in the context of media entities, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and similarly may be over-inclusive.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

17. The *FNPRM* proposes modified reporting requirements that, if adopted, may impact compliance requirements for small entities. The Commission seeks comment on whether FM licensees and permittees employing program originating boosters should provide notice through the Licensing and Management System (LMS) prior to commencing program origination, and whether it should similarly provide LMS notice when suspending operations. Should the Commission ultimately decide to adopt these requirements, they would likely result in a modified paperwork obligation for small and other entities. The Commission will have to consider the benefits and costs of allowing program originating booster licensees to submit certain notifications in LMS. If adopted, the Commission will seek approval of and submit the corresponding burden estimates to account for this modified reporting requirement. Additionally, small entities may determine they will need to hire professionals to comply with the rule changes proposed in the *FNPRM*, if adopted. We expect the comments we receive from the parties in the proceeding, including cost and benefit analyses, will help the Commission to identify and evaluate compliance costs and burdens for small businesses that may result from the proposed rules and additional matters discussed in the *FNPRM*.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

18. The RFA requires an agency to describe any significant alternatives, specifically for small businesses, that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for such small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities."³²

³⁰ *Id.*

³¹ "[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has the power to control both." 13 CFR § 21.103(a)(1).

³² See 5 U.S.C. § 603(c)(1)–(4).

19. The Commission has sought to minimize the economic impact on small entities, as well as consider significant alternatives and weigh their potential impact to those entities. In the *FNPRM*, we take the step of proposing to modify rules to facilitate limited program origination by FM booster stations.

20. In addition, the *FNPRM* seeks to avoid imposing additional burdens on small radio stations where practicable. For example, the *FNPRM* proposes to add a new section 74.1206 to the rules, which would prescribe LMS notification of the commencement or suspension of program originating booster service. The majority of Commission notifications in the media services are delivered through LMS, which is less burdensome than requiring separate mail or electronic mail notification. Further, our proposed rule also simplifies notification and certification requirements for broadcasters that permanently discontinue originating programming on a booster to file a notification of termination within 30 days. We believe that unlike other alternatives for compliance, this approach will provide adequate notice to the Commission while minimizing the regulatory burden for broadcast stations.

21. At this time, the Commission does not have supporting data to determine if there will or will not be an economic impact on small businesses as a result of the proposed rule amendments and/or additions. To assist in the Commission's evaluation of the economic impact on small entities, as a result of actions that have been proposed in the *FNPRM*, and to better explore options and alternatives, the Commission has sought comment from the parties. In particular, the Commission seeks comment on whether any of the burdens associated with the filing, recordkeeping and reporting requirements described above can be minimized for small entities. Additionally, the Commission seeks comment on whether any potential costs associated with our FM Booster Station requirements can be alleviated for small entities. The Commission expects to more fully consider the economic impact and alternatives for small entities following the review of comments filed in response to the *FNPRM*.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rule

22. None.

**STATEMENT OF
COMMISSIONER BRENDAN CARR**

Re: *Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations, MB Docket No. 20-401; Modernization of Media Initiative, MB Docket No. 17-105; Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations, RM-11854*

America's radio broadcasters are competing hard every day in the market and delivering the innovative audio content that responds to the needs and interests of their listeners. But they are competing on a playing field that has been tilted against them by outdated and unnecessary federal regulations—restrictions that do not apply to services offered by other businesses in the audio market, including those offered by Big Tech companies. The FCC needs to do a better job of eliminating regulations that are needlessly holding broadcasters back.

We take a good step in the right direction today. For years, the FCC has ensured that various technologies from cable to 5G to next-gen broadcast TV have the freedom to target their content to specific geographies. This has been a proven way to serve the needs of diverse communities while bringing in additional advertisers and revenue opportunities for providers. Except the FCC has never allowed radio broadcasters that same opportunity. It has artificially limited broadcasters' business models.

Today, we change that. The FCC now gives radio broadcasters the opportunity to target content for limited portions of time. With this Order, broadcasters can move forward now with plans to deploy technology to geotarget their audiences with hyper-local news, alerts, weather reports, and advertising. The Order definitively resolves all of the issues that had been raised from interference concerns to policy considerations. Importantly, the Order does not mandate that any broadcaster embrace this technology. It simply eliminates a federal regulation that would have prevented broadcasters from voluntarily choosing to offer this service. It represents an approach to unnecessary regulation that should serve as a model more broadly for how the FCC's broadcast rules should work. Moreover, the Order immediately opens up new opportunities for all FM radio broadcasters which operate in an intensely competitive media environment.

That is why I am very pleased to support the FCC's unanimous decision today that authorizes radio broadcasters to begin offering this service on a voluntary basis. I want to acknowledge in particular the work and leadership that Commissioner Starks has done to advance this bipartisan win. I have appreciated the chance to work with him on this important item.

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS**

Re: *Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations, MB Docket No. 20-401; Modernization of Media Initiative, MB Docket No. 17-105; Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations, RM-11854*

There's no shortage of ways to consume media in the Internet age. Cable, satellite, streaming, and shorts. Podcasts, audiobooks, socials, and, for a time, even audio chat. All of them compete for our attention alongside good old-fashioned radio and broadcast TV. And all of that competition has led to open questions about the direction of media, and the future and role that broadcasters will play. The answers are not crystal clear.

I believe that radio and TV stations are unique, and will continue to shine. They reach just about every home and most roadways in America. They provide a free, over-the-air option for millions of Americans who just can't afford another subscription or are aching from subscription fatigue. They serve as critical conduits for public safety messaging when disaster strikes. They remain among the most trusted sources of local content, including local news, in our communities. Safe, trusted, local, free, and ubiquitous. Those are sound and strong fundamentals.

Broadcasters, though, still need to build and innovate. They'll need to keep giving a voice to every community that they serve. That's why I led the charge to reinstate broadcast workforce data reporting. It's why I continue to fight for a fast and fair transition to NextGenTV. And it's why I support today's decision to allow FM radio stations to originate geotargeted content. Radio is the only media service that, until today, could not offer geo-targeted content. Talk about competing with one-hand tied behind your back.

Small and independent FM broadcasters, many of them minority-owned, have been the driving force behind this change. They've said they want to offer tailored content that speaks to specific communities within their listening audience, including weather and emergency alerts. They've told us that times are tough, and that geotargeting could help them generate new ad revenue. They've also expressed interest in airing geotargeted content to boost public safety and civic engagement. No fewer than [21 civil rights organizations](#) also urged us to make this change. They believe geotargeting has the power to diversify media ownership, while giving small businesses and community organizations more of an opportunity to get their message on the air.

This is about innovation. It's about time we gave these broadcasters—on a voluntary basis—the opportunity to try out their plans. What they have in mind no doubt presents a fresh way of thinking about FM. But the spirit of entrepreneurship runs deep in our communications history, and embracing the new has created pathways to opportunity for millions of Americans. The same could be true for radio.

I'd like to thank leaders in Congress, especially Congressional Black Caucus Chairman Steven Horsford, Congressman Bennie Thompson, and Congressman Hank Johnson, for their support. I'd also like to thank my colleague Commissioner Carr -- he and I have been working side-by-side to make this proposal a reality for a number of years. This bipartisan and unanimous result wouldn't have been possible without his true collaboration. I'd also like to thank Chairwoman Rosenworcel for working with us to circulate this item.

Finally, I'd like to thank our excellent staff in the Media Bureau -- and especially the Audio Division -- for their dedication, determination, and tremendous expertise. This item has my full support.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
CenturyLink Communications, LLC, as the
successor to Qwest Communications Corporation,
Level 3 Communications, LLC, WilTel
Communications, LLC, and Global Crossing
Telecommunications, Inc.,
Complainants,
v.
Peerless Network, Inc.,
Defendant.

Proceeding No. 22-172
Bureau ID No. EB-22-MD-002

ORDER ON RECONSIDERATION

Adopted: April 2, 2024

Released: April 3, 2024

By the Commission: Commissioner Gomez absent and not participating.

I. INTRODUCTION

1. Peerless Network, Inc. (Peerless)—a competitive local exchange carrier (LEC)—seeks reconsideration of the Enforcement Bureau’s (Bureau) March 28, 2023, Memorandum Opinion and Order (Complaint Order) in the captioned formal complaint proceeding.1 The Complaint Order addressed whether Peerless lawfully billed access charges to CenturyLink Communications, LLC (CenturyLink)2—an interexchange carrier (IXC). Specifically, in its Complaint,3 CenturyLink alleged, among other things, that Peerless lacked tariff authority to assess end office and tandem access charges on “over-the-top” Voice over Internet Protocol (VoIP) traffic.4 The Bureau ruled in CenturyLink’s favor as to these contentions, granting Counts II, III, and IV of the Complaint and dismissing Count I of the Complaint

1 CenturyLink Communications, LLC v. Peerless Network, Inc., Proceeding No. 22-172, Memorandum Opinion and Order, DA 23-261, 2023 WL 2705610 (EB Mar. 28, 2023) (Complaint Order).

2 CenturyLink is the successor to Qwest Communications Corporation, Level 3 Communications, LLC, WilTel Communications, LLC, and Global Crossing Telecommunications, Inc.

3 CenturyLink filed its complaint under section 208 of the Communications Act of 1934, as amended (Act). 47 U.S.C. § 208. See Formal Complaint of CenturyLink, LLC, as the successor to Qwest Communications Corporation, Level 3 Communications, LLC, WilTel Communications, LLC, and Global Crossing Telecommunications, Inc., Proceeding No. 22-172, Bureau ID No. EB-22-MD-002 (filed July 8, 2022) (Complaint).

4 Over-the-top VoIP traffic (OTT-VoIP) is a type of VoIP traffic routed to or from an end user “over the top” of a broadband connection provided by a third party not affiliated with the LEC or its VoIP partners. See Connect America Fund et al., Declaratory Ruling, 30 FCC Rcd 1587, 1588, para. 2, 1592, n.35 (2015), vacated and remanded sub nom. AT&T Corp. v. FCC, 841 F.3d 1047 (D.C. Cir. 2016) (2015 VoIP Symmetry Declaratory Ruling).

without prejudice. Thereafter, Peerless filed a Petition for Reconsideration,⁵ which CenturyLink opposes.⁶ As explained below, we dismiss the Petition on procedural grounds and, as an independent and alternative basis for this decision, deny it on the merits.⁷

II. BACKGROUND

2. The *Complaint Order* recites in detail the facts underlying this dispute.⁸ To summarize, Peerless purported to provide “End Office Switching” and “Tandem Switching and Transport” access services to CenturyLink under a federal tariff that Peerless filed with the Federal Communications Commission (Commission).⁹ The Tariff describes “End Office Switching” as a “rate categor[y]” that applies to “Switched Access Service” and that “provides the local end office switching functions necessary to complete the transmission of Switched Access communications to and from the end users served by the local end office and the Customer.”¹⁰ The Tariff defines “Tandem Switching and Transport” as a “rate categor[y]” that applies to “Switched Access Service” and that “provides for the use of the Company’s tandem switches.”¹¹ In particular, “Tandem-Switched Transport provides Switched Transport that is switched through a tandem switch, between the customer’s serving wire center and the end offices subtending the tandem” and “is also available between an access tandem and end offices subtending the tandem.”¹²

3. Peerless billed CenturyLink for these services, but CenturyLink refused to pay. CenturyLink sued Peerless in the U.S. District Court for the Northern District of Illinois (Court), alleging that Peerless unlawfully assessed end office and tandem access charges for OTT-VoIP traffic.¹³ At CenturyLink’s request, the Court referred to the Commission three issues relating to OTT-VoIP traffic that fell “within the [Commission’s] special competence.”¹⁴ To effectuate the referral, and in accordance with section 1.739 of the Commission’s rules, CenturyLink filed the Complaint.¹⁵ The Complaint asserted four claimed violations of the Communications Act of 1934, as amended (Act) based on allegations that Peerless improperly billed CenturyLink access charges on OTT-VoIP traffic in

⁵ See 47 CFR § 1.106. See also Peerless Network, Inc.’s Petition for Reconsideration [of] the Enforcement Bureau’s March 28, 2023 Memorandum Opinion and Order, Proceeding No. 20-362, Bureau ID No. EB-20-MD-005 (filed Apr. 27, 2023) (Petition); Peerless Network, Inc.’s Reply in Support of its Petition for Reconsideration of the Enforcement Bureau’s March 28, 2023 Memorandum Opinion and Order, Proceeding No. 20-362, Bureau ID No. EB-20-MD-005 (filed May 15, 2023) (Reply).

⁶ See Opposition to Petition for Rehearing, Proceeding No. 20-362, Bureau ID No. EB-20-MD-005 (filed May 8, 2023) (Opposition).

⁷ The Commission is acting upon the Petition pursuant to referral by the Bureau. See 47 CFR § 1.106(a)(1).

⁸ See *Complaint Order*, *supra* note 1, at paras. 2-9. See also Complaint, Exh. D, Peerless Network, LLC FCC Tariff No. 4 (Tariff).

⁹ See *Complaint Order*, *supra* note 1, at paras. 5-6. CenturyLink’s dispute relates to charges billed on Peerless’s End Office Billing Account Numbers (E BANS) for services provided between January 2016 through February 2020. See *id.* at n.31.

¹⁰ See *id.* at para. 5 (citing Tariff, p. 47, § 6.1.2(B)).

¹¹ See *id.* at para. 5 (citing Tariff, p. 52, § 6.1.2(C) and Joint Stipulations at 6, Stipulated Fact No. 26).

¹² See *id.* at para. 5 (citing Tariff, p. 53, § 6.1.2(C)(1) and Joint Stipulations at 6, Stipulated Fact No. 26).

¹³ See *id.* at para. 7.

¹⁴ See *id.* at para. 7 (citing Complaint, Exh. C, *CenturyLink Communications, LLC et al. v. Peerless Network, Inc. et al.*, Case No. 1:18-cv-03114, Memorandum Opinion and Order (N.D. Ill. Mar. 1, 2022) (ECF 247) (*Referral Order*) and Joint Stipulations at 2-3, Stipulated Fact No. 8).

¹⁵ 47 CFR § 1.739. See *Complaint Order*, *supra* note 1, at para. 8.

contravention of the Tariff and the Commission's rules and orders,¹⁶ including, but not limited to, the Commission's *2019 VoIP Symmetry Declaratory Ruling*¹⁷ and the Commission's VoIP Symmetry Rule.¹⁸

4. Counts II, III, and IV of the Complaint—which the *Complaint Order* granted—required interpreting the Tariff. Specifically, Count II alleged that the “plain language of Peerless’s Tariff . . . does not permit Peerless to assess end office charges when it does not provide the physical interconnection with the last-mile facilities connecting to the end user,” and that “assessing charges in contradiction to the language in [the] Tariff” violated section 203 of the Act.¹⁹ Count III alleged that, because Peerless charged tandem switching charges that did not meet the Tariff’s definitions of tandem switching, Peerless violated the prohibition against unjust and unreasonable practices contained in section 201(b) of the Act.²⁰ And Count IV alleged that Peerless violated section 203 of the Act by charging tandem switching charges “in lieu” of end office charges when the Tariff “did not permit [Peerless] to assess Tandem Switching charges on calls not routed through a tandem switch.”²¹ Count I of the Complaint—which the *Complaint Order* dismissed without prejudice as moot—concerned the proper application of the *2019 VoIP Symmetry Declaratory Ruling*.²²

5. With respect to the Tariff claims, the *Complaint Order* found that Peerless violated sections 201(b) and 203 of the Act by billing CenturyLink for access charges associated with VoIP-PSTN traffic. This conclusion stemmed from the Bureau’s analysis of sections 201(b) and 203 of the Act and well-established precedent regarding the provision of tariffed services, the Commission’s tariffing rules, the “filed-rate” doctrine, and the Commission’s intercarrier compensation regime.²³ The *Complaint Order* found that nothing in the Tariff authorized Peerless to bill end office charges, or tandem switching charges “in lieu” of end office charges, for such traffic.²⁴ In its Petition, Peerless challenges several aspects of the *Complaint Order*.²⁵

¹⁶ See *Complaint Order*, *supra* note 1, at para. 9.

¹⁷ See *Connect America Fund, et al.*, Order on Remand and Declaratory Ruling, 34 FCC Rcd 12692, 12964, para. 8 (2019) (*2019 VoIP Symmetry Declaratory Ruling*).

¹⁸ See 47 CFR § 51.913(b) (VoIP Symmetry Rule). The Commission’s VoIP Symmetry Rule permits a LEC to assess switched access charges for VoIP-PSTN traffic where the LEC or its VoIP partner provides services that are “functionally equivalent” to traditional access services performed in Time Division Multiplexing (TDM) format regardless of the technology used to perform the functions for which it charges. See also *Complaint Order*, *supra* note 1, at para. 3.

¹⁹ See *Complaint Order*, *supra* note 1, at para. 9.

²⁰ See *id.* at para. 9.

²¹ See *id.*

²² *Id.* at paras. 9-10. The *Complaint Order* held that granting Counts II, III, and IV afforded CenturyLink all of the relief to which it is entitled. *Id.* at n.75.

²³ *Id.* at paras. 11-13, 15.

²⁴ *Id.* at para. 10.

²⁵ In a footnote in its Reply, Peerless asks the Bureau to clarify that the *Complaint Order* reached “no conclusion on whether Peerless’s tariffed tandem switching services may be assessed for calls exchanged between Peerless and Lumen at Peerless’s tandems.” Reply, *supra* note 5, at 4, n.6. To the extent that Peerless seeks clarification that the *Complaint Order* was silent about whether its Tariff allows it to charge tandem switching charges for VoIP-PSTN traffic, we disagree with that interpretation of the *Order*. The *Complaint Order* found that, under Peerless’s current Tariff, “Peerless cannot bill CenturyLink for end office charges—or tandem charges ‘in lieu’ of end office charges—for any of the VoIP traffic at issue.” *Complaint Order*, *supra* note 1, at para. 10 (emphasis added). To the extent that Peerless instead seeks clarification that the *Complaint Order* did not reach the abstract question—divorced from the language of its current Tariff—of whether Peerless can charge tariffed tandem switching charges for VoIP-PSTN traffic when Peerless actually performs tandem switching for that traffic and has tariffs in place that accurately describe those services, we agree that the *Complaint Order* was silent about that hypothetical scenario.

III. DISCUSSION

A. We Dismiss the Petition on Procedural Grounds

6. The Petition repeats arguments that the *Complaint Order* fully considered and rejected. These include Peerless's assertions that (1) the VoIP Symmetry Rule and Commission precedent do not require use of the term "functional equivalent" in the Tariff for Peerless to be able to bill end office charges on VoIP-PSTN traffic,²⁶ and (2) the Commission was limited to addressing the three specific questions referred by the Court because the Court maintained jurisdiction over the claims.²⁷ The Petition's repetition of the same arguments here does not provide grounds for reconsideration.²⁸ We therefore dismiss the Petition to the extent it repeats these and other arguments fully considered and rejected.

B. We Deny the Petition on the Merits

7. As an independent and alternative basis for our decision, we deny the Petition on the merits. For the reasons explained below, the Petition offers no grounds warranting reconsideration of the *Complaint Order's* findings.

1. The Bureau Properly Adjudicated the Scope of the Tariff in a Formal Complaint Proceeding

8. Peerless argues that the Bureau erred in adjudicating several legal claims in this formal complaint proceeding that go beyond three specific questions referred by the Court.²⁹ According to Peerless, the Bureau's decision to adjudicate the referred questions in a formal complaint proceeding "runs afoul of the District Court's referral order" and "the foundational purpose of the primary jurisdiction doctrine because it creates a significant risk of inconsistent rulings between the District Court and the Commission."³⁰ We disagree. Nothing in the referral order discussed the processes the Commission should use to answer the Court's questions. And there is every indication that the Court was aware that the Commission would rely on its formal complaint procedures because CenturyLink "advised the Court, in its motion seeking a primary jurisdiction referral, that it would effectuate the requested

²⁶ Compare Peerless Network, Inc.'s Answer, Proceeding No. 22-172, Bureau ID No. EB-22-MD-002 (filed Aug. 8, 2022) (Answer) at 91-94, paras. 156-58; Peerless Network, Inc.'s Answer Legal Analysis in Support of its Request for Relief on the Court's Referral Order, Proceeding No. 22-172, Bureau ID No. EB-22-MD-002 (filed Aug. 8, 2022) (Answer Legal Analysis) at 58-59, Petition at 5-19 with *Complaint Order*, *supra* note 1, at paras. 13-14, n.61.

²⁷ Compare Answer at 2-3, 13, paras. 1, 13; Answer Legal Analysis at 81-84, Petition at 22-23 with *Complaint Order*, *supra* note 1, at paras. 17-21.

²⁸ See 47 CFR § 1.106(p)(3) (providing that petitions for reconsideration of a Commission action that "[r]ely on arguments that have been fully considered and rejected by the Commission within the same proceeding" are among those that "plainly do not warrant consideration by the Commission" and that a bureau may therefore dismiss); *Amendment of Certain of the Commission's Part 1 Rules of Practice and Procedure and Part 0 Rules of Commission Organization*, Report and Order, 26 FCC Rcd 1594, 1606, para. 27 (2011) ("For a similarly procedurally defective or repetitive petition directed to a bureau or office (rather than the full Commission) seeking reconsideration of a staff-level decision, we delegate authority to the relevant bureau or office to dismiss or deny the petition."). See also *AT&T Corp., et al. v. Wide Voice, LLC*, Order on Reconsideration, 36 FCC Rcd 14106, 14108-09 (2021) at para. 4, n.29 (citations omitted) ("repetition of the same arguments here does not provide grounds for reconsideration"); *In the Matter of Walter Olenick and M. Rae Nadler-Olenick Austin, Texas*, Memorandum Opinion and Order, 29 FCC Rcd 10011 (EB 2014) (dismissal of petition for reconsideration of bureau order because it relies on arguments that have been considered and rejected).

²⁹ Petition, *supra* note 5, at 19-23.

³⁰ *Id.* at 22.

referral by filing a formal complaint with the Commission.”³¹ The Court granted CenturyLink’s motion without qualification.

9. Nevertheless, as it did in its Answer, Peerless maintains that the Bureau should have directed the parties to file a petition for declaratory ruling, not a formal complaint.³² But Peerless offers no substantive arguments in the Petition beyond those that the *Complaint Order* already considered and rejected. That said, Peerless does take issue with the *Complaint Order*’s reliance on *Reiter v. Cooper*,³³ arguing that the Supreme Court’s decision “does not hold that the absence of a referral mechanism [in the Communications Act] requires the filing of an administrative complaint whereby the agency adjudicates all issues within its purview.”³⁴ The *Complaint Order* should not be construed so narrowly. It cited *Reiter* to explain the process by which courts “enable a ‘referral’ to [an] agency, staying further proceedings so as to give the parties reasonable opportunity to seek an administrative ruling.”³⁵ The *Complaint Order* further quoted from note 3 of *Reiter*, where the Supreme Court observed that the Interstate Commerce Act—which was at issue in that case and on which the Communications Act is modeled³⁶—“contains no mechanism whereby a court can on its own authority demand or request a determination from the agency; that is left to the adversary system, the court merely staying its proceedings while the [party seeking the referral] files an administrative complaint”³⁷

10. As the *Complaint Order* went on to explain, the Commission possesses broad discretion to structure its proceedings (including primary jurisdiction referrals) to maximize fairness, promote efficiency, and conserve resources, and, in cases involving common carriers, primary jurisdiction referrals “generally are appropriately filed as formal complaints with the Enforcement Bureau pursuant to section 208 . . . of the Act.”³⁸ It is not the case that primary jurisdiction referrals to the Commission never are decided via a petition for declaratory ruling.³⁹ But in this matter—after taking into account the extensive factual record specific to the traffic exchanged between these parties and the unique language of the Tariff⁴⁰—the Bureau determined that a formal complaint proceeding was the more appropriate process.⁴¹ The formal complaint rules facilitate the exchange of relevant information and the development of a

³¹ *Complaint Order*, *supra* note 1, at para. 20.

³² Petition, *supra* note 5, at 23.

³³ *Reiter v. Cooper*, 507 U.S. 258, 268-69 (1993) (*Reiter*).

³⁴ Petition, *supra* note 5, at 22-23; *Complaint Order*, *supra* note 1, at para. 18.

³⁵ *Reiter*, 507 U.S. at 268.

³⁶ *MCI Telecommunications Corp. v. FCC*, 917 F.2d 30, 38 (D.C. Cir. 1990) (“The Communications Act, of course, was based upon the [Interstate Commerce Act] and must be read in conjunction with it.”).

³⁷ *Reiter*, 507 U.S. at 268, n.3.

³⁸ *Complaint Order*, *supra* note 1, at para. 19 (emphasis added).

³⁹ See *Primary Jurisdiction Referrals Involving Claims Under the Communications Act*, Public Notice, 29 FCC Rcd 738 (EB Jan. 30, 2014) (“There may be circumstances . . . in which a petition for declaratory ruling . . . is a better vehicle than a formal complaint proceeding.”).

⁴⁰ The factual record consists of thousands of pages of exhibits, many of which are subject to the terms of a Protective Order. See Letter Ruling from Lisa B. Griffin, Deputy Chief, Market Disputes Resolution Division, FCC Enforcement Bureau, to Charles W. Steese, Counsel for CenturyLink, and Henry T. Kelly, Counsel for Peerless, Proceeding No. 22-172, Bureau ID No. EB-22-MD-002 (filed May 9, 2022).

⁴¹ Cf. Letter to Anthony J. DeLaurentis, Special Counsel, Market Disputes Resolution Division, FCC Enforcement Bureau, from Charles W. Steese, Counsel for CenturyLink, (dated Apr. 21, 2022) at 3 (describing the issues referred to the Commission as “highly specific to the parties . . . concern[ing] exclusively traffic exchanged between the parties, and specific terms and conditions of Peerless’s interstate tariff” and arguing against addressing the issues “through a petition for declaratory ruling”).

comprehensive record through the use of discovery, joint stipulations, and other filings.⁴² By employing the formal complaint process, the Bureau could identify and address the relevant facts and legal issues raised by the questions presented in the Court’s primary jurisdiction referral.⁴³ We find no grounds warranting reconsideration on this issue.

2. The Tariff’s Terms Do Not Unambiguously Apply to VoIP-PSTN Traffic

11. Peerless advances five arguments supporting its contention that the *Complaint Order*’s tariff findings are both factually and legally incorrect.⁴⁴ Finding no error in the *Complaint Order*’s conclusions, we deny the relief Peerless requests.

12. To begin, the Petition asserts that the “Tariff unambiguously describes the End Office services Peerless provides, and expressly states that the terms of [the] Tariff apply to VoIP-PSTN traffic.”⁴⁵ In particular, Peerless relies—for the first time in this proceeding—on Section 6.7 of its Tariff,⁴⁶ captioned “Identification and rating of Voice Over Internet Protocol (VOIP) Traffic.”⁴⁷ That provision states in relevant part:

VOIP traffic is defined as traffic that is exchanged between a Company end user and the customer in time division multiplexing (TDM) format that originates and/or terminates in Internet protocol (IP) format. These rules establish the method of separating such traffic from the customer’s traditional intrastate access traffic, so that such relevant VOIP traffic can be billed in accordance with the

⁴² See 47 CFR §§ 1.730 (identifying available discovery as including interrogatories, requests for document production, and depositions), 1.733(b)(2) (requiring parties to file a joint statement of stipulated facts, disputed facts, and key legal issues), 1.732 (according staff discretion to order briefing). These processes are generally unavailable in declaratory ruling proceedings which require the solicitation of comment on the petition via public notice. See *id.* § 1.2(b).

⁴³ *Complaint Order*, supra note 1, at para. 20. Peerless focuses exclusively on the “questions” raised in CenturyLink’s request for referral, without acknowledging the Court’s conclusion that those *questions* “require[] the resolution of *issues* which under a regulatory scheme, have been placed within the special competence of an administrative body.” See *Referral Order*, supra note 14, at 7-8 (emphasis added). In any case, Peerless does not demonstrate that the use of an adjudicatory declaratory ruling proceeding as the procedural vehicle to effectuate the primary jurisdiction referral rather than an adjudicatory formal complaint proceeding would have altered the scope of the ultimate decision. Whatever the scope of issues that Peerless might hypothesize being raised in a petition for declaratory ruling, the Commission can, in any event, issue a declaratory ruling on an issue “on its own motion.” 47 CFR § 1.2(a). As the *Complaint Order* concluded, “in the circumstances here [] addressing those questions [resolving violations of the Act] will assist the Court.” *Complaint Order*, supra note 1, at para. 21. Indeed, the statutory implications under sections 201(b) and 203 of the Act provide important context to give the Court a complete understanding of the Commission’s response to the second and third referred questions. See *Referral Order*, supra note 14, at 4 (referring the questions “(2) whether Peerless may assess tandem switching charges in lieu of end office charges on OTT-VoIP calls; and (3) whether Peerless’s [Tariff] can be interpreted to permit Peerless to assess tandem switching charges on OTT-VoIP calls”). Further, although Peerless contends that Commission guidance on those issues was not required by the primary jurisdiction referral, see, e.g., Petition, supra note 5, at 20-23, it does not demonstrate either that it would not assist the court to understand the agency’s views in that regard or that the Commission’s assessment in that regard would have been different in the context of a declaratory ruling. And to the extent that Peerless expresses concern that reaching those questions “creates a significant risk of inconsistent rulings between the District Court and the Commission,” Petition, supra note 5, at 22, it provides no grounds to credit those concerns beyond (implicitly) its own disagreement with the outcome of the *Complaint Order*.

⁴⁴ Petition, supra note 5, at 5.

⁴⁵ *Id.* at 6-7; Reply, supra note 5, at 4-8.

⁴⁶ See Petition, supra note 5, at 6-7; Reply, supra note 5, at 5-7.

⁴⁷ Petition, supra note 5, at 6-7; Reply, supra note 5, at 5-7. See Tariff, supra note 8, Section 6.7 at page 66.

FCC Order (see Report and Order in WC Docket Nos. 10-90, etc. FCC Release No. 11-161 (November 18, 2011) [i.e., the *USF/ICC Transformation Order*]).⁴⁸

* * *

VOIP traffic that is identified in accordance with this tariff section will be bill [sic] at rates equal to the Company's applicable tariffed interstate access rates as specified in this tariff.⁴⁹

The Petition argues that this language is "sufficient to inform Peerless's customers that the rates and terms for Peerless's end office access services as described in the Tariff will apply to VoIP-PSTN services."⁵⁰ We disagree.

13. Section 6.7 explains how Peerless calculates and applies a "[p]ercent of VOIP Usage [PVU] Factor" to distinguish "traditional intrastate access traffic" from "VOIP traffic."⁵¹ To be sure, as part of that explanation, Section 6.7 describes VoIP-PSTN traffic and references billing consistent with the *USF/ICC Transformation Order*.⁵² But that is as far as the provision goes, and it is not enough. Section 6.7 does not define the services Peerless furnishes to transmit the VoIP-PSTN traffic or which Tariff sections govern those services. On the contrary, Section 6.7 merely refers the reader to the "applicable tariffed interstate access rates." As the *Complaint Order* found, this is where the Tariff falls short.⁵³ Indeed, billing VoIP-PSTN traffic "in accordance with" the *USF/ICC Transformation Order* as specified in Section 6.7 of Peerless's Tariff would require compliance with the longstanding principles governing tariff interpretation applied in the *Complaint Order*.⁵⁴ The *USF/ICC Transformation Order* made clear that "to the extent that these [VoIP-PSTN] charges are imposed via tariff, a carrier may not impose charges other than those provided for under the terms of its tariff."⁵⁵ In connection with that statement, the Commission cited *AT&T v. YMax*,⁵⁶ where the Commission evaluated whether charges for certain VoIP traffic were covered by the tariff at issue by determining if the tariff unambiguously described the functions the provider was performing. *AT&T v. YMax* was consistent with the principle

⁴⁸ See Tariff, *supra* note 8, Section 6.7(A)(1) (General) at page 66.

⁴⁹ Tariff, *supra* note 8, Section 6.7(B) (Rating of VOIP traffic) at page 66.

⁵⁰ Petition, *supra* note 5, at 6-7; Reply, *supra* note 5, at 7-8.

⁵¹ See Tariff, *supra* note 8, Section 6.7(A) (Identification and rating of Voice Over Internet Protocol (VOIP) Traffic) at page 66, (C) (Calculation and Application of Percent of VOIP Usage Factor) at page 66, (D) (Initial PVU Factor) at page 67, (E) (PVU Factor Updates) at page 67, (F) (Verification of PVU) at page 68.

⁵² In response to concerns that an intercarrier compensation regime for VoIP-PSTN traffic could lead to further arbitrage or undermine the Commission-established transition for intercarrier compensation more broadly, the Commission permitted LECs to include language in their tariffs to address the identification of VoIP-PSTN traffic, much as they do to identify the jurisdiction of traffic. See *Connect America Fund, et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 18011-12, para. 950, 18020-22, para. 963 (2011) (*USF/ICC Transformation Order*), *pets. for review denied*, *In re FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014), *cert. denied*, 135 S. Ct. 2050 and 135 S. Ct. 2072 (2015).

⁵³ *Complaint Order*, *supra* note 1, at para. 15 ("[T]here is a difference between a carrier having authority under the Commission's rules to assess an access charge and a carrier properly exercising that authority by filing a valid tariff that expressly permits assessment of the charge.").

⁵⁴ We thus reject Peerless's contention that its Tariff "does exactly what the *Transformation Order* told LECs to do." Petition, *supra* note 5, at 6.

⁵⁵ *USF/ICC Transformation Order*, 26 FCC Rcd at 18026-27, para. 970 n.2026.

⁵⁶ *Id.* (citing *AT&T Corp. v. YMax Communications Corp.*, Memorandum Opinion and Order, 26 FCC Rcd 5742 (2011) (*AT&T v. YMax*)).

that ambiguities in a tariff are construed against the filer⁵⁷—the very principles applied in the *Complaint Order*.⁵⁸

14. The Tariff’s provisions regarding end office (or tandem) access service do not clearly and unambiguously authorize Peerless to bill for functionally equivalent access services that either Peerless or its VoIP partner provide using IP technology.⁵⁹ Peerless objects to the assertion in the *Complaint Order* that the Tariff “governs [its] provision of traditional, regulated TDM-based access services.”⁶⁰ However, as CenturyLink explains,⁶¹ the Tariff’s definition of “End Office Access Service” mirrors provisions in the Commission’s rules,⁶² and the National Exchange Carrier Association, Inc. (NECA) tariff applicable to TDM-based switched access services.⁶³ In contrast, Peerless’s network is “100% IP-based.”⁶⁴ For example, the Tariff details that its Tandem-Switched Transport service “provides Switched Transport that is switched through a tandem switch, between the customer’s serving wire center and the end offices subtending the tandem. Tandem Switched Transport is also available between an access tandem and end offices subtending that tandem.”⁶⁵ This language clearly defines a service that utilizes physical, network

⁵⁷ *AT&T v. YMax*, 26 FCC Rcd at 5748-49, 5754-55, 5759, paras. 14, 33, 45. Thereafter, the Commission continued to reaffirm the applicability of these longstanding tariffing principles in connection with VoIP-PSTN traffic. *See, e.g., 2015 VoIP Symmetry Declaratory Ruling*, *supra* note 4, at 1605, para. 35 (discussing *AT&T v. YMax* and recognizing that “the Commission rule still exists that carriers must accurately describe services offered in their tariffs,” and distinguishing a Fourth Circuit decision addressing billing for VoIP-PSTN traffic as turning on shortcomings in the tariff language at issue there “[b]ecause tariff language may now include compensation for functional equivalent services provided by a competitive LEC or its VoIP provider partner under the VoIP symmetry rule,” observing that “[m]any competitive LECs have incorporated tariff language that describes functionally equivalent services under the VoIP symmetry rule, either by explicitly reciting the VoIP symmetry rule, or by referring to the ‘functional equivalent’ of TDM-based end office switching”).

⁵⁸ *Complaint Order*, *supra* note 1, at para. 15.

⁵⁹ *Id.* at para. 13.

⁶⁰ Petition, *supra* note 5, at 12 n.14 (citing *Complaint Order*, *supra* note 1, at para. 13). Time-division multiplexed (TDM) technology is a circuit-switched technology that connects to the public switched telephone network, or PSTN, as opposed to a packet-switched technology in an IP format. *See Technology Transitions, et al.*, GN Docket No. 13-5, et al., Order, Report and Order and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative, 29 FCC Rcd 1433, 1435, 1440, paras. 1, 16-17 (2014).

⁶¹ Opposition, *supra* note 6, at 11-16.

⁶² *See id.* at 14-15 (citing 47 CFR §§ 69.2(pp) (defining “End Office” as an “exchange service”); *see also* 47 CFR §§ 69.2 (ss) (defining “tandem-switched transport” as a circuit-switched service), 69.111 (defining tandem-switched transport and tandem charges as circuit-switched services)).

⁶³ Opposition, *supra* note 6, at 15-16 (comparing Peerless F.C.C. Tariff No. 4, § 6.1.2(B) to NECA F.C.C. Tariff No. 5, *see also* 47 CFR § 6.1.3(B)). Compare Peerless F.C.C. Tariff No. 4, § 6.1.2(B) with NECA F.C.C. Tariff No. 5, § 6.1.3(B) (defining the end office rate category as providing the local end office switching functions necessary to complete the transmission of switched access communications to and from the end users served by the local end office and the customer). The NECA tariff that CenturyLink cited is filed on behalf of incumbent LECs that do not file their own tariffs. 47 CFR §§ 69.601-10 (Commission rules applicable to the exchange carrier association, i.e., National Exchange Carrier Association, or NECA). Peerless’s comparison of language in Level 3’s tariff with the NECA tariff (*see Reply, supra* note 5, at 6-7) does not address the shortcomings of Peerless’s Tariff. *See Core Communications, Inc., et al. Tariff F.C.C. No. 3*, Memorandum Opinion and Order, 36 FCC Rcd 15128, 15156-57, para. 67 (2021) (*Core Tariff Order*).

⁶⁴ *Qwest Corporation, et al. v. Peerless Network, Inc. et al.*, Case No. 21-cv-03004, Response to Lumen’s Motion to Stay the Case and Refer Issues to the FCC (D. Colo. Oct. 7, 2022) (ECF 46) at 6 (“Peerless’ network is . . . 100% IP-based”); *Id.*, Exhibit 1, Declaration of John McCluskey in Support of Plaintiff’s Motion to Stay the Case and Refer Issues to the FCC, at 3, para. 5 (“Peerless’ network[] use[s] Internet-Protocol based (“IP”) technology”).

⁶⁵ Tariff, *supra* note 8, at p. 53, Section 6.1.2(C)(1); *Complaint Order, supra* note 1, at para. 6 & n.25.

switching equipment to transport telecommunications traffic. Peerless, however, attempts to impose these tariffed Tandem-Switched Transport charges on services it provided via OTT-VoIP. OTT-VoIP service does not traverse the TDM network and, most importantly, does not pass through a switch. Rather, this traffic is provided over IP and is directed via routers instead of switches. Consequently, OTT-VoIP service is not a service offered in the Tariff,⁶⁶ and, therefore Peerless may not assess its tariffed access charges on these services. Stated differently, although the VoIP Symmetry Rule might allow Peerless to charge a tariffed rate for services that are “functionally equivalent” to the TDM access described in its Tariff, Peerless could only do so *if* the Tariff contained clear language extending those charges to functionally equivalent services.⁶⁷ Because the Tariff does not, Peerless may not assess switched access charges detailed in its Tariff for the OTT-VoIP service it provides.

15. Thus, Peerless’s argument that the *Complaint Order* “fails to explain why Peerless’s tariff is not ‘clear and explicit,’ other than noting that the Tariff does not use the phrase functionally equivalent”⁶⁸ is wrong, as is its claim that the *Complaint Order* failed to make any findings that the services Peerless actually performed differed from the definitions in its Tariff.⁶⁹ The *Complaint Order* properly found that the Tariff fails to clearly explain or state that the defined access services would be provided by Peerless using IP technology or that the services Peerless provided would be “functionally equivalent” to the TDM services defined in its Tariff. The *Complaint Order* appropriately construed this ambiguity against Peerless, as the drafter of the Tariff.⁷⁰

3. The Language of Other Carriers’ Tariffs is Not Determinative

16. Peerless contends that “[s]ome of the largest carriers in the country have language incorporating the terms of the *USF/ICC Transformation Order* and the VoIP Symmetry rule into their tariffs that is virtually identical to Peerless’s tariff.”⁷¹ Specifically, Peerless cites to language in CenturyLink’s tariff that “establishes the method of separating VoIP-PSTN Traffic from the customer’s traditional intrastate access traffic, so that VoIP-PSTN Traffic can be billed in accordance with the [*USF/ICC Transformation Order*]⁷² and to language in Verizon’s tariff that defines VoIP-PSTN traffic as “traffic that is exchanged in time division multiplexing format between the Telephone Company and the customer that originates and/or terminates in Internet Protocol format.”⁷³ Whatever the similarities between these provisions and Section 6.7 of the Tariff, they shed no light on the key inquiry in this case: whether the Tariff contains language clearly implementing the charges authorized by the VoIP Symmetry

⁶⁶ In fact, services involving IP-to-IP traffic generally cannot be tariffed. *Complaint Order*, *supra* note 1, at para. 13. Peerless states that “Level 3 purchases SIP trunking services from Peerless, and calls are exchanged in IP format,” citing the District Court, which “held that Peerless and Level 3 exchange traffic in IP format by agreement and through Level 3’s purchase of Peerless’s tariffed SIP trunking services.” Reply, *supra* note 5, at 9 (citing *CenturyLink Communications, LLC v. Peerless Network Inc.*, 2023 WL 2477535, at *8 (N.D. Ill., 2023)). However, Peerless cannot tariff rates for IP-IP services. *Teliax Colorado, LLC Tariff F.C.C. No. 1*, Order, 36 FCC Rcd 8285, 8287-88, paras. 8-9 (WCB-PPD 2021) (*Teliax Tariff Order*) (carriers cannot impose tariffed charges under the Commission’s intercarrier compensation rules for pure IP-IP traffic exchange).

⁶⁷ As discussed below, Peerless’s Tariff does not include *any* language indicating that its OTT-VoIP service is functionally equivalent (regardless of the terminology used) to any switched access service offered in its Tariff. *Infra* Section III.B.5.

⁶⁸ Petition, *supra* note 5, at 15.

⁶⁹ Reply, *supra* note 5, at 8-10.

⁷⁰ *Complaint Order*, *supra* note 1, at para. 15, n.72.

⁷¹ Petition, *supra* note 5, at 7.

⁷² *See id.* at 7-8.

⁷³ *See id.* at 8.

Rule such that Peerless has a right to bill for the services it or its VoIP partners actually provide.⁷⁴ The *Complaint Order* correctly found that the Tariff does not.⁷⁵

4. Comparisons Between the Tariff's and the VoIP Symmetry Rule's Definitions of "End Office Access Service" Support the *Complaint Order's* Findings

17. In another argument, Peerless maintains that it is entitled to bill for VoIP-PSTN traffic because the Tariff's definition of End Office Access Service "mirrors" the definition of "End Office Access Service" in the VoIP Symmetry Rule.⁷⁶ Specifically, Peerless contends that, although its Tariff language is not identical to the language in the Commission's rules, the Tariff's definitions of "End Office Switch" and "End Office" are similar to the language in section 51.903(d)(1) and (2) of the Commission's rules.⁷⁷ Peerless also contends that the Tariff's definition of the "End Office rate category includes the Local Switching and Common Trunk Port rate elements," which "is similar to the language in section 51.903(d)(3)."⁷⁸

18. Peerless misapprehends the purpose of the VoIP Symmetry Rule. Although the VoIP Symmetry Rule authorizes carriers to tariff certain charges consistent with longstanding tariffing principles,⁷⁹ it does not itself represent tariff language that invariably reflects the specific functions a particular carrier actually performs.⁸⁰ It is up to the carrier to make certain the description in its tariff matches the services it actually provides in any given situation.⁸¹ Peerless has not done so in its Tariff. This is especially true given that Peerless, whose network operates exclusively in IP,⁸² cannot tariff a purely IP-IP traffic exchange under the Commission's intercarrier compensation rules.⁸³ As the *Complaint Order* correctly found,⁸⁴ the Tariff lacks clear and unambiguous language conveying the

⁷⁴ The fact that another carrier's tariff may include language similar to Peerless's Tariff does not address the shortcomings identified in the Tariff. See *Core Tariff Order*, *supra* note 63, at 15156-57, para. 67.

⁷⁵ *Complaint Order*, *supra* note 1, at para. 15.

⁷⁶ See *Petition*, *supra* note 5, at 8-12; *Reply*, *supra* note 5, at 7-8.

⁷⁷ *Petition*, *supra* note 5, at 10-11 (citing *Tariff*, *supra* note 8, at pages 6, 52). *Tariff* at page 6 defines "End Office Switch" as "[a] local telephone switching system established to provide local exchange service and/or exchange access services." *Tariff* at page 52 defines "End Office rate category" as "the local switching functions necessary to complete the transmission of Switched Access communications to and from the end users service by the local end office and the Customer. The End Office rate category includes the Local Switching and Common Trunk Port rate elements."

⁷⁸ *Petition*, *supra* note 5, at 11 (citing *Tariff*, *supra* note 8, at page 52).

⁷⁹ See *USF/ICC Transformation Order*, *supra* note 52, at 18026-27, para. 970, n.2026 (stating that a carrier may not impose charges for functionally equivalent services that are not provided for in its tariff). See also *id.* at 18019-18022, paras. 961-63 (discussing the role of tariffs during the transition of the intercarrier compensation reform); *2019 VoIP Symmetry Declaratory Ruling*, *supra* note 17, at 12701, n.65 ("We leave carriers to determine the appropriate compensation for such services in accordance with their agreements and applicable tariffs."); 47 CFR §§ 51.905(b), 51.913(b) (referencing a carrier's entitlement to assess and collect transitional access rates set forth in a carrier's tariff).

⁸⁰ See 47 CFR § 51.913(b) ("This rule does not permit a [LEC] to charge for functions not performed by the [LEC] itself or the affiliated or unaffiliated provider of interconnected VoIP service or non-interconnected VoIP service.").

⁸¹ See *Complaint Order*, *supra* note 1, at paras. 10-11.

⁸² See *supra* paragraph 14 and note 64.

⁸³ See *Teliox Tariff Order*, *supra* note 66, at 8287-88, paras. 8-9.

⁸⁴ *Complaint Order*, *supra* note 1, at paras. 13, 15.

concept of functional equivalence in the context of Peerless's network, and the result is that Peerless cannot assess access charges for VoIP-PSTN traffic.⁸⁵

5. Although Tariffs Need Not Use the Exact Words “Functional Equivalent” to Bill End Office Charges on VoIP-PSTN Traffic, They Must Unambiguously Convey that Concept

19. Peerless takes issue with the *Complaint Order*'s purported finding that the Tariff must use the precise term “functional equivalent” for Peerless to bill end office charges on VoIP-PSTN traffic.⁸⁶ That is not what the *Complaint Order* held. The Commission's rules set the limits carriers may exercise through their tariffs. As relevant here, they permit carriers to impose certain charges for transmitting telecommunications “using, in whole or in part, technology other than TDM transmission in a manner that is comparable to a service offered by a local exchange carrier [and thus] constitutes the functional equivalent of the incumbent local exchange carrier access service.”⁸⁷ But although the rules allow carriers to bill in certain circumstances for providing “the functional equivalent” of an ILEC access service, to avail themselves of that right carriers still must ensure that their tariffs clearly apply to those activities. As the *Complaint Order* found, Peerless's Tariff describes actions performed by a TDM network.⁸⁸ By contrast, Peerless operates an IP network, and as the *Complaint Order* found,⁸⁹ and as we explain in greater detail above,⁹⁰ the actions performed by that network are not reasonably understood to fall within the scope of the Tariff language geared to TDM networks. Thus, even if the actions Peerless performed arguably could constitute the functional equivalent of an ILEC access service under the Commission's rules, Peerless still could not bill for those actions because, as the *Complaint Order* found, its Tariff did not clearly encompass those actions. The key point, then, is not that “functional equivalent” constitutes magic words that must appear in a tariff, but rather that, in Peerless's case, the Tariff needed to somehow clearly reflect that Peerless would be billing for certain actions that are the functional equivalent to those performed by a TDM network. In defining their tariffed services, carriers often use language that tracks the Commission's rules—such as “functional equivalent” here—to make clear that

⁸⁵ *Complaint Order*, *supra* note 1, at para. 12, n.50 (citing the *USF/ICC Transformation Order*, 26 FCC Rcd at 18026-27, para. 970, n.2026), at para. 14 (citing *2015 VoIP Symmetry Declaratory Ruling*, *supra* note 4, at 1596, n.64).

⁸⁶ Petition, *supra* note 5, at 5 (“The *Order*'s finding that [the words ‘functional equivalent’] are required to entitle a carrier to charge for services that are functionally equivalent is unlawful.”), 12-15 (“There is no Commission rule or order that requires Peerless's Tariff use the terms “functionally equivalent” to qualify as end office access services under the VoIP Symmetry Rule.”); Reply, *supra* note 5, at 4-8.

⁸⁷ 47 CFR § 51.913(b); *see also* 47 CFR § 51.903(d) (defining “end office access service” for purposes of the Commission's Part 51, Subpart J rules).

⁸⁸ *Complaint Order*, *supra* note 1, at para. 13.

⁸⁹ *Id.* at para. 13.

⁹⁰ *See supra* para. 14.

the tariff authority extends exactly as far as the Commission's rules permit.⁹¹ Carriers are free to seek to use different language instead,⁹² but do so at the risk of creating ambiguities.⁹³

20. The broader point, however, is that the Tariff contains no indication—through the phrase “functional equivalent” or otherwise—that Peerless and its VoIP partners are providing something other than traditional TDM-based services. It is this shortcoming that the *Complaint Order* found violates section 203 of the Act, the “filed-rate” doctrine, and well-established Commission precedent.⁹⁴

6. The Tariff Does Not Permit Peerless to Bill for VoIP-PSTN Traffic Regardless of the Configuration

21. Finally, the Petition contends that the Bureau erred in not determining as a factual matter how Peerless connects to its customers before ruling on the tariff question.⁹⁵ But any such factual inquiry is beside the point. Even assuming the traffic is as Peerless describes, the language in its Tariff is not adequate to permit Peerless to charge for the functional equivalent of end office services.⁹⁶

⁹¹ See Opposition, *supra* note 6, at 9-10. See also *Complaint Order*, *supra* note 1, at n.61.

⁹² Indeed, although acknowledging that the wording of a competitive LEC's tariff does not have to be identical to that of an incumbent LEC's tariff, the *Complaint Order* observed that other carriers “have amended their tariffs to contain the term ‘functional equivalent’ or *similar language that clearly implements the charges authorized by the VoIP Symmetry Rule*.” *Complaint Order*, *supra* note 1, at n.61 (emphasis added). Regardless, Peerless's suggestion that the Commission must find that the language in its Tariff violated a rule is without merit; the Commission's authority under section 201(b) of the Act is not limited to a determination that a particular rule has been violated. See *Wide Voice, LLC v. FCC*, 61 F.4th 1018, 1025-27 (9th Cir. 2023) (holding that the Commission could find unjust and unreasonable conduct by local exchange carrier without finding breach of an existing regulation or order).

⁹³ Opposition, *supra* note 6, at 9-10.

⁹⁴ *Complaint Order*, *supra* note 1, at paras. 11-15. Peerless argues that the Commission's reliance on section 61.2 of its rules is somehow flawed because “there is no standard for what is a sufficiently ‘clear and explicit explanatory statement’ in terms of the physical network or protocol that is used to provide end office access services.” Petition, *supra* note 5, at 14. However, it is both reasonable and understandable that what is sufficiently clear and explicit will depend on the circumstances. The operation of that standard is further guided by the fact that ambiguities in a tariff are construed against the filer. This means that a tariff filer must understand that its tariff needs to be sufficiently clear and explicit to overcome alternative interpretations—not merely be one of multiple arguably plausible interpretations. Nor does Peerless not put forward its own, alternative interpretation of the standard in section 6.2 of the rules let alone one that would persuade us to depart from our longstanding case-by-case approach to that rule.

⁹⁵ Petition, *supra* note 5, at 15-19.

⁹⁶ See *Complaint Order*, *supra* note 1, at para. 14.

IV. ORDERING CLAUSE

22. Accordingly, **IT IS HEREBY ORDERED**, pursuant to sections 4(i), 4(j), 201, 203, 204, 208, and 405 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201, 203, 204, 208, 405, and sections 1.106 and 51.913(b) of the Commission's rules, 47 CFR §§ 1.106, 51.913(b), that Peerless's Petition for Reconsideration is **DISMISSED** on procedural grounds, to the extent it repeats arguments previously considered and rejected by the Enforcement Bureau and, as an independent and alternative basis, **DENIED** for the reasons stated herein.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
)
)
) MB Docket No. 21-401
) Facility ID No. 57424
)
ROGER WAHL
)
WQZS(FM), Meyersdale, PA

ORDER ON REVIEW

Adopted: April 2, 2024

Released: April 3, 2024

By the Commission:

I. INTRODUCTION

1. Pursuant to section 5(c)(4) of the Communications Act of 1934, as amended (Act),¹ the Federal Communications Commission (FCC or Commission) denies an Application for Review filed by Roger Wahl (Mr. Wahl).² Mr. Wahl requests review of an Enforcement Bureau order³ that revoked his license for FM Station WQZS in Meyersdale, Pennsylvania. The Revocation Order was issued following an order by Administrative Law Judge Jane Hinckley Halprin (ALJ) terminating a hearing into Mr. Wahl’s qualifications to be a licensee and certifying the case to the Commission.⁴ The ALJ held that Mr. Wahl had waived his right to a hearing by failing to respond to discovery requests and failing to comply with other procedural obligations.⁵ After reviewing the record and the arguments raised in the AFR, we conclude that the Enforcement Bureau correctly revoked Mr. Wahl’s license.

II. BACKGROUND

2. On July 8, 2020, Mr. Wahl pleaded guilty to five crimes.⁶ Specifically, Mr. Wahl admitted that he: (a) secretly took nude photos of a woman inside her home using a concealed camera he surreptitiously installed in her bathroom; (b) impersonated the woman on an online dating site; (c) sent the nude photos of the woman to at least one man with whom Mr. Wahl, posing as the woman, connected through that site; and (d) posing as the woman, solicited the man to have sexual relations with her.⁷ In

¹ 47 U.S.C. § 155(c)(4).

² Application for Review, MB Docket No. 21-401 (filed May 12, 2023). On July 3, 2023, Mr. Wahl filed a supplement consisting of two letters endorsing Mr. Wahl’s character—one of which was signed under penalty of perjury. Supplement to Application for Review, MB Docket No. 21-401 (filed July 3, 2023) (AFR Supplement). We refer to the May 12th and July 3rd filings collectively as the “AFR.”

³ See Roger Wahl, Revocation Order, MB Docket No. 21-401, DA 23-304 (Enf. Bur. Apr. 12, 2023) (Revocation Order).

⁴ See Roger Wahl, Order Terminating Proceeding, MB Docket No. 21-401 (Halprin, ALJ, Aug. 2, 2022) (Final Termination Order); 47 CFR § 1.92(a), (c), (d).

⁵ See Final Termination Order.

⁶ See Commonwealth of Pa. v. Wahl, No. 56-CR-0000952-2019 (Ct. of C.P., Somerset C’nty, Pa. July 8, 2020) (Initial Order of the Court); Commonwealth of Pa. v. Wahl, Sentence of Court, No. 56-CR-0000952-2019 (Ct. of C.P., Somerset C’nty, Pa. Nov. 16, 2020) (Sentence of Court).

⁷ See Initial Order of the Court; Sentence of Court; Pa. State Police GO# PA 2019-1197584 (Wahl Police Report) at 10-11, 14-16. In their investigation, the police obtained screen shots of the dating profile and photos, Wahl Police (continued....)

addition, upon learning of the Pennsylvania State Police investigation, Mr. Wahl deleted the nude photos from his mobile phone and deleted the communications he made via the online dating site.⁸

3. Mr. Wahl pleaded guilty to criminal use of a communication facility, a third-degree felony,⁹ and four related, second-degree misdemeanors: recklessly endangering another person, unlawful dissemination of an intimate image, tampering with evidence, and identity theft.¹⁰ The elements of his reckless endangerment conviction included “recklessly engag[ing] in conduct which place[d] or may [have placed] another person in danger of death or serious bodily injury.”¹¹ His conviction for unlawfully disseminating an intimate image involved “disseminat[ing] a visual depiction . . . in a state of nudity” of a woman with the “intent to harass, annoy or alarm” her.¹² His conviction for tampering with evidence established that he, “believing that an official proceeding or investigation [was] pending or about to be instituted . . . alter[ed], destroy[ed], conceal[ed] or remove[d] any record, document or thing with intent to impair its verity or availability in such proceeding or investigation.”¹³ Further, in pleading guilty to identity theft, Mr. Wahl affirmed under oath that he “did pretend to be the victim . . . on an Internet dating site and did so without the consent of the victim in furtherance of an unlawful purpose.”¹⁴ On November 16, 2020, the court sentenced Mr. Wahl to probation, electronic monitoring, and a fine for these crimes.¹⁵

4. On October 19, 2021, the Commission’s Media Bureau released an Order to Show Cause to commence a hearing before the ALJ to determine whether Mr. Wahl’s license should be revoked.¹⁶ Over the course of many months, Mr. Wahl repeatedly failed to comply with his obligations in the hearing proceeding.¹⁷ In light of Mr. Wahl’s failure to comply with the ALJ’s orders and his discovery obligations, the Enforcement Bureau, on May 31, 2022, asked the ALJ either to dismiss the hearing proceeding or compel a response to then-outstanding discovery requests.¹⁸ Finding that Mr. Wahl had not fulfilled his commitment to present evidence on the matters specified in the Order to Show Cause, the ALJ determined that Mr. Wahl was not participating in the proceeding at the level necessary to render it a

Report at 10-11 and 14, and seized Mr. Wahl’s phone after finding the nude photos in the deleted photos file of the phone. *Id.* at 15-16.

⁸ See Wahl Police Report at 15-16.

⁹ See Initial Order of the Court, *supra* note 6. The police report from 2019 described this charge as use of a communication device to facilitate the commission of a felony or attempted felony. See Wahl Police Report at 29.

¹⁰ See Initial Order of the Court, *supra* note 6; *Commonwealth of Pa. v. Wahl, Order*, No. 56-CR-0000952-2019 (Ct. of C.P., Somerset C’ty, Pa. Nov. 16, 2020) (Guilty Plea to Identity Theft).

¹¹ See 18 Pa. Stat. and Cons. Stat. Ann. § 2705 (West).

¹² See *id.* § 3131(a).

¹³ See *id.* § 4910.

¹⁴ See Guilty Plea to Identity Theft, *supra* note 10, at 5-7.

¹⁵ See Sentence of Court, *supra* note 6. In imposing the sentence, the court observed that the victim of Mr. Wahl’s criminal activity was not physically assaulted. At the same time, it stated that Mr. Wahl “caused the victim in this case substantial emotional harm. The seriousness of the offenses, the multiple actions, and the extent to which the Defendant went to perpetrate harm on the victim warrants a lengthy period of supervision. Any lesser sentence in our view would depreciate the seriousness of the offenses.” *Id.* at 4.

¹⁶ *Roger Wahl*, Hearing Designation Order, Order to Show Cause, and Notice of Opportunity for Hearing, 36 FCC Rcd 14628 (MB 2021) (Order to Show Cause).

¹⁷ See Final Termination Order, *supra* note 4, at 1-5, paras. 3-5, 7-8.

¹⁸ *Roger Wahl*, Enforcement Bureau’s Motion to Dismiss for Failure to Participate and Waiver of Hearing, or, in the Alternative, Motion to Compel a Response to the Enforcement Bureau’s Outstanding Discovery Requests, MB Docket No. 21-401 (filed May 31, 2022).

meaningful exercise of the opportunity for a hearing.¹⁹ The ALJ therefore (1) determined that Mr. Wahl had waived his right to a hearing; (2) terminated the hearing proceeding; and (3) certified the case to the Commission for further disposition consistent with her order.²⁰

5. On April 12, 2023, the Enforcement Bureau issued the Revocation Order, revoking Mr. Wahl's license to FM Station WQZS.²¹ He filed the instant AFR on May 12, 2023.²² In it, Mr. Wahl argues that the Enforcement Bureau's decision to revoke his license warrants Commission consideration for the reasons specified in section 1.115(b)(2)(i) and (b)(2)(iv) of the Commission's rules (Rules).²³ He also details his health difficulties, service to the station's local community, and support from members of the community, which he asserts should weigh in his favor.²⁴

6. The arguments in the AFR fall into two categories. First, Mr. Wahl argues that he should be given additional opportunity to present his case and rebut the Enforcement Bureau's case by demonstrating Station WQZS(FM)'s meritorious programming and his own public service and reputation for good character in the community.²⁵ Second, Mr. Wahl argues that his criminal convictions do not merit revocation of the license.²⁶ He argues that the facts surrounding his convictions "do not neatly compare to those considered disqualifying in other hearing cases," and that they "did not involve fraud, bribery, perjury, or bodily injury."²⁷ He contends that the offenses in this case are "not indicative of an ongoing propensity for criminal behavior" but reflect "an isolated crime of passion."²⁸ He also asserts that "there is no evidence of FCC misconduct that has a nexus between [his] criminal behavior and his FCC licenses."²⁹ He asks that the Revocation Order in this proceeding be vacated and this case remanded to the ALJ.³⁰

¹⁹ Final Termination Order, *supra* note 4, at 4, para. 7 (noting that "[t]o date, he has filed no substantive documents in this proceeding"); *id.* at 6, para. 10 (stating that he had "made no filings in response to outstanding discovery requests, motions, and orders").

²⁰ *Id.* at 5-6, paras. 10-12.

²¹ See Revocation Order, *supra* note 3. Although the ALJ certified the case to the Commission, the Enforcement Bureau was authorized under the Rules to "[i]ssue or draft appropriate orders after a hearing proceeding has been terminated by the presiding officer on the basis of waiver." 47 CFR § 0.111(a)(18); *see also id.* § 0.311(a)(3) (requiring referral to the Commission only of those matters that cannot be resolved under existing precedent).

²² See AFR, *supra* note 2; 47 CFR § 1.115(d). An unrelated third party filed an Amended Opposition to the AFR. See Amended Opposition to Application for Review of Roger Wahl, WQZS (FM), Proceeding No. MB 21-401 (filed May 25, 2023) (Amended Opposition). The Amended Opposition fails to support any of the facts alleged therein, however, and it greatly exceeds the maximum permissible length for such filings. See 47 CFR § 1.115(f). We therefore strike the filing, giving it no further consideration in this proceeding. Relatedly, we do not consider the Reply that Mr. Wahl filed to the Amended Opposition, which is moot. See Reply to Opposition to Application for Review, Proceeding No. MB 21-401 (filed June 7, 2023).

²³ See 47 CFR § 1.115(b)(2)(i) ("The action taken pursuant to delegated authority is in conflict with statute, regulation, case precedent, or established Commission policy."), (b)(2)(iv) ("An erroneous finding as to an important or material question of fact."). *Cf.* AFR, *supra* note 2, at 1.

²⁴ See AFR, *supra* note 2, at 2, 4-9; AFR Supplement, *supra* note 2.

²⁵ See AFR, *supra* note 2, at 2, 4-10.

²⁶ See *id.* at 2.

²⁷ See *id.* at 10.

²⁸ See *id.* at 9.

²⁹ See *id.* at 10.

³⁰ See *id.* at 4.

III. DISCUSSION

7. As an initial matter, we reject Mr. Wahl's attempts to introduce new evidence concerning his illness, conduct, and reputation.³¹ We will not take such evidence into consideration as a basis for overturning the Revocation Order. Section 1.115(c) of the Rules declares that "no application for review will be granted if it relies on questions of fact or law upon which the designated authority has been afforded no opportunity to pass."³² The Enforcement Bureau had no opportunity to consider the impact, if any, of the facts alleged in Mr. Wahl's declaration and the writings of others on his behalf as they relate to his qualifications to be a Commission licensee, because they were not presented to the Enforcement Bureau. But even if these materials had been presented to the Enforcement Bureau before it issued the Revocation Order, we still would decline to consider them due to Mr. Wahl's waiver of his right to present such evidence before the ALJ. We further affirm, for the reasons discussed below, the Enforcement Bureau's decision that Mr. Wahl's criminal convictions merit revocation of his license.

A. Mr. Wahl, Having Waived His Right to a Hearing, Can No Longer Avail Himself of the Evidentiary Functions of a Hearing.

8. Mr. Wahl states that "[i]f provided with the opportunity to proceed with the presentation of evidence, [he] will be able to provide information concerning his past meritorious service to the community and the station's importance to the community."³³ This argument wrongly assumes that Mr. Wahl retains the right to introduce additional evidence. Because the hearing was terminated by the ALJ, Mr. Wahl may no longer present evidence or rely on other hearing rights.³⁴

9. Pursuant to section 312(a)(2) and (c) of the Act³⁵ and sections 0.283 and 1.91 of the Rules,³⁶ the Media Bureau designated for hearing before an ALJ whether Mr. Wahl was qualified to remain and would remain a Commission licensee following his criminal convictions.³⁷ Under section 1.91(d) of the Rules, the Commission, represented by the Enforcement Bureau, bore the burden of proceeding with the introduction of evidence and the burden of proof in that hearing proceeding.³⁸ Mr. Wahl filed, as required under section 1.91(c) of the Rules, a written appearance stating that he would "present evidence on the matters specified in the" Order to Show Cause.³⁹ Mr. Wahl, however, failed to preserve his right to present evidence on the matters specified in the Order to Show Cause.⁴⁰ Specifically, the ALJ found Mr. Wahl had waived the hearing under section 1.92(a)(2) of the Rules by failing to comply with discovery and other hearing obligations.⁴¹ The ALJ thereafter terminated the hearing

³¹ See AFR, *supra* note 2, at 2, 4-9; AFR Supplement, *supra* note 2.

³² See 47 CFR § 1.115(c).

³³ See AFR, *supra* note 2, at 5.

³⁴ See, e.g., *Quests, Inc.*, Memorandum Opinion and Order, 7 FCC Rcd 5273 (1992) (denying an application for review after a licensee failed to participate in a hearing on an order to show cause). We note also that 47 CFR § 1.44 prohibits commingling requests to different entities (e.g., the Commission, the ALJ, and an entity acting on delegated authority) in a single pleading and authorizes return of such pleadings without consideration.

³⁵ 47 U.S.C. § 312(a)(2), (c).

³⁶ 47 CFR §§ 0.283, 1.91(a).

³⁷ See *id.* §§ 0.61, 0.283.

³⁸ See *id.* § 1.91(d).

³⁹ See Final Termination Order, *supra* note 4, at 6, para. 10; 47 CFR § 1.91(c).

⁴⁰ See Final Termination Order, *supra* note 4, at 4, para. 7 (noting that Mr. Wahl had "filed no substantive documents in this proceeding"); *id.* at 6, para. 10 (stating that he had "made no filings in response to outstanding discovery requests, motions, and orders").

⁴¹ See *id.* at 4, para. 7; *id.* at 6, para. 10; 47 CFR § 1.92(a)(2).

proceeding, acknowledging that this step would have the effect of “causing a Commission license to be revoked without a full airing of substantive issues.”⁴² Mr. Wahl had the right to appeal from that ruling within 30 days but did not do so.⁴³ After the hearing was terminated and the time for appeal had expired, the Enforcement Bureau, acting on delegated authority, properly considered the issues under section 1.92(d) of the Rules *based on the information available to it* and revoked Mr. Wahl’s license.⁴⁴ While Mr. Wahl asserts that his health issues merit reopening the proceeding so he can introduce evidence,⁴⁵ he had ample opportunity to request additional time from the ALJ and failed to do so.⁴⁶

10. As Mr. Wahl filed no appeal to the Final Termination Order, he waived his right to appeal the matters resolved in that order, including his opportunity to present evidence in a hearing.⁴⁷ To the extent that Mr. Wahl seeks review of the Final Termination Order now, we decline his untimely request.

B. The Enforcement Bureau Reasonably Concluded that Mr. Wahl’s Criminal Convictions Merited Revoking the License to FM Station WQZS.

1. Mr. Wahl’s Conduct is Relevant to His Qualifications as a Licensee.

11. Mr. Wahl argues that his criminal convictions do not merit revocation of the station license, but we affirm the Enforcement Bureau’s conclusion to the contrary.⁴⁸ Certain types of behavior unrelated to the FCC may call into question a licensee’s fitness to maintain a license. This behavior includes, *inter alia*, felony convictions,⁴⁹ serious misdemeanor convictions in appropriate or compelling cases,⁵⁰ and adjudicated conduct “in which a specific finding of fraudulent representation to another governmental unit is made.”⁵¹

12. Mr. Wahl’s criminal behavior implicates each of these types of behavior. First, Mr. Wahl pleaded guilty to criminal use of a communication facility, which is a third-degree felony.⁵² Although

⁴² See Final Termination Order, *supra* note 4, at 4, para. 7; *id.* at 6, para. 10; 47 CFR § 1.92(a)(2), (c).

⁴³ See 47 CFR § 1.302(a) (“If the presiding officer’s ruling terminates a hearing proceeding, any party to the proceeding, as a matter of right, may file an appeal from that ruling within 30 days after the ruling is released.”).

⁴⁴ See *id.* § 1.92(d) (“The Commission will determine on the basis of all the information available to it from any source, including such further proceedings as may be warranted, if a revocation order and/or a cease and desist order should issue, and if so, will issue such order.”); Revocation Order, *supra* note 3.

⁴⁵ See AFR, *supra* note 2, at 4-5.

⁴⁶ See Final Termination Order, *supra* note 4, at 4, para. 7 n.25.

⁴⁷ See *id.* at 4, para. 7; *id.* at 6, para. 10; 47 CFR §§ 1.92(a), 1.302(a).

⁴⁸ Relatedly, Mr. Wahl argues that the Enforcement Bureau failed to make out a prima facie case and to meet its burden of proof that his criminal record establishes his lack of character qualification to hold a license. See AFR, *supra* note 2, at 3, 10. The Enforcement Bureau’s burdens of proceeding and proof, however, apply only within the hearing proceeding, the termination of which Mr. Wahl did not appeal.

⁴⁹ See *Policy Regarding Character Qualifications in Broadcast Licensing*, Policy Statement and Order, 5 FCC Rcd 3252, 3252 paras. 3-5 (1990) (*1990 Policy Statement*), *modified*, Memorandum Opinion and Order, 6 FCC Rcd 3448 (1991) (*1991 Policy Statement*), *further modified*, Memorandum Opinion and Order, 7 FCC Rcd 6564 (1992).

⁵⁰ See *1990 Policy Statement*, 5 FCC Rcd at 3252, para. 4 n.3.

⁵¹ *Policy Regarding Character Qualifications in Broadcast Licensing, Amendment of Rules of Broadcast Practice and Procedure Relating to Written Responses to Commission Inquiries and the Making of Misrepresentations to the Commission by Permittees and Licensees*, Report, Order and Policy Statement, 102 F.C.C.2d 1180, 1195-96, paras. 35-36 (1986), *recon. dismissed/denied*, 1 FCC Rcd 421 (1986) (*January 1986 Policy Statement*).

⁵² See Initial Order of the Court, *supra* note 6.

Mr. Wahl is correct that not every felony is disqualifying,⁵³ every felony is relevant to our analysis of qualifications to be a licensee.⁵⁴ Second, Mr. Wahl pleaded guilty to four second-degree misdemeanors related to his felony conviction and based on actions he deliberately took over a period of time: recklessly endangering another person, unlawful dissemination of an intimate image, tampering with evidence, and identity theft.⁵⁵ The mere elements of these crimes, and Mr. Wahl's statement under oath, establish the seriousness of these convictions.⁵⁶ Third, his conviction for tampering with evidence establishes *per se* a fraudulent representation to a governmental unit because he sought to conceal information that was relevant to an official criminal investigation,⁵⁷ and lack of candor "involv[ing] concealment, evasion, and other failures to be fully informative" is a form of fraudulent representation.⁵⁸

2. Mr. Wahl's Conduct Disqualifies Him as a Licensee.

13. Whether misconduct disqualifies a licensee is an individualized determination.⁵⁹ Our orders articulate the factors we typically consider in making predictive judgments about future licensee behavior,⁶⁰ and we briefly consider Mr. Wahl's conduct in light of each of the following factors.

14. *Willfulness of misconduct.* Mr. Wahl's criminal conduct was a premeditated and deliberate scheme. Moreover, his conviction for tampering with evidence expressly included the "intent to impair" the availability of material in a proceeding or investigation,⁶¹ and his conviction for unlawfully disseminating an intimate image establishes his "intent to harass, annoy or alarm" another person.⁶² Mr. Wahl's misconduct was clearly willful.

15. *Frequency of misconduct.* Mr. Wahl did not repeatedly commit all the offenses for which he was convicted, but it is clear that he performed multiple criminal acts over a significant period.⁶³ In sentencing Mr. Wahl, the court noted "the multiple actions, and the extent to which [Mr. Wahl] went to perpetrate harm on the victim."⁶⁴ These actions included creating an online dating profile, disseminating images of his victim, engaging with individuals responding to that profile, and later deleting materials.⁶⁵ Although Mr. Wahl alleges that the offenses in this case are "not indicative of an ongoing propensity for

⁵³ See AFR, *supra* note 2, at 9.

⁵⁴ 1990 Policy Statement, 5 FCC Rcd at 3252, paras. 3-5.

⁵⁵ See Initial Order of the Court, *supra* note 6; Guilty Plea to Identity Theft, *supra* note 10.

⁵⁶ See *supra* para. 3.

⁵⁷ See 18 Pa. Stat. and Cons. Stat. Ann. § 4910 (West).

⁵⁸ January 1986 Policy Statement, *supra* note 51, at 1195-96, paras. 35-36.

⁵⁹ 1990 Policy Statement, *supra* note 49, at 3252, para. 5; January 1986 Policy Statement, *supra* note 51, at 1227-29, paras. 102-106.

⁶⁰ 1990 Policy Statement, *supra* note 49 at 3252, para. 5 (explaining that the Commission generally considers factors such as "the willfulness of the misconduct, the frequency of the misconduct, the currentness of the misconduct, the seriousness of the misconduct, the nature of the participation (if any) of managers or owners, efforts made to remedy the wrong, overall record of compliance with FCC rules and policies, and rehabilitation") (citing January 1986 Policy Statement, *supra* note 51, at 1227-29).

⁶¹ See 18 Pa. Stat. and Cons. Stat. Ann. § 4910 (West).

⁶² See *id.* § 3131(a).

⁶³ See Sentence of Court, *supra* note 6, at 4; Wahl Police Report, *supra* note 7, at 10-16.

⁶⁴ See Sentence of Court, *supra* note 6, at 4.

⁶⁵ See *id.*; Wahl Police Report, *supra* note 7, at 10-11, 14-16.

criminal behavior” but reflect “an isolated crime of passion,”⁶⁶ we find that an extended course of premeditated conduct cannot fairly be characterized as “an isolated crime of passion.”

16. Mr. Wahl relies on a handful of decisions for the proposition that the absence of “repeated behavior” indicates that “retention of a license is appropriate.”⁶⁷ The cases he cites, however, do not support this proposition. *Contemporary Media, Titus, Cox, and Augusta* all resulted in license revocations.⁶⁸ Although Mr. Wahl argues that a different outcome would have obtained in each case absent repeated behavior, the decisions belie his assertion. In *Titus*, the Commission stated that “[e]ven without considering Titus’s two juvenile convictions, we believe Titus’s adult conviction . . . would be sufficient to justify revocation of his license.”⁶⁹ Similarly, in *Augusta*, the Commission explained that the “drug conviction is itself sufficient basis for revocation here.”⁷⁰ And neither *Contemporary Media* nor *Cox* cites the occurrence of repeated offenses as essential to the outcomes in those decisions.⁷¹

17. Mr. Wahl also relies on *Richard Richards* and *Auburn Network*, in which the licensees were not disqualified, but those cases are distinguishable from this dispute. In *Richards*, the Review Board granted renewal to an applicant who had been convicted on a single criminal count of possession of marijuana that “did not include preying on others”⁷² or other aggravating factors, whereas Mr. Wahl’s convictions include recklessly endangering his victim and tampering with evidence. Finally, in *Auburn Network* (a case still subject to Commission review), the ALJ after a hearing was unpersuaded that frequency of conduct was dispositive concerning the licensee’s qualifications.⁷³

18. *Currentness of misconduct.* Police were made aware of Mr. Wahl’s possible criminal activities in September 2019,⁷⁴ and he was sentenced on November 16, 2020.⁷⁵ We have deemed offenses “current” where the convictions occurred within six years prior⁷⁶ and where criminal conduct occurred within the preceding four to five years.⁷⁷ By this standard, Mr. Wahl’s misconduct is current.

19. *Seriousness of misconduct.* “[A]ll felonies are serious crimes,”⁷⁸ and we find Mr. Wahl’s misdemeanor convictions likewise to reflect serious misconduct.⁷⁹ Mr. Wahl asserts that the facts surrounding his convictions “do not neatly compare to those considered disqualifying in other hearing

⁶⁶ See AFR, *supra* note 2, at 9.

⁶⁷ See *id.*

⁶⁸ See *Contemporary Media, Inc. v. FCC*, 214 F.3d 187 (D.C. Cir. 2000) (*Contemporary Media*); *David Titus*, Decision, 29 FCC Rcd 14066 (2014) (*Titus*); *David Edward Cox*, Order of Revocation, 21 FCC Rcd 14153 (EB 2006) (*Cox*); *Augusta Radio Fellowship*, Memorandum Opinion and Order, 6 FCC Rcd 4823 (1991) (*Augusta*).

⁶⁹ See *Titus*, 29 FCC Rcd at 14070, para. 11.

⁷⁰ See *Augusta*, 6 FCC Rcd at 4824, para. 7.

⁷¹ See *Contemporary Media*, 214 F.3d at 187-199; *Cox*, 21 FCC Rcd at 14153-56.

⁷² See *Richard Richards*, Decision, 10 FCC Rcd 1950 (Rev. Bd. 1995) (*Richards*); see *id.* at 3959, para. 38. In fact, the record in *Richards* did not show any potential or actual harm to a third party due to the licensee’s criminal activity.

⁷³ See *Auburn Network, Inc.*, Initial Decision, 2022 WL 1528628, at *13, FCC 22D-01 (ALJ 2022) (*Auburn Network*).

⁷⁴ See Wahl Police Report, *supra* note 7, at 3.

⁷⁵ See Sentence of Court, *supra* note 6.

⁷⁶ See *Auburn Network*, 2022 WL 1528628, at *12, para. 34.

⁷⁷ See *Augusta*, *supra* note 68, at 4823-24, para. 6; *Contemporary Media, Inc.*, 10 FCC Rcd 13685, 13688 (1995).

⁷⁸ See 1990 Policy Statement, *supra* note 49, at 3252.

⁷⁹ See *supra* para. 12.

cases,” in that “[t]hey did not involve fraud, bribery, perjury, or bodily injury.”⁸⁰ On the contrary, the facts surrounding his convictions implicate both fraud and bodily injury. As explained above, his lack of candor in tampering with evidence is a form of fraudulent representation.⁸¹ And while his victim did not suffer bodily injury, his criminal conduct foreseeably placed his victim at risk of sexual assault. Mr. Wahl recklessly engaged in conduct that by definition placed or may have placed his victim “in danger of death or serious bodily injury.”⁸² Moreover, the court declared that he caused his victim “substantial emotional harm” and went to a significant extent “to perpetrate harm”⁸³ on her. Mr. Wahl argues that “there is no evidence of FCC misconduct that has a nexus between [his] criminal behavior and his FCC licenses.”⁸⁴ Such a connection, however, is not a requirement under our character qualifications policy.⁸⁵

20. *Nature of participation of managers or owners.* Mr. Wahl states in the AFR that he owns the station and “has operated his radio station since 1997.”⁸⁶ Thus, his misconduct is clearly that of a manager or owner and directly relevant to whether the license should be revoked.

21. *Efforts made to remedy the wrong.* To our knowledge, Mr. Wahl complied with the requirements imposed at his sentencing. But the AFR identifies no additional efforts he has made to remedy his wrongs.

22. *Overall record of compliance with Commission rules and policies.* Mr. Wahl asserts that “[h]e has a long history of honest dealing with the FCC and with compliance with the FCC’s rules. Mr. Wahl’s radio station has a record of compliance before the FCC.”⁸⁷ We are unaware of evidence to the contrary, so this factor weighs in Mr. Wahl’s favor.

23. *Rehabilitation.* Mr. Wahl’s misconduct is recent, and rehabilitation logically assumes the passage of time since the offense occurred. Thus, we cannot conclude that he has been rehabilitated, and this factor has little significance.⁸⁸

24. *Summary.* On balance, we find that these factors weigh strongly in favor of revoking the license. Moreover, several factors aggravate Mr. Wahl’s criminal conduct. His misconduct was recent and willful and involved multiple criminal acts. Additionally, he inflicted emotional harm and the risk of bodily harm—including sexual assault—to the victim and also committed fraud in tampering with evidence. Because Mr. Wahl is the owner and operator of the station, his character determines whether the license should be revoked. While Mr. Wahl’s overall record of compliance with our Rules and policies mitigates his misconduct to some extent, that factor is far outweighed by the aggravating factors

⁸⁰ See AFR, *supra* note 2, at 10.

⁸¹ See *January 1986 Policy Statement*, *supra* note 51, at 1195-96, paras. 35-36.

⁸² See 18 Pa. Stat. and Cons. Stat. Ann. § 2705 (West).

⁸³ See Sentence of Court, *supra* note 6, at 4.

⁸⁴ See AFR, *supra* note 2, at 10.

⁸⁵ The basis for revocation of Mr. Wahl’s license is his non-FCC misconduct under the standards delineated in that policy. And while we do find a nexus between his non-FCC misconduct and his truthfulness and reliability, even that finding is not necessary to establish a lack of character where the conduct is egregious. See *Richards*, *supra* note 72, at 3955, para. 26 (internal citation omitted).

⁸⁶ AFR, *supra* note 2, at 2.

⁸⁷ *Id.* at 2.

⁸⁸ Were the conduct at issue not recent, here we would look to factors such as the occurrence of more recent misconduct, the applicant’s reputation in the community, and efforts the licensee has taken to prevent future misconduct, along with the factors already addressed. See *1990 Policy Statement*, *supra* note 49, at 3252, para 4 n.3; *January 1986 Policy Statement*, *supra* note 51, at 1228-29, para. 105.

discussed above. In sum, we find Mr. Wahl's offenses to be egregious and render him unqualified to be a Commission licensee.

IV. ORDERING CLAUSE

25. Accordingly, **IT IS HEREBY ORDERED**, pursuant to sections 4(i), 4(j), and 5(c) of the Communications Act, 47 U.S.C. §§ 154(i), 154(j), 155(c), and sections 1.115 and 1.720-1.740 of the Commission's Rules, 47 CFR §§ 1.115, 1.720-1.740, that the AFR is **DENIED**, the Revocation Order is **AFFIRMED**, and the license held by Mr. Wahl is **REVOKED**, effective the day after release of this Order.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Supporting Survivors of Domestic and Sexual) WC Docket No. 22-238
Violence)

FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: April 3, 2024

Released: April 8, 2024

Comment Date: 30 days after date of publication in the Federal Register
Reply Comment Date: 60 days after date of publication in the Federal Register

By the Commission: Chairwoman Rosenworcel issuing a statement.

I. INTRODUCTION

1. In this Further Notice of Proposed Rulemaking (Further Notice), the Commission seeks comment on additional action we can take to help survivors of domestic violence access safe and affordable connectivity, particularly in the context of connected car services. Modern vehicles are frequently equipped with a suite of connectivity tools and features, such as hands-free communication, real-time location, and other connectivity services. While these services provide benefits to drivers and passengers when used as intended, news reports suggest that these services have also been used to stalk, harass, and revictimize survivors of domestic violence.

2. We seek comment on solutions to help ensure that domestic violence survivors need not choose between access to personal transportation or exposing themselves to threatening, stalking, or other harmful behavior by those who can access the car’s data and connectivity. We seek comment on the types, as well as the frequency of use, of connected car services in the marketplace today. In addition, we ask whether changes to the Commission’s rules implementing the Safe Connections Act (SCA) are needed to address the impact of connected car services on domestic violence survivors.1 We also ask more broadly what steps connected car service providers can proactively take to protect survivors from being stalked, harassed, intimidated, or otherwise revictimized through the misuse of connected car services.

II. BACKGROUND

3. Domestic violence and abusive relationships are a significant safety and public health issue that result in individual harm and societal costs that extend beyond the survivor.2 Domestic violence affects more than 12 million people every year, and an average of 24 people per minute are subject to

1 Safe Connections Act of 2022, Pub. L. No. 117-223, 116 Stat. 2280 (Safe Connections Act or SCA); see also 47 U.S.C. § 345. In November 2023, the Commission adopted a Report and Order implementing the Safe Connections Act. Supporting Survivors of Domestic and Sexual Violence et al., WC Docket No. 22-238, Report and Order, FCC 23-96 (Nov. 16, 2023) (SCA Report and Order).

2 SCA Report and Order at para. 2; Safe Connections Act § 3(1) (noting that “[d]omestic violence, dating violence, stalking, sexual assault, human trafficking, and related crimes are life-threatening issues and have lasting and harmful effects on individuals, families, and entire communities”).

physical violence or stalking by an intimate partner.³ Almost half of all women and men in the United States have experienced psychological aggression by an intimate partner in their lifetime (48.4% and 48.8%, respectively).⁴ The effects of domestic violence disproportionately impact women.⁵ In addition, domestic violence disproportionately impacts people of color, LGBTQ+ individuals, and other individuals who identify with historically marginalized demographics.⁶ Estimates of economic costs due to domestic violence are vast and encompass disruptions to education and work, among other aspects.⁷

4. *Safe Connections Act.* In recognition of the harmful and lasting impact that domestic violence and related crimes have on survivors, Congress passed the SCA in November of 2022.⁸ In particular, Congress recognized the reality that survivors seeking to escape their abusers are often tethered to their abusers by technology—such as shared mobile service—and that these lingering connections present unique challenges for survivors seeking to maintain essential connectivity while distancing themselves from their abusers.⁹ In the SCA, Congress found that “perpetrators of violence and abuse . . . increasingly use technological and communications tools to exercise control over, monitor, and abuse their victims,” and that “[c]ommunications law can play a public interest role in the promotion of safety, life, and property” with respect to these types of violence and abuse.¹⁰ The SCA further found that “[s]afeguards within communications services can serve a role in preventing abuse and narrowing the digital divide experienced by survivors of abuse.”¹¹ Congress, through the SCA, sought to ensure that survivors can separate from abusers without losing independent access to their mobile service plans.¹² To further that objective, Congress directed the Commission to adopt rules to implement the protections established in the SCA for survivors of domestic violence.¹³

³ National Domestic Violence Hotline, *Domestic Violence Statistics*, <https://www.thehotline.org/stakeholders/domestic-violence-statistics> (last visited Feb. 5, 2024) (noting “[i]ntimate partner violence alone affects more than 12 million people every year.”).

⁴ *Id.*

⁵ *Id.* (noting “[j]ust under 15% of women (14.8%) and 4% of men in the US have been injured as a result of intimate partner violence that included rape, physical violence, and/or stalking by an intimate partner.”).

⁶ See, e.g., Abriana Herron, “New plan to address disproportionate impact of domestic violence on Black women,” *wfyi*, Indianapolis, (Jan. 10, 2024), <https://www.wfyi.org/news/articles/new-plan-to-address-disproportionate-impact-of-domestic-violence-on-black-women#:~:text=A%20key%20component%20of%20the,resources%20and%20restorative%20justice%20programmi> (last visited Feb. 27, 2024); Jamila K. Stockman, et al., *Intimate Partner Violence and Its Health Impact on Disproportionately Affected Populations, Including Minorities and Impoverished Groups*, *Journal of Women’s Health*, Jan. 1, 2015, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4302952/> (last visited Feb. 15, 2024); National Domestic Violence Hotline, *Domestic Violence and its Impact on Transgender and Nonbinary Survivors*, <https://www.thehotline.org/resources/domestic-abuse-transgender-non-binary-survivors/> (last visited Feb. 15, 2024).

⁷ See Maggie Germano, *Domestic Violence Has A Financial Impact Too*, *FORBES* (Oct. 17, 2019), <https://www.forbes.com/sites/maggiegermano/2019/10/17/domestic-violence-has-a-financial-impact-too/?sh=7ef6ccf49d04> (last visited Jan. 19, 2024); see also Centers for Disease Control and Prevention, *Fast Facts: Preventing Intimate Partner Violence*, Oct. 11, 2022, <https://www.cdc.gov/violenceprevention/intimatepartnerviolence/fastfact.html> (last visited Feb. 5, 2024).

⁸ See generally *Safe Connections Act*.

⁹ *Safe Connections Act* § 3.

¹⁰ *Safe Connections Act* § 3(3)-(4).

¹¹ *Safe Connections Act* § 3(5).

¹² See *Safe Connections Act* § 3(4); see also 47 U.S.C. § 345(b)-(c).

¹³ See *Safe Connections Act* § 5; see also 47 U.S.C. § 345 note (Rulemaking on Protections for Survivors of Domestic Violence). For example, the SCA directs the Commission to issue rules implementing a line separation

(continued....)

5. *SCA Report and Order.* In November 2023, the Commission adopted the *SCA Report and Order* implementing the Commission’s obligations under the SCA to help survivors of domestic violence and related crimes to separate service lines from accounts shared with their abusers, protect the privacy of calls made by survivors to domestic-violence hotlines, and support survivors suffering from financial hardship.¹⁴ The Commission defined key terms in the SCA, such as what constitutes a “covered provider” subject to the Commission’s new rules.¹⁵ As noted in the *SCA Report and Order*, multi-line shared mobile service contracts¹⁶ present challenges for survivors of domestic violence who seek to maintain essential connectivity while also distancing themselves from their abuser, because the abuser may be an account holder and thus able to monitor the survivor’s calls, text messages, and device location.¹⁷ In adopting rules implementing the SCA, the Commission recognized that it can be difficult for the survivor to separate their mobile service line from their abuser when the plan is shared with and controlled by the abuser.¹⁸

6. *Concerns of Misuse of Connected Car Applications by Abusers.* Connected cars bring a myriad of benefits that can improve conditions for drivers, pedestrians, and motorists in general.¹⁹ These benefits include helping to locate a vehicle in a parking lot and connecting promptly with first responders in an emergency without a phone. These features typically require the car to have wireless connectivity and to create and share location data. However, when these data and connectivity are in the wrong hands,

(Continued from previous page)

requirement, facilitate emergency communications support for survivors, and consider whether and how to set up a hotline central database and omit hotline calls from consumer-facing call logs. *See* Safe Connections Act § 3(4); 47 U.S.C. § 345(b)-(c).

¹⁴ *See generally SCA Report and Order.* The Commission defined “survivor” as an individual who is not less than 18 years old and either (1) against whom a covered act has been committed or allegedly committed; or (2) who cares for another individual against whom a covered act has been committed or allegedly committed (provided that the individual providing care did not commit or allegedly commit the covered act). *SCA Report and Order* at para. 11; 47 U.S.C. § 345(a)(6); 47 CFR § 64.6400(m). “Covered act” is defined under the Commission’s rules to mean “conduct that constitutes (1) a crime described in section 40002(a) of the Violence Against Women Act of 1994 (34 U.S.C. § 12291(a)), including, but not limited to, domestic violence, dating violence, sexual assault, stalking, and sex trafficking; (2) an act or practice described in paragraph (11) or (12) of section 103 of the Trafficking Victims Protection Act of 2000 (22 U.S.C. § 7102) (relating to severe forms of trafficking in persons and sex trafficking, respectively); or (3) an act under State law, Tribal law, or the Uniform Code of Military Justice that is similar to an offense described in clause (1) or (2) of this paragraph.” *SCA Report and Order* at para. 8; 47 CFR § 64.6400(e).

¹⁵ The SCA defines “covered provider” to mean “a provider of a private mobile service or commercial mobile service, as those terms are defined in section 332(d)” of the Communications Act, and the Commission adopted this definition in its implementing regulations. 47 U.S.C. § 345(a)(3); *SCA Report and Order* at para. 16 and at Appendix A, § 64.6400(g).

¹⁶ The SCA states that a “shared mobile service contract” “(A) means a mobile service contract for an account that includes not less than 2 consumers; and (B) does not include enterprise services offered by a covered provider.” 47 U.S.C. § 345(a)(5). The Commission defined this term in its implementing regulations as “a mobile service contract for an account that includes not less than two lines of service, and does not include enterprise services offered by a covered provider,” with a “line of service” meaning “one that is associated with a telephone number, and includes all of the services associated with that line under the shared mobile service contract, regardless of classification, including voice, text, and data services. *SCA Report and Order* at paras. 19-24 and Appendix A, § 64.6400(k).

¹⁷ *SCA Report and Order* at para. 3.

¹⁸ *SCA Report and Order* at para. 3.

¹⁹ *See, e.g.,* Federal Trade Commission, *Connected Cars Workshop*, Jan. 2018, https://www.ftc.gov/system/files/documents/reports/connected-cars-workshop-federal-trade-commission-staff-perspective/staff_perspective_connected_cars_0.pdf (last visited Jan. 30, 2024).

they may be used to harm a survivor in—or attempting to leave—an abusive relationship.²⁰ Indeed, recent reports suggest that connected cars can be “weaponized” against survivors, especially when survivors co-own or share a car with an abuser.²¹ For instance, connected cars co-owned or leased by both the abuser and survivor may allow the abuser to track the survivor using the car’s location-based services.²² One news report suggests that survivors may have only limited ability to remove an abuser from their vehicle’s data services and that connected car manufacturers may hesitate to act or abstain from acting altogether when the abuser has an ownership interest in the connected car with the survivor.²³

7. *FCC Letters and Responses.* In response to this public policy concern and Congress’ directive in the SCA, in January 2024, Chairwoman Rosenworcel sent a series of letters to wireless service providers²⁴ and to auto manufacturers²⁵ to seek information and ask for their help in protecting domestic violence survivors.²⁶ The letters to the wireless providers asked about existing connected car services, treatment of geolocation data from these services, current compliance with the SCA, and whether (and if so, how) the companies provide connected car services to consumers who are not subscribers to the company’s wireless services. The letters to the auto manufacturers asked the companies for details about the connected car services they offer, any existing plans to support survivors’ efforts to disconnect from abusers, and how the manufacturers handle consumers’ geolocation data.

8. In their responses, as discussed further below, the wireless service providers noted their shared concerns about safeguarding survivors of domestic violence and affirmed that they are taking steps to implement the SCA.²⁷ The auto manufacturers provided an overview of the functions and privacy features of their connected car services.²⁸

²⁰ Kashmir Hill, “Your Car is Tracking You. Abusive Partners May Be, Too. Apps that remotely track and control cars are being weaponized by abusive partners. Car manufacturers have been slow to respond, according to victims and experts.” *The New York Times*, Dec. 31, 2023, <https://www.nytimes.com/2023/12/31/technology/car-trackers-gps-abuse.html>.

²¹ *Id.* This article details the experiences of survivors of abusive relationships where the abusers used their shared connected car to track and harass the survivor. *Id.*

²² *Id.*

²³ *Id.*

²⁴ Letter from Jessica Rosenworcel, Chairwoman, FCC, to John Stankey, CEO, AT&T Services, Inc. (Jan. 11, 2024); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Mike Sievert, President and CEO, T-Mobile (Jan. 11, 2024); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Hans Vestburg, Chairman and CEO, Verizon (Jan. 11, 2024) (collectively, Wireless Provider Letters).

²⁵ Letter from Jessica Rosenworcel, Chairwoman, FCC, to James D. Farley, Jr., President and CEO, Ford Motor Company (Jan. 11, 2024); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Mary Barra, Chair and CEO, General Motors Company (Jan. 11, 2024); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Noriya Kaihara, President and CEO, American Honda Motor Co., Inc. (Jan. 11, 2024); Letter from Jessica Rosenworcel, Chairwoman, FCC, to José Muñoz, President and CEO, Hyundai Motor America, Inc. (Jan. 11, 2024); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Dimitris Psillakis, President and CEO, Mercedes-Benz USA, LLC (Jan. 11, 2024); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Jérémie Papin, Chairperson, Nissan North America, Inc. (Jan. 11, 2024); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Mark Stewart, COO, Stellantis North America, LLC (Jan. 11, 2024); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Elon Musk, CEO, Tesla, Inc. (Jan. 11, 2024); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Tetsuo “Ted” Ogawa, President and CEO, Toyota Motor North America, Inc. (Jan. 11, 2024) (collectively, Auto Manufacturer Letters).

²⁶ *Chairwoman on Safe Connected Cars for Domestic Violence Survivors*, News Release, January 11, 2024, <https://www.fcc.gov/document/chairwoman-safe-connected-cars-domestic-violence-survivors>.

²⁷ Wireless Provider Letters.

²⁸ Auto Manufacturer Letters.

III. DISCUSSION

9. We seek comment generally on the ways that connected car services are used and steps the Commission can take to help protect survivors of domestic violence from misuse of such services. First, based on the responses to the information requests sent by the Chairwoman, we describe and seek comment on our understanding of wireless service providers' and auto manufacturers' connected car service offerings. We also seek additional information on any other connected car services that are available. Next, we seek comment on whether changes to the Commission's rules implementing the SCA are necessary to address the impact of connected car services on domestic violence survivors. Finally, we seek comment on other actions we can take to help protect survivors using connected car services. In that regard, we seek comment on other potential sources of authority for Commission action and on how to encourage connected car service providers to take proactive steps to protect survivors against misuse of these services.

10. *The Connected Car Services Available Today.* The responses to Chairwoman Rosenworcel's information requests show that wireless service providers and auto manufacturers currently provide a range of connected car services in the marketplace. We seek additional information about how these services are offered to consumers.

11. One method for offering connected car services is through a wireless service provider. The wireless service providers' responses to the Chairwoman's information requests suggest that their offerings generally consist either of (1) services offered directly to consumers or (2) wholesale connectivity services offered to auto manufacturers or to the manufacturer's contracted third-party telematics service provider.²⁹ For services offered directly to consumers, wireless service providers may enter into an agreement with a subscriber to add a line with an associated phone number to their wireless service contract for the connected car service.³⁰ Subscribers typically access these services using an app and, in some cases, a separate device that plugs into their vehicle's control panel.³¹ The direct-to-subscriber services offer a range of features such as roadside assistance, navigation, and notification of required vehicle maintenance.³² Wireless service provider responses to the information requests suggest that some of these services also include the ability to track the vehicle's location remotely.³³ Some wireless service providers also offer in-vehicle Wi-Fi services to consumers.³⁴ When wireless service providers offer wholesale connectivity services, the providers may not have a direct contractual relationship with individual vehicle owners or lessees. Rather, they may contract directly with auto manufacturers via wholesale agreements or with other third parties to provide connectivity for a fleet of vehicles.³⁵ We seek comment on our understanding of the connected car services offered by wireless

²⁹ See, e.g., Letter from Rhonda J. Johnson, Exec. Vice Pres. Fed. Regulatory Relations, AT&T to Jessica Rosenworcel, Chairwoman, FCC (Jan. 26, 2024) (on file in WC Docket No. 22-238) at 1 (AT&T Response Letter); Letter from William H. Johnson, Senior Vice Pres. Verizon to Jessica Rosenworcel, Chairwoman, FCC (Jan. 26, 2024) (on file in WC Docket No. 22-238) at 2-4 (Verizon Response Letter); Letter from Edward ("Smitty") Smith, Senior Vice Pres. Public Policy and Governmental Affairs, T-Mobile to Jessica Rosenworcel, Chairwoman, FCC, (Jan. 26, 2024) (on file in WC Docket No. 22-238) at 2-3 (T-Mobile Response Letter).

³⁰ See, e.g., T-Mobile Response Letter at 3, 5; Verizon Response Letter at 5-6 (noting that, "with limited exceptions, Verizon assigns non-geographic 10-digit telephone numbers in its connected car offerings, both for its own services and those offered directly to consumers by automobile manufacturers").

³¹ See, e.g., Verizon Response Letter at 2; T-Mobile Response Letter at 3.

³² See, e.g., Verizon Response Letter at 2; T-Mobile Response Letter at 2.

³³ See, e.g., Verizon Response Letter at 2; T-Mobile Response Letter at 4.

³⁴ See, e.g., AT&T Response Letter at 1-2; Verizon Response Letter at 2.

³⁵ See, e.g., AT&T Response Letter at 2; Verizon Response Letter at 4.

service providers, and we seek additional information on any other features and capabilities not covered in this paragraph.

12. With respect to auto manufacturers' connected car services, the responses suggest that, when purchasing service from an auto manufacturer, the owner or lessee of a car typically enters into a service agreement with the auto manufacturer for connected car services.³⁶ A car owner typically accesses connected services on their mobile device through a manufacturer-provided app.³⁷ Many auto manufacturers obtain the network connectivity to power these services by entering into contracts to access the wireless networks of wireless service providers or other third parties.³⁸ The connected car services provided by auto manufacturers include a range of features such as the ability to start the vehicle or control the vehicle's climate control system remotely.³⁹ Some services also include the ability to track the vehicle's location remotely.⁴⁰ We seek comment on our understanding of the connected car services offered by auto manufacturers, and we seek additional information on any other features and capabilities not covered in this paragraph.

13. It appears that consumers—including domestic violence survivors—have varying levels of control of the data that connected car services generate, including remote vehicle location data. Responses to the information requests suggest that while some of the wireless service providers and auto manufacturers enable a survivor to turn off remote location tracking if the survivor becomes aware of being tracked by an abuser, not all companies currently provide that ability.⁴¹ For some connected car services, it appears that only a vehicle owner or lessee may disable tracking features on the connected car app absent a court order or other legal process.⁴² Some of the responses to the information requests

³⁶ See, e.g., Letter from David Strickland, Vice Pres. Global Reg. Affairs and Transportation Technology Policy, General Motors to Jessica Rosenworcel, Chairwoman, FCC (Jan. 26, 2024) (on file in WC Docket No. 22-238) at 3 (General Motors Response Letter); Letter from Jennifer Thomas, Vice President, Corp. Affairs, Honda to Jessica Rosenworcel, Chairwoman, FCC (Jan. 26, 2024) (on file in WC Docket No. 22-238) at 2 (Honda Response Letter); Letter from Robert R. Hood, Vice Pres. of Govt. Affairs, Hyundai Motors (Jan. 26, 2024) (on file in WC Docket No. 22-238) at 1 (Hyundai Response Letter).

³⁷ See, e.g., General Motors Response Letter at 3-4; Honda Response Letter at 2; Hyundai Response Letter at 1, Letter from Shane Karr, Sen. Vice Pres. Public Affairs North America, Stellantis to Jessica Rosenworcel, Chairwoman, FCC (Jan. 26, 2024) (on file in WC Docket No. 22-238) at 2 (Stellantis Response Letter).

³⁸ See, e.g., Stellantis Response Letter at 1; Hyundai Response Letter at 2; Letter from Angela E. Giancarlo, on behalf of Toyota Motor North America, Inc. (Jan. 26, 2024) (on file in WC Docket No. 22-238) at 5-6 (Toyota Response Letter).

³⁹ See, e.g., Hyundai Response Letter at 1; Letter from Jake Jones, Vice Pres. of External Affairs, Mercedes Benz North America to Jessica Rosenworcel, Chairwoman, FCC (Jan. 26, 2024) at 1 (Mercedes Response Letter); Stellantis Response Letter at 2; Toyota Response Letter at 4.

⁴⁰ See, e.g., Mercedes Response Letter at 1; Letter from Rohan Patel, Vice Pres. Public Policy & Business Development, Tesla to Jessica Rosenworcel, Chairwoman, FCC (Jan. 26, 2024) (on file in WC Docket No. 22-238) at 2 (Tesla Response Letter); Toyota Response Letter at 3.

⁴¹ Compare GM Response Letter at 2 (stating that “if a driver wishes to prevent access to a vehicle’s location outside the vehicle, the driver can disable the location of the vehicle using the settings function of the vehicle’s infotainment system . . .”); and Letter from Christopher A. Smith, Chief Governmental Affairs Office, Ford Motor Co. to Jessica Rosenworcel, Chairwoman, FCC (Feb. 2, 2024) (on file in WC Docket No. 22-238) at 2 (Ford Response Letter) (noting that anyone concerned about tracking has the option to use touch screen controls in the vehicle to turn off locating data sharing, turn off connectivity entirely, or disassociate the vehicle from the app), with Mercedes Response Letter at 1-2 (noting that customers can delete profiles from the Mercedes me connect app but that “when the party requesting the deletion of a profile or termination of access is not the vehicle owner or lessee, our ability to confirm the veracity of that request is limited. A court order would thus be required where a non-owner or leasing party is seeking deactivation of a service”).

⁴² See, e.g., Mercedes Response Letter at 1-2; Stellantis Response Letter at 2.

indicate that the provider's connected car service gives notice to a driver that the car's location is being tracked.⁴³ Other responses do not indicate whether the service offers this function.⁴⁴ The responses to the information requests further indicate that information collected through connected car services may be shared with third parties in accordance with connected car service agreements.⁴⁵ We seek further information on whether and how users, including both owners or lessees and nonowners or lessees, control access to their data for connected car services that are available today and on what information users receive about the tracking features of these services. To what extent do auto manufacturers and wireless service providers enable—or plan to enable—access controls for data associated with connected car services for owners and lessees and other vehicle users?

14. *Application of the SCA and the FCC's Implementing Rules to Connected Car Services.* We seek comment on what, if any, changes to our rules implementing the SCA could help to address the impact of connected car services on domestic violence survivors. A "shared mobile service contract" is defined under the SCA rules to mean "a mobile service contract for an account that includes not less than two lines of service and does not include enterprise services offered by a covered provider."⁴⁶ "Lines of service," under the SCA rules, are those "associated with a telephone number" and include "all of the mobile services associated with that line under the shared mobile service contract, regardless of classification, including voice, text, and data services."⁴⁷ The *SCA Report and Order* makes clear that a "line" can apply to devices, "such as tablets with no mobile capability, which only nominally have a line associated with a customer account," noting, for example, that "a survivor may want to separate a line for a device in order to protect his or her location information from an abuser with access to the shared mobile account information."⁴⁸

15. Line separation requirements apply, under the SCA rules, to "covered providers."⁴⁹ "Covered providers" are defined as providers of "a private mobile service or commercial mobile service, as those terms are defined in 47 U.S.C. 332(d)."⁵⁰ "Covered provider" includes providers of mobile

⁴³ See, e.g., Tesla Response Letter at 2 (noting that its connected car service "transparently communicates when the vehicle's live location is being requested by an app" and that this is accomplished by "serving the driver with an arrow icon in the status bar of the vehicle's center touchscreen"); Honda Response Letter at 4 (noting that "if a request for a vehicle's location is made, an in-vehicle notification is displayed for the vehicle operator to indicate that the vehicle's location was (or is being) shared").

⁴⁴ See, e.g., Hyundai Response Letter; Stellantis Response Letter.

⁴⁵ See, e.g., Hyundai Response Letter at 2-3; T-Mobile Response Letter at 6.

⁴⁶ *SCA Report and Order* at para. 19; 47 CFR § 64.6400(k).

⁴⁷ *SCA Report and Order* at para. 20; 47 CFR § 64.6400(k).

⁴⁸ *SCA Report and Order* at para. 21.

⁴⁹ 47 CFR § 64.6401.

⁵⁰ 47 CFR § 64.6400(g). Section 332(d) defines "commercial mobile service" as "any mobile service (as defined in [47 U.S.C. § 153]) that is provided for profit and makes interconnected service available (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public, as specified by regulation by the Commission," and "private mobile service" as "any mobile service (as defined in [47 U.S.C. § 153]) that is not a commercial mobile service or the functional equivalent of a commercial mobile service, as specified by regulation by the Commission." 47 U.S.C. § 332(d)(1),(3). The Commission's regulations define "commercial mobile radio service" as "a mobile service that is:

(a)

(1) provided for profit, *i.e.*, with the intent of receiving compensation or monetary gain;

(2) An interconnected service; and

(continued....)

broadband-only or mobile text service that do not also offer mobile voice service, if such provider assigns a telephone number to a device.⁵¹ “Covered provider” also includes facilities-based mobile network operators and resellers/mobile virtual network operators (MVNOs).⁵²

16. Where the defined elements in the Commission’s SCA rules are present, the obligations associated with line separations apply. The FCC’s rules implementing the SCA thus could apply to connected car services that involve a “shared mobile service contract” offered by a “covered provider” as defined under the rules and would require a provider to respond to a valid request for a line separation.⁵³ We seek comment on this position and the extent to which the FCC’s existing SCA rules do not fully address concerns regarding the impact of connected car services on domestic violence survivors and whether changes to these rules would enable the Commission to better address these concerns.

17. As stated above, the definition of “covered provider” under the SCA rules includes providers both of commercial mobile service and private mobile service and also includes facilities-based mobile network operators and resellers/MVNOs. In the context of connected cars, wireless providers offer services directly to consumers and may enter into an agreement with a subscriber to add a line to their mobile service contract for the connected car service. Wireless providers also provide wholesale service to auto manufacturers, which in turn provide connectivity for consumers as a value-added service. Auto manufacturers enter into service agreements with owners and lessees of vehicles to provide them connected car services using, in many cases, the connectivity from the networks of wireless service providers. We view the broad scope of the “covered provider” definition as potentially including the connected car services that wireless service providers offer directly to consumers, and we highlight this view to assist efforts to implement the Commission’s recently adopted rules under the SCA. Does the definition also include the service that auto manufacturers purchase wholesale and in turn offer to consumers? Does the definition of “covered provider” in the SCA rules need to be modified to account

(Continued from previous page) _____

(3) Available to the public, or to such classes of eligible users as to be effectively available to a substantial portion of the public; or

(b) The functional equivalent of such a mobile service described in paragraph (a) of this definition.

(c) A variety of factors may be evaluated to make a determination whether the mobile service in question is the functional equivalent of a commercial mobile radio service, including: Consumer demand for the service to determine whether the service is closely substitutable for a commercial mobile radio service; whether changes in price for the service under examination, or for the comparable commercial mobile radio service, would prompt customers to change from one service to the other; and market research information identifying the targeted market for the service under review.

(d) Unlicensed radio frequency devices under part 15 of this chapter are excluded from this definition of Commercial mobile radio service.”

47 C.F.R. § 20.3. “Private mobile radio service” is a “mobile service that meets neither the paragraph (a) nor paragraph (b) definitions of commercial mobile radio service” and a “mobile service that does not meet the paragraph (a) definition of commercial mobile radio service . . . is presumed to be a private mobile radio service.” *Id.*

⁵¹ *SCA Report and Order* at para. 18.

⁵² *SCA Report and Order* at para. 17.

⁵³ The *SCA Report and Order* codified the SCA’s requirement that, for a shared mobile service contract under which a survivor and abuser each use a line, a covered provider must, not later than two business days after receiving a completed line separation request from a survivor, (1) separate the line(s) of the survivor, and the line(s) of any individual in the care of the survivor, from the shared mobile service contract, or (2) separate the line(s) of the abuser from the shared mobile service contract. *SCA Report and Order* at para. 50; 47 CFR §§64.6402(a); 47 U.S.C. §345(b)(1).

for additional use cases in order to better protect survivors, and if so, what revisions do commenters recommend? Would doing so be consistent with the policy objectives and authority of the SCA?

18. To what extent are auto manufacturers reselling mobile connectivity when providing connected car services? In clarifying that the SCA rules extend to MVNOs, the Commission noted in the *SCA Report and Order* that, for some MVNOs, “the underlying facilities-based provider may have control over some parts of, or all of, the systems and infrastructure necessary to effectuate line separations.”⁵⁴ The Commission clarified that, in those cases, “the MVNO should fulfill its obligations under the SCA and our rules through its contractual relationship with the underlying facilities-based provider, and may satisfy its obligations by utilizing the same procedures and processes the facilities-based provider makes available to its own customers.”⁵⁵ To the extent an MVNO controls any facilities or systems, such as customer care or billing, the Commission found that “the obligations imposed by the SCA fall entirely upon the MVNO and not the underlying facilities-based provider.”⁵⁶ We seek comment on how these findings may apply in the context of connected car services offered by auto manufacturers. Do auto manufacturers have control over any systems or infrastructure necessary to effectuate a line separation under the SCA rules? Are these systems entirely controlled by the wireless service providers who provide the connectivity for the services? Are they controlled or operated jointly?

19. Under the SCA, “shared mobile service contract” is defined to mean “a mobile service contract for an account that includes not less than 2 consumers.”⁵⁷ The rules implementing the SCA provide that a “shared mobile service contract” means “a mobile service contract for an account that includes not less than two lines of service”⁵⁸ and define “lines of service” to mean those lines associated with a telephone number.⁵⁹ Connected car services generally involve a “shared mobile service contract” when the service is offered by a wireless service provider as an add-on to an existing wireless service agreement. Do connected car services offered by auto manufacturers also involve multiple lines of service?⁶⁰ For example, if someone owns multiple cars from the same manufacturer and each of those cars has connected car service, would there be a “shared mobile service contract” for those services? Do connected car services use “lines of service” as contemplated under the SCA framework? The responses to the information requests suggest that some connected car services associate phone numbers with specific vehicles.⁶¹ Is that association typical for the majority of connected car services? If there are some connected car services that do not involve “shared mobile service contracts” and “lines of service” as currently defined by the Commission, are there ways that the Commission can revise these definitions, consistent with our authority under the SCA, to expand their scope and apply to connected car services? Would doing so be consistent with the policy objectives of and authority granted by the SCA? For example, to the extent connected car services are not currently encompassed in the Commission’s

⁵⁴ *SCA Report and Order* at para. 17.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ 47 U.S.C. § 345(a)(5).

⁵⁸ *SCA Report and Order* at para. 19; 47 CFR § 64.6400(k). The Commission interpreted “2 consumers” to mean “two lines of service” based on its understanding that mobile service contracts are typically structured around the number of lines of service associated with an account rather than the number of consumers.” *SCA Report and Order* at para. 19.

⁵⁹ *SCA Report and Order* at para. 20; 47 CFR § 64.6400(k).

⁶⁰ Some of the responses to the information requests stated that auto manufacturers do not use shared mobile service contracts for connected car services. See Alliance for Automotive Innovation Response Letter at 1; Toyota Response Letter at 1.

⁶¹ See, e.g., Honda Response Letter at 3; Hyundai Response Letter at 2; Stellantis Response Letter at 1; Toyota Response Letter at 5.

definition of “shared mobile service contract” under our rules, does the language in the SCA definition that refers to “an account that includes *not less than 2 consumers*”⁶² suggest that we could extend the definition to a shared account (e.g., co-owners or co-lessees of a vehicle) for connected car services?

20. To the extent that connected car services are—or could be—covered by the SCA, how would line separation requirements apply? Are there operational or technical issues that would affect implementation, including any unique challenges for small entities? For example, how would vehicle ownership affect implementation? Are vehicles typically owned on a shared basis by both members of a couple? We expect that, if a vehicle is under the sole ownership of an abuser, but is used by a survivor, the SCA rules would require separation of the connected car service line that is associated with that vehicle through the abuser’s account. In these cases, what evidence and standards of proof would be needed from a survivor to separate the connected car service line? Currently, under the Commission’s SCA rules, survivors seeking a line separation are required to submit documentation that verifies that an individual who uses a line under the shared mobile service contract has committed or allegedly committed a covered act against the survivor or an individual in the survivor’s care.⁶³ Would there be any reason to modify these evidentiary requirements for connected car services?

21. *Other Actions to Protect Survivors Using Connected Car Services.* Outside of the SCA, we seek comment on other authority the Commission could use and other steps the Commission could take to help prevent the misuse of connected car services. To the extent that connected car services are not covered by the SCA and Commission rules, are there other sources of authority the Commission could use to help address the misuse of these services? For example, could the Commission use its authority under other Title III provisions to adopt requirements that apply to the connected car services offered by wireless service providers and/or auto manufacturers?

22. Outside of formal Commission action, what steps can providers of connected car services take to prevent the misuse of connected car services in domestic violence situations? How can the Commission encourage providers to take such steps? What changes to the design and functionality of these services are needed to help protect survivors of domestic violence? In particular, we seek comment on what steps providers of connected car services could take to make it easier for survivors to turn off remote location tracking and other services that might enable abusers to track, control, or revictimize survivors. For example, for some connected car services it appears that only a vehicle owner or lessee may disable tracking features on the connected car app absent a court order.⁶⁴ Should manufacturers permit their apps to allow multiple account holders so that survivors using a co-owned vehicle may access the app to turn off tracking features? How could companies change their policies to better respond to domestic violence situations? What other users or sets of users should be permitted to disable such features? Are there any risks that would arise if companies were to allow users other than the owner or lessee to disable any connected car services?

23. What are companies’ policies, and how can they best ensure that survivors are protected in instances when survivors request, and companies make, changes to location tracking or other connected services? Where companies do permit survivors who are not the primary account holder to request changes (such as turning off location data for a connected car service), do companies automatically send notices to primary account holders? If so, do companies need to notify a primary account holder (who may be an abuser) about such changes? Should companies set a uniform waiting period between when the company receives a request from a survivor and when the company notifies a primary account holder? Could companies delay notice to primary account holders until the company has approved and processed

⁶² 47 U.S.C. § 345(a)(5) (emphasis added).

⁶³ *SCA Report and Order* at para. 29; 47 CFR § 64.6401(a)(9).

⁶⁴ *See, e.g., Mercedes Response Letter at 2; Stellantis Response Letter at 2.*

such requests, or do the companies need to communicate with primary account holders prior to making changes?

24. Are there other ways to allow vehicle tracking for legitimate safety reasons (e.g., driver safety or vehicle theft recovery) without making the tracking features accessible by abusers? Are there changes that automakers could make to alert unsuspecting survivors about tracking services that may be active in their vehicles? What other steps should auto manufacturers and wireless service providers consider to prevent the misuse of connected car services? Should they provide consumers with more information about the connectivity features, privacy controls, and other settings available in connected car services and apps? Should they develop more specific policies to address the misuse of connected car services in domestic violence situations? How can the Commission encourage auto manufacturers and wireless service providers to collaborate proactively with stakeholders to protect against misuse of connected car services?

25. *Promoting Digital Equity and Inclusion.* As noted earlier, the effects of domestic violence disproportionately impact women as well as people of color, LGBTQ+ individuals, and other individuals who identify with historically marginalized demographics.⁶⁵ The Commission, as part of its continuing effort to advance digital equity for all,⁶⁶ including people of color, persons with disabilities, persons who live in rural or Tribal areas, women, LGBTQ+ persons, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty or inequality, invites comment on any equity-related considerations⁶⁷ and benefits (if any) that may be associated with the proposals and issues discussed herein. Specifically, we seek comment on how our proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well the scope of the Commission's relevant legal authority.

IV. PROCEDURAL MATTERS

26. *Ex Parte Rules.* This proceeding shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.⁶⁸ Persons making *ex parte* presentations must file a

⁶⁵ See, e.g., National Domestic Violence Hotline, *Domestic Violence Statistics*, <https://www.thehotline.org/stakeholders/domestic-violence-statistics> (last visited Feb. 5, 2024); Abriana Herron, "New plan to address disproportionate impact of domestic violence on Black women," *wyfi*, Indianapolis, (Jan. 10, 2024), <https://www.wfyi.org/news/articles/new-plan-to-address-disproportionate-impact-of-domestic-violence-on-black-women#:~:text=A%20key%20component%20of%20the,resources%20and%20restorative%20justice%20programming> (last visited Feb. 27, 2024); Jamila K. Stockman, et al., *Intimate Partner Violence and Its Health Impact on Disproportionately Affected Populations, Including Minorities and Impoverished Groups*, *J Womens Health*, Jan. 1, 2015, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4302952/> (last visited Feb. 15, 2024).

⁶⁶ Section 1 of the Communications Act of 1934 as amended provides that the FCC "regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex." 47 U.S.C. § 151.

⁶⁷ The term "equity" is used here consistent with Executive Order 13985 as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; women and girls; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. See Exec. Order No. 13985, 86 Fed. Reg. 7009, Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (Jan. 20, 2021).

⁶⁸ 47 CFR § 1.1200(a). Although the rules do not generally require *ex parte* presentations to be treated as "permit but disclose" in Notice of Inquiry proceedings, see 47 CFR § 1.1204(b)(1), we exercise our discretion in this

(continued....)

copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with Rule 1.1206(b), 47 CFR § 1.1206(b). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

27. *Comment Filing Procedures.* Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by paper. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- Electronic Filers: Comments may be filed electronically by accessing ECFS at <https://www.fcc.gov/ecfs>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. Paper filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.⁶⁹
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority Mail must be addressed to 45 L Street NE, Washington, D.C. 20554.

28. *People with Disabilities.* To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the FCC's Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice).

29. *Regulatory Flexibility Act.* The Regulatory Flexibility Act of 1980, as amended (RFA),⁷⁰ requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities."⁷¹ Accordingly, the Commission has prepared an Initial Regulatory

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instance, and find that the public interest is served by making *ex parte* presentations available to the public, in order to encourage a robust record. See *id.* § 1.1200(a).

⁶⁹ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, DA 20-304, Public Notice, 35 FCC Rcd 2788 (2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

⁷⁰ 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601-612, was amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

⁷¹ *Id.* § 605(b).

Flexibility Analysis (IRFA) concerning the possible impact of the rule and policy changes contained in this Further Notice of Proposed Rulemaking. The IRFA is set forth in Appendix A.

30. *Paperwork Reduction Act.* This document contains proposed new or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. § 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

31. *Providing Accountability Through Transparency Act.* Consistent with the Providing Accountability Through Transparency Act, Public Law 118-9, a summary of this Further Notice will be available on <https://www.fcc.gov/proposed-rulemakings>.

32. *Further Information.* For additional information on this proceeding, contact Thomas Hastings of the Competition and Infrastructure Policy Division, Wireless Telecommunications Bureau, at Thomas.Hastings@fcc.gov.

V. ORDERING CLAUSES

33. Accordingly, IT IS ORDERED, pursuant to the authority contained in sections 1, 4(i), 4(j), 254, 345, and 403 of the Communications Act of 1934, as amended; 47 U.S.C §§ 151, 154(i), 154(j), 254, 345, and 403; section 5(b) of the Safe Connections Act of 2022, Pub. L. No. 117-223, 136 Stat 2280; and section 904 of Division N, Title IX of the Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, 134 Stat. 1182, as amended by the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429; that this Further Notice of Proposed Rulemaking IS ADOPTED.

34. IT IS FURTHER ORDERED that, pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission's Rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments on the Further Notice of Proposed Rulemaking on or before 30 days after publication in the Federal Register, and reply comments on or before 60 days after publication in the Federal Register.

35. IT IS FURTHER ORDERED that the Commission's Office of the Secretary SHALL SEND a copy of this Further Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Federal Communications Commission (Commission) has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the Further Notice of Proposed Rulemaking (*Further Notice*). The Commission requests written public comments on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided on the first page of the *Further Notice*. The Commission will send a copy of the *Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the *Further Notice* and IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need for and Objectives of the Proposed Rules

2. Connectivity services in modern vehicles such as hands-free communication or find-your-car are intended to function as convenient tools for passengers and drivers. However, in the hands of an abuser, those same services can be used to stalk, harass, and intimidate survivors of domestic violence. In the *Further Notice*, the Commission seeks comment generally from small and other entities on the ways that connected car services are used and what further action the Commission can take to help protect domestic violence survivors from misuse of these services. First, based on the responses the Commission received to the information requests sent by the Chairwoman, the *Further Notice* describes and seeks comment on the Commission's understanding of wireless-service providers' and auto manufacturers' connected car service offerings. The *Further Notice* also seeks additional information on any other connected car services that are available in today's marketplace. Next, the *Further Notice* seeks comment on whether changes to the Commission's rules implementing the Safe Connections Act (SCA) are necessary to address the impact of connected car services on domestic violence survivors.⁴ Finally, the *Further Notice* seeks comment on other actions the Commission can take to help protect survivors using connected car services, other potential sources of authority for Commission action, and how best to encourage connected car service providers to take proactive steps to protect survivors against abuse of these services.

B. Legal Basis

3. The proposed action is authorized pursuant to sections 1, 4(i), 4(j), 254, 345, and 403 of the Communications Act of 1934, as amended, 47 U.S.C §§ 151, 154(i), 154(j), 254, 345, and 403; section 5(b) of the Safe Connections Act of 2022, Pub. L. No. 117-223, 136 Stat 2280; and section 904 of Division N, Title IX of the Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, 134 Stat. 1182, as amended by the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429.

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See 5 U.S.C. § 603(a).

³ See *id.*

⁴ See Safe Connections Act of 2022, Pub. L. No. 117-223, 116 Stat. 2280 (Safe Connections Act or SCA); see also 47 U.S.C. § 345(a)(3). In November 2023, the Commission adopted a Report and Order implementing the Safe Connections Act. Supporting Survivors of Domestic and Sexual Violence et al., WC Docket No. 22-238, Report and Order, FCC 23-96, (Nov. 16, 2023) (*SCA Report and Order*).

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

4. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.⁵ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁶ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.⁷ A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.⁸

5. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe, at the outset, three broad groups of small entities that could be directly affected herein.⁹ First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration’s (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.¹⁰ These types of small businesses represent 99.9% of all businesses in the United States, which translates to 33.2 million businesses.¹¹

6. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”¹² The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations.¹³ Nationwide, for tax year 2020, there were approximately 447,689 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.¹⁴

⁵ 5 U.S.C. § 603(b)(3).

⁶ *Id.* § 601(6).

⁷ *Id.* § 601(3) (incorporating by reference the definition of “small-business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

⁸ 15 U.S.C. § 632.

⁹ See 5 U.S.C. § 601(3)-(6).

¹⁰ See SBA, Office of Advocacy, “What’s New With Small Business?,” <https://advocacy.sba.gov/wp-content/uploads/2023/03/Whats-New-Infographic-March-2023-508c.pdf> (Mar. 2023).

¹¹ *Id.*

¹² See 5 U.S.C. § 601(4).

¹³ The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C § 601(5) that is used to define a small governmental jurisdiction. Therefore, the IRS benchmark has been used to estimate the number small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations – Form 990-N (e-Postcard), “Who must file,” <https://www.irs.gov/charities-non-profits/annual-electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard>. We note that the IRS data does not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.

¹⁴ See Exempt Organizations Business Master File Extract (EO BMF), “CSV Files by Region,” <https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-ao-bmf>. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO (continued....)

7. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”¹⁵ U.S. Census Bureau data from the 2017 Census of Governments¹⁶ indicate there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.¹⁷ Of this number, there were 36,931 general purpose governments (county,¹⁸ municipal, and town or township¹⁹) with populations of less than 50,000 and 12,040 special purpose governments—independent school districts²⁰ with enrollment populations of less than 50,000.²¹ Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of “small governmental jurisdictions.”²²

8. *Wireless Telecommunications Carriers (except Satellite)*. This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves.²³ Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless Internet access, and

(Continued from previous page) _____

BMF data for businesses for the tax year 2020 with revenue less than or equal to \$50,000 for Region 1-Northeast Area (58,577), Region 2-Mid-Atlantic and Great Lakes Areas (175,272), and Region 3-Gulf Coast and Pacific Coast Areas (213,840) that includes the continental U.S., Alaska, and Hawaii. This data does not include information for Puerto Rico.

¹⁵ See 5 U.S.C. § 601(5).

¹⁶ See 13 U.S.C. § 161. The Census of Governments survey is conducted every five (5) years compiling data for years ending with “2” and “7”. See also Census of Governments, <https://www.census.gov/programs-surveys/cog/about.html>.

¹⁷ See U.S. Census Bureau, 2017 Census of Governments – Organization Table 2. Local Governments by Type and State: 2017 [CG1700ORG02], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). See also tbl.2. CG1700ORG02 Table Notes_Local Governments by Type and State_2017.

¹⁸ See *id.* at tbl.5. County Governments by Population-Size Group and State: 2017 [CG1700ORG05], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 2,105 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

¹⁹ See *id.* at tbl.6. Subcounty General-Purpose Governments by Population-Size Group and State: 2017 [CG1700ORG06], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 18,729 municipal and 16,097 town and township governments with populations less than 50,000.

²⁰ See *id.* at tbl.10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2017 [CG1700ORG10], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 12,040 independent school districts with enrollment populations less than 50,000. See also tbl.4. Special-Purpose Local Governments by State Census Years 1942 to 2017 [CG1700ORG04], CG1700ORG04 Table Notes_Special Purpose Local Governments by State_Census Years 1942 to 2017.

²¹ While the special purpose governments category also includes local special district governments, the 2017 Census of Governments data does not provide data aggregated based on population size for the special purpose governments category. Therefore, only data from independent school districts is included in the special purpose governments category.

²² This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,931) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (12,040), from the 2017 Census of Governments - Organizations tbls.5, 6 & 10.

²³ See U.S. Census Bureau, 2017 NAICS Definition, “517312 Wireless Telecommunications Carriers (except Satellite),” <https://www.census.gov/naics/?input=517312&year=2017&details=517312>.

wireless video services.²⁴ The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.²⁵ U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.²⁶ Of that number, 2,837 firms employed fewer than 250 employees.²⁷ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 594 providers that reported they were engaged in the provision of wireless services.²⁸ Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees.²⁹ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

9. *Satellite Telecommunications.* This industry comprises firms “primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.”³⁰ Satellite telecommunications service providers include satellite and earth station operators. The SBA small business size standard for this industry classifies a business with \$38.5 million or less in annual receipts as small.³¹ U.S. Census Bureau data for 2017 show that 275 firms in this industry operated for the entire year.³² Of this number, 242 firms had revenue of less than \$25 million.³³ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 65 providers that reported they were engaged in the provision of satellite telecommunications services.³⁴ Of these providers, the Commission estimates that approximately 42 providers have 1,500 or fewer employees.³⁵ Consequently, using the SBA's small business size standard, a little more than half of these providers can be considered small entities.

²⁴ *Id.*

²⁵ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

²⁶ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.:* 2017, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

²⁷ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

²⁸ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>.

²⁹ *Id.*

³⁰ See U.S. Census Bureau, *2017 NAICS Definition, “517410 Satellite Telecommunications,”* <https://www.census.gov/naics/?input=517410&year=2017&details=517410>.

³¹ See 13 CFR § 121.201, NAICS Code 517410.

³² See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 517410, <https://data.census.gov/cedsci/table?y=2017&n=517410&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>.

³³ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

³⁴ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>.

³⁵ *Id.*

10. *Wireless Broadband Internet Access Service Providers (Wireless ISPs or WISPs)*.³⁶ Providers of wireless broadband Internet access service include fixed and mobile wireless providers. The Commission defines a WISP as “[a] company that provides end-users with wireless access to the Internet[.]”³⁷ Wireless service that terminates at an end user location or mobile device and enables the end user to receive information from and/or send information to the Internet at information transfer rates exceeding 200 kilobits per second (kbps) in at least one direction is classified as a broadband connection under the Commission’s rules.³⁸ Neither the SBA nor the Commission have developed a size standard specifically applicable to Wireless Broadband Internet Access Service Providers. The closest applicable industry with an SBA small business size standard is Wireless Telecommunications Carriers (except Satellite).³⁹ The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.⁴⁰ U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.⁴¹ Of that number, 2,837 firms employed fewer than 250 employees.⁴²

11. Additionally, according to Commission data on Internet access services as of June 30, 2019, nationwide there were approximately 1,237 fixed wireless and 70 mobile wireless providers of connections over 200 kbps in at least one direction.⁴³ The Commission does not collect data on the number of employees for providers of these services, therefore, at this time we are not able to estimate the number of providers that would qualify as small under the SBA’s small business size standard. However, based on data in the Commission’s 2022 *Communications Marketplace Report* on the small number of large mobile wireless nationwide and regional facilities-based providers, the dozens of small regional facilities-based providers and the number of wireless mobile virtual network providers in general,⁴⁴ as well as on terrestrial fixed wireless broadband providers in general,⁴⁵ we believe that the majority of wireless Internet access service providers can be considered small entities.

12. *Local Resellers*. Neither the Commission nor the SBA have developed a small business size standard specifically for Local Resellers. Telecommunications Resellers is the closest industry with a SBA small business size standard.⁴⁶ The Telecommunications Resellers industry comprises

³⁶ Formerly included in the scope of the Internet Service Providers (Broadband), Wireless Telecommunications Carriers (except Satellite) and All Other Telecommunications small entity industry descriptions.

³⁷ Federal Communications Commission, *Internet Access Services: Status as of June 30, 2019* at 27, Fig. 30 (*IAS Status 2019*), Industry Analysis Division, Office of Economics & Analytics (March 2022). The report can be accessed at <https://www.fcc.gov/economics-analytics/industry-analysis-division/iad-data-statistical-reports>.

³⁸ See 47 CFR § 1.7001(a)(1).

³⁹ See U.S. Census Bureau, *2017 NAICS Definition*, “517312 Wireless Telecommunications Carriers (except Satellite),” <https://www.census.gov/naics/?input=517312&year=2017&details=517312>.

⁴⁰ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁴¹ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

⁴² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁴³ See *IAS Status 2019*, Fig. 30.

⁴⁴ See *Communications Marketplace Report*, GN Docket No. 22-203, 2022 WL 18110553 at 27, paras. 64-68. (2022) (*2022 Communications Marketplace Report*).

⁴⁵ *Id.* at 8, para. 22.

⁴⁶ See U.S. Census Bureau, *2017 NAICS Definition*, “517911 Telecommunications Resellers,” <https://www.census.gov/naics/?input=517911&year=2017&details=517911>.

establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households.⁴⁷ Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.⁴⁸ Mobile virtual network operators (MVNOs) are included in this industry.⁴⁹ The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.⁵⁰ U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.⁵¹ Of that number, 1,375 firms operated with fewer than 250 employees.⁵² Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 207 providers that reported they were engaged in the provision of local resale services.⁵³ Of these providers, the Commission estimates that 202 providers have 1,500 or fewer employees.⁵⁴ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

13. *Toll Resellers.* Neither the Commission nor the SBA have developed a small business size standard specifically for Toll Resellers. Telecommunications Resellers⁵⁵ is the closest industry with a SBA small business size standard. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.⁵⁶ Mobile virtual network operators (MVNOs) are included in this industry.⁵⁷ The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.⁵⁸ U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.⁵⁹ Of that number, 1,375

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).

⁵¹ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517911, <https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

⁵² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁵³ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>.

⁵⁴ *Id.*

⁵⁵ See U.S. Census Bureau, *2017 NAICS Definition, "517911 Telecommunications Resellers,"* <https://www.census.gov/naics/?input=517911&year=2017&details=517911>.

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).

⁵⁹ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517911, <https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

firms operated with fewer than 250 employees.⁶⁰ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 457 providers that reported they were engaged in the provision of toll services.⁶¹ Of these providers, the Commission estimates that 438 providers have 1,500 or fewer employees.⁶² Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

14. *All Other Telecommunications.* This industry is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation.⁶³ This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.⁶⁴ Providers of Internet services (e.g. dial-up ISPs) or Voice over Internet Protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry.⁶⁵ The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small.⁶⁶ U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year.⁶⁷ Of those firms, 1,039 had revenue of less than \$25 million.⁶⁸ Based on this data, the Commission estimates that the majority of "All Other Telecommunications" firms can be considered small.

15. *Automobile Manufacturing.* This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.⁶⁹ The SBA small business size standard for this industry classifies firms having 1,500 employees or less as small.⁷⁰ 2017 U.S. Census Bureau data indicate that 157 firms operated in this industry for the entire year.⁷¹ Of this number, 145 firms employed fewer than

⁶⁰ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁶¹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>.

⁶² *Id.*

⁶³ See U.S. Census Bureau, 2017 NAICS Definition, "517919 All Other Telecommunications," <https://www.census.gov/naics/?input=517919&year=2017&details=517919>.

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ See 13 CFR § 121.201, NAICS Code 517919 (as of 10/1/22, NAICS Code 517810).

⁶⁷ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 517919, <https://data.census.gov/cedsci/table?y=2017&n=517919&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>.

⁶⁸ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

⁶⁹ See U.S. Census Bureau, 2017 NAICS Definition, "336111 Automotive Manufacturing," <https://www.census.gov/naics/?input=336111&year=2017&details=336111>.

⁷⁰ See 13 CFR § 121.201, NAICS Code 336111 (as of 10/1/22 NAICS Code 336110).

⁷¹ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPfirm, NAICS Code 336111, <https://data.census.gov/cedsci/table?y=2017&n=336111&tid=ECNSIZE2017.EC1700SIZEEMPfirm&hidePreview=false>.

100 employees.⁷² Therefore, the Commission estimates that the majority of manufacturers in this industry are small entities.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

16. The *Further Notice* seeks comment on the ways that connected car services are used and steps the Commission can take to help protect survivors of domestic violence from misuse of these services. The Commission states that the FCC's rules implementing the SCA apply to connected car services that involve a "shared mobile service contract" offered by a "covered provider" as defined under the rules and would require a provider to respond to a valid request for a line separation. The *Further Notice* seeks comment on the extent to which the FCC's existing SCA rules do not fully address concerns regarding the impact of connected car services on domestic violence survivors and whether changes to these rules would enable the Commission to better address these concerns. Outside of the SCA, the *Further Notice* seeks comment on other sources of authority the Commission can use to help address the misuse of connected car services.

17. While the *Further Notice* does not specifically propose new rules, the Commission does discuss application of the existing SCA rules in a new context and to potentially additional entities. The Commission seeks comment from small and other entities on whether any changes to the SCA rules are necessary. If the Commission ultimately decides to make any changes to the SCA rules in the connected car context, this could potentially result in additional costs, new or modified recordkeeping, reporting, or other compliance requirements for small and other providers. For example, the existing SCA rules require covered providers, within two business days of receiving a completed request from a survivor, to (1) separate the line of the survivor, and the line of any individual in the care of the survivor, from a shared mobile service contract, or (2) separate the line of the abuser from a shared mobile service contract. We seek comment on the impact to compliance for small and other entities as a result of rules reflecting a broader application of the SCA.

18. At present, the record does not include a detailed cost/benefit analysis that would allow us to quantify the costs of compliance for small entities, including whether it will be necessary for small entities to hire professionals to comply with any rules that may be adopted. Small and other entities are encouraged to quantify the costs and benefits of any reporting, recordkeeping, or compliance requirement that may be established in this proceeding. The Commission expects the comments it receives on its proposals, and the matters discussed in the *Further Notice* to include information addressing costs, benefits, and other matters of concern for small entities, which should help the Commission identify and better evaluate compliance costs and relevant issues for small entities before adopting final rules.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

19. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rules for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.⁷³

20. The *Further Notice* considers alternative approaches for addressing the misuse of connected car services. It discusses application of the existing SCA rules in the connected car services

⁷² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁷³ 5 U.S.C. § 603(c)(1)-(4).

context and seeks comment on whether any changes to the SCA rules are necessary to address these services. To the extent that connected car services are or could be covered by the SCA, the *Further Notice* seeks comment on how line separation requirements would apply. The *Further Notice* also asks whether there are operational or technical issues that would affect implementation, including for small entity providers. The *Further Notice* also seeks comment on an alternative, non-regulatory approach that would minimize potential burden and provide additional flexibility for connected car providers, including any small entity providers. The *Further Notice* seeks comment on how the Commission can encourage connected car service providers to voluntarily take steps to prevent the misuse of connected car services in domestic violence situations. In particular, the *Further Notice* seeks comment on what steps providers of connected car services could take to make it easier for survivors to turn off remote location tracking and other services that might enable abusers to track, control, or revictimize domestic violence survivors.

21. Additionally, to assist with the Commission's evaluation of the economic impact on small entities that may result from the actions and alternatives that have been proposed in this proceeding, the *Further Notice* seeks alternative proposals and requests information on the potential costs of such alternatives. The Commission expects to consider more fully the economic impact on small entities following its review of comments filed in response to the *Further Notice*, including costs and benefits information. Alternative proposals and approaches from commenters could help the Commission further minimize the economic impact on small entities. The Commission's evaluation of the comments filed in this proceeding will shape the final conclusions it reaches, the final alternatives it considers, and the actions it ultimately takes in this proceeding to minimize any significant economic impact that may occur on small entities from the final rules that are ultimately adopted.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

22. None.

**STATEMENT OF
CHAIRWOMAN JESSICA ROSENWORCEL**

Re: *Supporting Survivors of Domestic and Sexual Violence*, WC Docket No. 22-238, Further Notice of Proposed Rulemaking (April 8, 2024)

The newest generation of cars are smartphones on wheels. They come with built-in connections. They can help a driver to locate their vehicle in a parking lot, turn on their car remotely, and reach out to first responders in an emergency even if the driver cannot call with a phone. But these conveniences in new vehicles rely on wireless services and location data that in the wrong hands can be used to do real harm.

This is especially true for survivors of domestic violence—which include one in four women in this country and one in seven men. This problem was laid bare in an article late last year in *The New York Times*, which chronicled how connected cars are being weaponized by abusers to stalk and harass survivors.

It was also last year that the Federal Communications Commission adopted rules to implement the Safe Connections Act. This law provides this agency with authority to assist survivors of domestic violence and abuse with secure access to communications.

In the Safe Connections Act, Congress recognized that survivors need communications services they can count on, so that their abusers do not track and surveil them. That is why in our first effort to implement this statute, we required covered providers of communications to separate phone lines linked to family plans where the abuser is on the account. This means survivors can safely separate from their abusers tracking them through communications while also ensuring they have the separate service they need to stay connected to their family, friends, and supporters. After all, a phone is a lifeline; it is essential for survivors to rebuild their lives.

Having access to a car is also a lifeline. It is a means of escape and independence, and it is often essential for those seeking employment and support. That is why in this rulemaking we propose that survivors should be able to separate lines that connect their cars, just like they can separate their phone lines from family plans. We also ask what more the Commission can do, and what industry can do, to make sure that survivors feel safe, secure, and free from harm when they use their cars.

No survivor of domestic violence and abuse should have to choose between giving up their car and allowing themselves to be stalked and harmed by those who can access its connectivity and data. We can—and should—do more to make sure these new forms of communications help keep survivors safe.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
Spectrum Five LLC) IB Docket No. 20-399
Petition for Enforcement of Operational Limits and)
for Expedited Proceedings to Revoke Satellite)
Licenses)

MEMORANDUM OPINION AND ORDER

Adopted: April 10, 2024

Released: April 11, 2024

By the Commission:

I. INTRODUCTION

1. We have before us an Application for Review (AFR) filed on January 12, 2024, by BIU, LLC (BIU), seeking review of the Enforcement Bureau's (Bureau) November 13, 2023 decision to dismiss and, on alternative and independent grounds, deny BIU's request to reinstate the above-captioned Petition filed by Spectrum Five LLC (Spectrum Five). As discussed below, we dismiss BIU's AFR because it was filed late, in violation of section 1.115(d) of the Commission's rules. On alternative and independent grounds, we deny the AFR and affirm the Bureau's decision that this matter presents a private contractual dispute between Spectrum Five and BIU that is justiciable, if at all, in a court of competent jurisdiction and not by the Commission.

II. BACKGROUND

2. On November 6, 2020, Spectrum Five filed the above-captioned Petition asking the Commission to require Intelsat License LLC (Intelsat) to come into compliance with the terms of its licenses for the Intelsat 30 and Intelsat 31 satellites. On April 12, 2023, Spectrum Five's outside counsel

1 See BIU, LLC, Application for Review, IB Docket No. 20-399 (filed Jan. 12, 2024) (AFR).
2 See Spectrum Five LLC, Memorandum Opinion and Order, DA 23-1067, 2023 WL 8603170 (EB 2023) (EB MO&O).
3 Letter from Michael H. Strub, Jr., Counsel for BIU, LLC, to Loyaan A. Egal, Chief, Enforcement Bureau, FCC, IB Docket No. 20-399 (filed June 9, 2023) (BIU Reconsideration Letter).
4 Petition of Spectrum Five for Enforcement of Operational Limits and for Expedited Proceedings to Revoke Satellite Licenses, IB Docket No. 20-399 (filed Nov. 6, 2020) (Spectrum Five Petition or Petition).
5 47 CFR § 1.115(d).
6 See Spectrum Five Petition.

submitted a letter stating that Spectrum Five withdrew its Petition.⁷ In response, on April 24, 2023, the Bureau publicly released an Order dismissing the Spectrum Five Petition with prejudice.⁸

3. On June 9, 2023, BIU filed a letter in the above-captioned proceeding alleging that the withdrawal of the Petition was “procured by fraud” at the direction of R. David Wilson, Chairman and CEO of Spectrum Five.⁹ BIU alleged that BIU and Spectrum Five are parties to certain loan agreements on which Spectrum Five defaulted. According to BIU, under the terms of the loan agreement, upon Spectrum Five’s default BIU would be appointed as Spectrum Five’s exclusive attorney-in-fact, with the sole authority to authorize the dismissal of the Spectrum Five Petition.¹⁰ BIU asked the Bureau to reinstate the Spectrum Five Petition and reopen the docket.¹¹ On August 11, 2023, the Bureau sent a letter of inquiry to Spectrum Five and its counsel asking them to respond to the allegations in the BIU Reconsideration Letter.¹² On August 25, 2023, Spectrum Five, represented by Mr. Wilson, responded to the BIU Reconsideration Letter, contending that BIU has no right to claim it represents Spectrum Five.¹³ As an initial matter, Spectrum Five disputed that it is in default on its loan with BIU.¹⁴ And, even assuming it was then in default, Spectrum Five claimed that the contractual provisions of the loan agreements cited by BIU related only to BIU’s authority to perform specified ministerial functions on Spectrum Five’s behalf, such as signing of tax filings.¹⁵ On September 5, 2023, BIU responded to Spectrum Five, claiming that specified terms of the loan agreements appointed BIU as Spectrum Five’s attorney-in-fact.¹⁶

4. On November 13, 2023, the Enforcement Bureau released a decision dismissing and, on alternative and independent grounds, denying the BIU Reconsideration Letter.¹⁷ The Bureau dismissed the BIU Reconsideration Letter because it was filed over two weeks after the statutory deadline for seeking reconsideration.¹⁸ On alternative and independent grounds, the Bureau denied the BIU Reconsideration Letter explaining that, while the Commission has previously considered procedurally

⁷ See Letter from Samuel L. Feder, Counsel for Spectrum Five, LLC, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 20-399 (filed Apr. 12, 2023) (“Spectrum Five LLC respectfully withdraws its petition for Enforcement of Operational Limits and for Expedited Proceedings to Revoke Satellite Licenses.”).

⁸ See Spectrum Five LLC, Order, DA 23-345, 2023 WL 3152002 (EB 2023) (*EB Dismissal Order*). On June 23, 2023, BIU filed a Petition for Review of the *EB Dismissal Order* with the United States Court of Appeals for the D.C. Circuit. See Petition for Review of Petitioner BIU, LLC, *BIU, LLC v. FCC*, No. 23-1163 (D.C. Cir. June 23, 2023). On August 14, 2023, the Commission filed a Motion to Dismiss the BIU Petition for Review. See Motion to Dismiss of Respondent Federal Communications Commission, *BIU, LLC v. FCC*, No. 23-1163 (D.C. Cir. Aug. 14, 2023). On October 19, 2023, the D.C. Circuit granted the Motion to Dismiss. See Order, *BIU, LLC v. FCC*, No. 23-1163 (D.C. Cir. Oct. 19, 2023).

⁹ See BIU Reconsideration Letter at 1.

¹⁰ *Id.*

¹¹ *Id.* at 5.

¹² See Letter from Loyaan A. Egal, Chief, Enforcement Bureau, to, Samuel L. Feder, Counsel for Spectrum Five, LLC, FCC, IB Docket No. 20-399 (August 11, 2023).

¹³ See Letter from R. David Wilson, Spectrum Five, LLC, to Loyaan A. Egal, Chief, Enforcement Bureau, FCC, IB Docket No. 20-399, at 2-3 (filed Aug. 25, 2023) (Spectrum Five Reply).

¹⁴ See *id.* at 3 n.12.

¹⁵ *Id.* (stating that “neither the Security Agreement nor the Pledge Agreement confers exclusive powers or sole authority to BIU to make decisions on Spectrum Five’s behalf”).

¹⁶ See Letter from Michael H. Strub, Jr., Counsel for BIU, LLC, to Loyaan A. Egal, Chief, Enforcement Bureau, FCC, IB Docket No. 20-399, at 1 (filed Sept. 5, 2023) (BIU Response).

¹⁷ See *EB MO&O*.

¹⁸ See *id.* at para. 6 (citing 47 U.S.C. § 405).

improper petitions for reconsideration where there was undisputed evidence of fraud, the present case involved at most a private contractual dispute that is justiciable, if at all, in a court of competent jurisdiction and not by the Commission.¹⁹

5. On January 12, 2024, BIU filed an AFR of the Bureau's decision, again claiming that Mr. Wilson did not have authority to withdraw the Petition pursuant to Spectrum Five's contractual arrangements with BIU.²⁰ BIU asks the Commission to set aside the Bureau's decision, reinstate the Petition, and reopen the docket.²¹

III. DISCUSSION

6. Pursuant to section 1.115(d) of the Commission's rules, an application for review must be filed within 30 days from the date of public notice of the Commission action.²² Public notice of the Bureau's decision to dismiss and, on alternative and independent grounds, deny the BIU Reconsideration Letter was given on November 13, 2023, when the *EB MO&O* was released to the public.²³ Pursuant to section 1.4 of the Commission's rules, the first day to be counted in computing the 30-day period was November 14, 2023, resulting in the last day for filing an application for review of December 13, 2023.²⁴ BIU filed its AFR on January 12, 2024, approximately one month after the deadline.²⁵ BIU offered no explanation for its late filing nor did it seek a waiver.²⁶ Accordingly, we dismiss BIU's AFR as untimely.²⁷

7. On alternative and independent grounds, we deny the AFR because BIU has failed to demonstrate that the Bureau erred in dismissing and, on alternative and independent grounds, denying the BIU Reconsideration Letter. As an initial matter, the Bureau properly concluded that, without justification, BIU filed the BIU Reconsideration Letter over two weeks after the statutory deadline for seeking reconsideration.²⁸ In the AFR, BIU does not dispute that it filed the BIU Reconsideration Letter late. Although the Bureau recognized that the Commission has previously considered procedurally improper petitions for reconsideration where there was undisputed evidence of fraud on the

¹⁹ See *id.* at para. 7.

²⁰ AFR at 5.

²¹ *Id.* at 22.

²² 47 CFR § 1.115(d).

²³ 47 CFR § 1.4(b)(2) (providing that "for non-rulemaking documents released by the Commission or staff" the date of public notice is "the release date").

²⁴ 47 CFR § 1.4(c)-(d).

²⁵ See *supra* note 4.

²⁶ BIU claims without explanation that its AFR of the *EB MO&O* was filed pursuant to Sections 54.719 and 54.720 of the Commission's rules. AFR at 16 (citing 47 CFR §§ 54.719 and 54.720). These rules provide for a 60-day period for a party to seek Commission review of a decision made by the Universal Service Administrative Company. See 47 CFR § 54.720; see also 47 CFR § 54.5 (defining "Administrator" as the Universal Service Administrative Company). The decision to dismiss or deny the BIU Reconsideration Letter in the *EB MO&O* was made by the Enforcement Bureau on delegated authority, not by the Universal Service Administrative Company, thus the deadline for seeking Commission review was 30 days after release of the *EB MO&O* pursuant to Section 1.115 of the Commission's Rules. See *EB MO&O* at para. 8 n.24; see also 47 CFR § 1.115(a), (d).

²⁷ 47 CFR § 1.115(d).

²⁸ See *EB MO&O* at para. 6 (explaining that the Bureau's public release of the *EB Dismissal Order* on April 24, 2023, provided BIU with constructive notice of the decision) (citing *K. Rupert Murdoch (Transferor) and Fox Entm't Group (Transferee)*, Memorandum Opinion and Order on Reconsideration, 24 FCC Rcd 5824, 5827, para. 11 (2009) ("public notice constitutes constructive notice"); *Holy Family Oratory of St. Philip Neri*, Memorandum Opinion and Order, 29 FCC Rcd 13273, 13274, para. 5 (2014) (unawareness of public notice of decision insufficient basis for consideration of late-filed reconsideration petition)).

Commission's processes,²⁹ the Bureau correctly explained that the matter here is a private contractual dispute between BIU and Spectrum Five as to whether Mr. Wilson had authority to withdraw the Petition based on competing interpretations of contractual language in their loan agreements.³⁰

8. In its AFR, BIU presents new arguments in an attempt to support its claim that the Spectrum Five Petition should be reinstated. As an initial matter, we dismiss these new arguments because they were not presented to the Bureau.³¹ On alternative and independent grounds, we reject these arguments on the merits. First, BIU cites *Roy M. Speer*, claiming that the Commission has previously considered matters that involve a "private dispute."³² But, in *Roy M. Speer*, the Commission did not resolve a dispute between private parties on how to interpret the terms of their contract. Rather, the Commission considered allegations that a third party had assumed *de facto* control of a broadcast licensee, which is a matter that squarely fits within the Commission's expertise and jurisdiction under Section 310(d) of the Act.³³ The present matter, however, does not involve a claim of *de facto* control. Indeed, BIU filed a letter on June 13, 2023, in this proceeding stating that "BIU did not suggest, nor intend to suggest, that BIU has assumed operational control of Spectrum Five."³⁴ Rather, the basic allegation raised by BIU here—that the terms of a loan agreement did not authorize Mr. Wilson on behalf of Spectrum Five to withdraw the Spectrum Five Petition—is purely a matter of contractual interpretation

²⁹ See *id.* at para. 7 (citing *Champion Communications Services, Inc.*, Order, 15 FCC Rcd 12832, 12832, para. 3 (WTB 2000) (both assignee and assignor agreed that assignment application was signed by unauthorized person); *Comtex Communications, Inc.*, Order, 15 FCC Rcd 11730, 11731, para. 6 (WTB 2000) (undisputed showing that assignor never authorized the assignment of its license)). BIU argues that the present case is not different from *Champion*, where the Wireless Bureau sought to reinstate a former licensee after the assignee revealed the assignment application was not authorized by the assignor. See AFR at 20-21. Unlike the present case, however, there was no contractual dispute between the assignor and the assignee in *Champion* that required resolution. Rather, both the assignee and the assignor in *Champion* agreed that the assignment application was signed by an unauthorized person. *Champion*, 15 FCC Rcd at 12832, paras. 3-4 (referring to an "undisputed showing" that the assignee never authorized the assignment of its license). Similarly, BIU relies on *Hazel-Atlas Glass Co. v. Hartford-Empire Co.*, 322 U.S. 238 (1944), but in that case there was no factual dispute. *Id.* at 243 (referring to "[i]ndisputable proof of the foregoing facts"). See AFR at 19.

³⁰ See *id.*

³¹ 47 CFR § 1.115(c) ("No application for review will be granted if it relies on questions of fact or law upon which the designated authority has been afforded no opportunity to pass."); *id.* at Note to Section 1.115(c) ("Subject to the requirements of § 1.106, new questions of fact or law may be presented to the designated authority in a petition for reconsideration.").

³² AFR at 18-19 (citing *Applications of Roy M. Speer, (Transferor) & Silver Mgmt. Co., (Transferee)*, 11 FCC Rcd 14684 (1996)).

³³ 47 U.S.C. § 310(d) (stating that a license shall not be "transferred, assigned, or disposed of in any manner . . . or by transfer of control of any corporation holding such [] license, to any person except upon application to the Commission and upon finding by the Commission that the public interest, convenience, and necessity will be served thereby"). In addition, when the Commission in a subsequent decision pertaining to *Roy M. Speer* addressed the transfer of control allegation, it explained it would not "attempt to arbitrate contract interpretation" but instead its "objective [was] to determine the locus of control of" the station. *Applications of Roy M. Speer, (Transferor) & Silver Mgmt. Co., (Transferee)*, 11 FCC Rcd 18393, para. 51 (1996); see also *Applications of Roy M. Speer, (Transferor) & Silver Mgmt. Co., (Transferee)*, 13 FCC Rcd 19911, para. 17 (1998) ("[T]he Commission generally does not adjudicate disputes related to private contractual matters. In reaching our decision, we assumed the validity of the Option Agreement, and ruled only on whether it comported with our regulations and policies.").

³⁴ See Letter from Michael H. Strub, Jr., Counsel for BIU, LLC, to Loyaan A. Egal, Chief, Enforcement Bureau, FCC, IB Docket No. 20-399, at 1 (filed June 13, 2023). BIU stated the same in its filings with the United States Court of Appeals for the D.C. Circuit. See Petition for Review of Petitioner BIU, LLC, *BIU, LLC v. FCC*, No. 23-1163 (D.C. Cir. June 23, 2023), at 4 n.2 ("BIU did not assume operational control of Spectrum Five").

where the two parties to the contract have opposing views over how their contract should be interpreted and for which the Commission is not the proper forum for adjudication.³⁵

9. BIU's attempt to distinguish the cases cited by the Bureau holding that the Commission does not adjudicate private contract law questions is unavailing.³⁶ While BIU claims these cases did not involve the integrity of proceedings before the Commission or the Commission's exclusive jurisdiction over licensing,³⁷ the cases in fact specifically recognize that the Commission "does not possess the resources, expertise, or jurisdiction to adjudicate" private contractual disputes and that the Commission's approach is to defer to judicial determinations regarding the interpretation and enforcement of contracts in order to preserve its "exclusive authority to make public interest determinations on licensing matters while recognizing the role of state and local courts in adjudicating private contractual disputes."³⁸

10. Finally, while we take seriously the need to ensure the integrity of our processes, the Bureau properly concluded that the facts here reveal, at most, a private contractual dispute between Spectrum Five and BIU whether the terms of their loan agreement prohibited Spectrum Five from withdrawing the Petition.³⁹ Accordingly, on alternative and independent grounds, we affirm the Bureau's denial of the Spectrum Five Petition.

IV. ORDERING CLAUSES

11. Accordingly, **IT IS ORDERED** that, pursuant to section 5(c)(5) of the Communications Act of 1934, as amended, 47 U.S.C. § 155(c)(5), and section 1.115 of the Commission's rules, 47 CFR § 1.115, the Application for Review filed by BIU, LLC on January 12, 2024, is DISMISSED and, in the alternative, is DENIED.

12. **IT IS FURTHER ORDERED** that a copy of this Memorandum Opinion and Order shall be sent by first class mail and certified mail, return receipt requested, to Counsel for BIU, LLC, Michael H. Strub Jr., Esq., Greenberg Gross LLP, 650 Town Center Drive, Suite 1700, Costa Mesa, California 92626.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

³⁵ See *EB MO&O* at para. 7.

³⁶ AFR at 21-22.

³⁷ *Id.*

³⁸ *Arecibo Radio Corp.*, Memorandum Opinion and Order, 101 FCC 2d 545, 548 (1985). See *Applications of Cellco Partnership d/b/a Verizon Wireless and Atlantis Holdings LLC*, Memorandum Opinion and Order and Declaratory Ruling, 23 FCC Red 17444, 17538, para. 214 (2008) ("private contractual disputes . . . are best resolved by a local court of competent jurisdiction"); see also *Listeners' Guild, Inc. v. FCC*, 813 F.2d 465, 469 (D.C. Cir. 1987) (referring to the "Commission's longstanding policy of refusing to adjudicate private contract law questions for which a forum exists in the state courts"); *Environniel, LLC v. FCC*, 661 F.3d 80, 84-86 (D.C. Cir. 2011) (affirming Commission decision permitting withdrawal of assignment application, rejecting proposed assignee's consummation notification, and declining to examine the validity of the parties' contracts).

³⁹ BIU's claim that BIU cannot bring a civil action to require the Commission to restore the Petition misses the point. See AFR at 20. BIU could pursue a civil action in a court of competent jurisdiction alleging that Spectrum Five breached its contract with BIU or otherwise acted without authority when Mr. Wilson on behalf of Spectrum Five withdrew the Petition.