

tion 8.1(b) of title 47, Code of Federal Regulations, or any successor regulation.

**(2) Broadband map**

The term “Broadband Map” means the map created by the Commission under section 642(c)(1)(A) of this title.

**(3) Cell edge probability**

The term “cell edge probability” means the likelihood that the minimum threshold download and upload speeds with respect to broadband internet access service will be met or exceeded at a distance from a base station that is intended to indicate the ultimate edge of the coverage area of a cell.

**(4) Cell loading**

The term “cell loading” means the percentage of the available air interface resources of a base station that are used by consumers with respect to broadband internet access service.

**(5) Clutter**

The term “clutter” means a natural or man-made surface feature that affects the propagation of a signal from a base station.

**(6) Fabric**

The term “Fabric” means the Broadband Serviceable Location Fabric established under section 642(b)(1)(B) of this title.

**(7) Form 477**

The term “Form 477” means Form 477 of the Commission relating to local telephone competition and broadband reporting.

**(8) Indian Tribe**

The term “Indian Tribe” has the meaning given the term “Indian tribe” in section 5304 of title 25.

**(9) Mobility Fund Phase II**

The term “Mobility Fund Phase II” means the second phase of the proceeding to provide universal service support from the Mobility Fund (WC Docket No. 10–90; WT Docket No. 10–208).

**(10) Propagation model**

The term “propagation model” means a mathematical formulation for the characterization of radio wave propagation as a function of frequency, distance, and other conditions.

**(11) Provider**

The term “provider” means a provider of fixed or mobile broadband internet access service.

**(12) Quality of service**

The term “quality of service” means, with respect to broadband internet access service, the download and upload speeds (and, for relevant services, latency) with respect to that service, as determined by, and to the extent otherwise collected by, the Commission.

**(13) Shapefile**

The term “shapefile” means a digital storage format containing geospatial or location-based data and attribute information—

(A) regarding the availability of broadband internet access service; and

(B) that can be viewed, edited, and mapped in geographic information system software.

**(14) Standard broadband installation**

The term “standard broadband installation”—

(A) means the initiation by a provider of fixed broadband internet access service in an area in which the provider has not previously offered that service, with no charges or delays attributable to the extension of the network of the provider; and

(B) includes the initiation of fixed broadband internet access service through routine installation that can be completed not later than 10 business days after the date on which the service request is submitted.

(June 19, 1934, ch. 652, title VIII, §801, as added Pub. L. 116–130, §2, Mar. 23, 2020, 134 Stat. 228.)

**§ 642. Broadband maps**

**(a) Rules**

**(1) In general**

Not later than 180 days after March 23, 2020, the Commission shall issue final rules that shall—

(A) require the biannual collection and dissemination of granular data, as determined by the Commission—

(i) relating to the availability and quality of service with respect to terrestrial fixed, fixed wireless, satellite, and mobile broadband internet access service; and

(ii) that the Commission shall use to compile the maps created under subsection (c)(1) (referred to in this section as “coverage maps”), which the Commission shall make publicly available; and

(B) establish—

(i) processes through which the Commission can verify the accuracy of data submitted under subsection (b)(2);

(ii) processes and procedures through which the Commission, and, as necessary, other entities or individuals submitting non-public or competitively sensitive information under this subchapter, can protect the security, privacy, and confidentiality of that non-public or competitively sensitive information, including—

(I) information contained in the Fabric;

(II) the dataset created under subsection (b)(1)(A) supporting the Fabric; and

(III) the data submitted under subsection (b)(2);

(iii) the challenge process described in subsection (b)(5); and

(iv) the process described in section 644(b) of this title.

**(2) Other data**

In issuing the rules under paragraph (1), the Commission shall develop a process through which the Commission can collect verified data for use in the coverage maps from—

(A) State, local, and Tribal governmental entities that are primarily responsible for mapping or tracking broadband internet access service coverage for a State, unit of local government, or Indian Tribe, as applicable;

(B) third parties, if the Commission determines that it is in the public interest to use such data in—

- (i) the development of the coverage maps; or
- (ii) the verification of data submitted under subsection (b); and

(C) other Federal agencies.

### **(3) Updates**

The Commission shall revise the rules issued under paragraph (1) to—

- (A) reflect changes in technology;
- (B) ensure the accuracy of propagation models, as further provided in subsection (b)(3); and
- (C) improve the usefulness of the coverage maps.

### **(b) Content of rules**

#### **(1) Establishment of a Serviceable Location Fabric regarding fixed broadband**

##### **(A) Dataset**

###### **(i) In general**

The Commission shall create a common dataset of all locations in the United States where fixed broadband internet access service can be installed, as determined by the Commission.

###### **(ii) Contracting**

###### **(I) In general**

Subject to subclauses (II) and (III), the Commission may contract with an entity with expertise with respect to geographic information systems (referred to in this subsection as “GIS”) to create and maintain the dataset under clause (i).

###### **(II) Application of the Federal Acquisition Regulation**

A contract into which the Commission enters under subclause (I) shall in all respects comply with applicable provisions of the Federal Acquisition Regulation.

###### **(III) Limitations**

With respect to a contract into which the Commission enters under subclause (I)—

(aa) the entity with which the Commission enters into the contract shall be selected through a competitive bid process that is transparent and open; and

(bb) the contract shall be for a term of not longer than 5 years, after which the Commission may enter into a new contract—

- (AA) with an entity, and for the purposes, described in clause (i); and
- (BB) that complies with the requirements under subclause (II) and this subclause; and

(cc) the contract shall—

(AA) prohibit the entity described in item (aa) from selling, leasing, or otherwise disclosing for monetary consideration any personally identifiable information to any other entity other than for purposes authorized under this subchapter; and

(BB) require the entity described in item (aa) to include in any contract with any other entity a provision that prohibits that other entity from engaging in an action that is prohibited under subitem (AA).

### **(B) Fabric**

The rules issued by the Commission under subsection (a)(1) shall establish the Broadband Serviceable Location Fabric, which shall—

- (i) contain geocoded information for each location identified under subparagraph (A)(i);
- (ii) serve as the foundation upon which all data relating to the availability of fixed broadband internet access service collected under paragraph (2)(A) shall be reported and overlaid;
- (iii) be compatible with commonly used GIS software; and
- (iv) at a minimum, be updated every 6 months by the Commission.

### **(C) Implementation priority**

The Commission shall prioritize implementing the Fabric for rural and insular areas of the United States.

### **(D) Availability of census data**

The Secretary of Commerce shall submit to the Commission, for inclusion in the Fabric, a count of the aggregate number of housing units in each census block, as collected by the Bureau of the Census.

### **(2) Collection of information**

The rules issued by the Commission under subsection (a)(1) shall include uniform standards for the reporting of broadband internet access service data that the Commission shall collect—

(A) from each provider of terrestrial fixed, fixed wireless, or satellite broadband internet access service, which shall include data that—

(i) documents the areas where the provider—

(I) has actually built out the broadband network infrastructure of the provider such that the provider is able to provide that service; and

(II) could provide that service, as determined by identifying where the provider is capable of performing a standard broadband installation, if applicable;

(ii) includes information regarding download and upload speeds, at various thresholds established by the Commission, and, if applicable, latency with respect to broadband internet access service that the provider makes available;

(iii) can be georeferenced to the GIS data in the Fabric;

(iv) the provider shall report as—

(I) with respect to providers of fixed wireless broadband internet access service—

(aa) propagation maps and propagation model details that—

(AA) satisfy standards that are similar to those applicable to providers of mobile broadband internet access service under subparagraph (B) with respect to propagation maps and propagation model details, taking into account material differences between fixed wireless and mobile broadband internet access service; and

(BB) reflect the speeds and latency of the service provided by the provider; or

(bb) a list of addresses or locations that constitute the service area of the provider, except that the Commission—

(AA) may only permit, and not require, a provider to report the data using that means of reporting; and

(BB) in the rules issued under subsection (a)(1), shall provide a method for using that means of reporting with respect to Tribal areas; and

(II) with respect to providers of terrestrial fixed and satellite broadband internet access service—

(aa) polygon shapefiles; or

(bb) a list of addresses or locations that constitute the service area of the provider, except that the Commission—

(AA) may only permit, and not require, a provider to report the data using that means of reporting; and

(BB) in the rules issued under subsection (a)(1), shall provide a method for using that means of reporting with respect to Tribal areas; and

(v) the Commission determines is appropriate with respect to certain technologies in order to ensure that the Broadband Map is granular and accurate; and

(B) from each provider of mobile broadband internet access service, which shall include propagation maps and propagation model details that indicate the current (as of the date on which the information is collected) fourth generation Long-Term Evolution (commonly referred to as “4G LTE”) mobile broadband internet access service coverage of the provider, which shall—

(i) take into consideration the effect of clutter; and

(ii) satisfy—

(I) the requirements of having—

(aa) a download speed of not less than 5 megabits per second and an upload speed of not less than 1 megabit per second with a cell edge probability of not less than 90 percent; and

(bb) cell loading of not less than 50 percent; and

(II) any other parameter that the Commission determines to be necessary to create a map under subsection (c)(1)(C) that is more precise than the map produced as a result of the submissions under the Mobility Fund Phase II information collection.

### **(3) Update of reporting standards for mobile broadband internet access service**

For the purposes of paragraph (2)(B), if the Commission determines that the reporting standards under that paragraph are insufficient to collect accurate propagation maps and propagation model details with respect to future generations of mobile broadband internet access service technologies, the Commission shall immediately commence a rule making to adopt new reporting standards with respect to those technologies that—

(A) shall be the functional equivalent of the standards required under paragraph (2)(B); and

(B) allow for the collection of propagation maps and propagation model details that are as accurate and granular as, or more accurate and granular than, the maps and model details collected by the Commission under paragraph (2)(B).

### **(4) Certification and verification**

With respect to a provider that submits information to the Commission under paragraph (2)—

(A) the provider shall include in each submission a certification from a corporate officer of the provider that the officer has examined the information contained in the submission and that, to the best of the officer’s actual knowledge, information, and belief, all statements of fact contained in the submission are true and correct; and

(B) the Commission shall verify the accuracy and reliability of the information in accordance with measures established by the Commission.

### **(5) Challenge process**

#### **(A) In general**

In the rules issued under subsection (a), and subject to subparagraph (B), the Commission shall establish a user-friendly challenge process through which consumers, State, local, and Tribal governmental entities, and other entities or individuals may submit coverage data to the Commission to challenge the accuracy of—

(i) the coverage maps;

(ii) any information submitted by a provider regarding the availability of broadband internet access service; or

(iii) the information included in the Fabric.

#### **(B) Considerations; verification; response to challenges**

In establishing the challenge process required under subparagraph (A), the Commission shall—

(i) consider—

(I) the types of information that an entity or individual submitting a challenge

should provide to the Commission in support of the challenge;

(II) the appropriate level of granularity for the information described in subclause (I);

(III) the need to mitigate the time and expense incurred by, and the administrative burdens placed on, entities or individuals in—

(aa) challenging the accuracy of a coverage map; and

(bb) responding to challenges described in item (aa);

(IV) the costs to consumers and providers resulting from a misallocation of funds because of a reliance on outdated or otherwise inaccurate information in the coverage maps;

(V) any lessons learned from the challenge process established under Mobility Fund Phase II, as determined from comments solicited by the Commission; and

(VI) the need for user-friendly challenge submission formats that will promote participation in the challenge process;

(ii) include a process for verifying the data submitted through the challenge process in order to ensure the reliability of that data;

(iii) allow providers to respond to challenges submitted through the challenge process; and

(iv) develop an online mechanism, which—

(I) shall be integrated into the coverage maps;

(II) allows for an entity described in subparagraph (A) to submit a challenge under the challenge process;

(III) makes challenge data available in both geographic information system and non-geographic information system formats; and

(IV) clearly identifies the areas in which broadband internet access service is available, and the upload and download speeds at which that service is available, as reported to the Commission under this section.

#### **(C) Use of challenges**

The rules issued to establish the challenge process under subparagraph (A) shall include—

(i) a process for the speedy resolution of challenges, which shall require that the Commission resolve a challenge not later than 90 days after the date on which a final response by a provider to a challenge to the accuracy of a map or information described in subparagraph (A) is complete; and

(ii) a process for the regular and expeditious updating of the coverage maps and granular data disseminated by the Commission as challenges are resolved.

#### **(D) Report to Congress**

Not earlier than 1 year, and not later than 18 months, after the date on which the rules

issued under subsection (a)(1) take effect, the Commission shall, after an opportunity for notice and comment, submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that—

(i) evaluates the challenge process described in subparagraph (A); and

(ii) considers whether the Commission should commence an inquiry on the need for other tools to help—

(I) identify potential inaccuracies in the data relating to broadband internet access service that providers report; and

(II) improve the accuracy of the data described in subclause (I).

#### **(6) Reform of Form 477 process**

##### **(A) In general**

Not later than 180 days after the date on which the rules issued under subsection (a) take effect, the Commission shall—

(i) reform the Form 477 broadband deployment service availability collection process of the Commission—

(I) to achieve the purposes of this subchapter; and

(II) in a manner that—

(aa) enables the comparison of data and maps produced before the implementation of this subchapter with data and coverage maps produced after the implementation of this subchapter; and

(bb) maintains the public availability of data relating to the deployment of broadband internet access service; and

(ii) harmonize reporting requirements and procedures regarding the deployment of broadband internet access service that are in effect on the day before the date on which the rules issued under subsection (a)(1) take effect with those requirements and procedures in those rules.

##### **(B) Continued collection and reporting**

On and after the date on which the Commission carries out subparagraph (A), the Commission shall continue to collect and publicly report subscription data that the Commission collected through the Form 477 broadband deployment service availability process, as in effect on July 1, 2019.

#### **(7) Sharing data with NTIA**

The Commission shall establish a process to make the data collected under paragraph (2) available to the National Telecommunications and Information Administration.

#### **(c) Maps**

The Commission shall—

(1) after consultation with the Federal Geographic Data Committee established under section 2802(a) of title 43, create—

(A) the Broadband Map, which shall depict—

(i) the extent of the availability of broadband internet access service in the United States, without regard to whether

that service is fixed broadband internet access service or mobile broadband internet access service, which shall be based on data collected by the Commission from all providers; and

(ii) the areas of the United States that remain unserved by providers;

(B) a map that depicts the availability of fixed broadband internet access service, which shall be based on data collected by the Commission from providers under subsection (b)(2)(A); and

(C) a map that depicts the availability of mobile broadband internet access service, which shall be based on data collected by the Commission from providers under subsection (b)(2)(B);

(2) after creating the maps under paragraph (1), use such maps—

(A) to determine the areas in which terrestrial fixed, fixed wireless, mobile, and satellite broadband internet access service is and is not available; and

(B) when making any new award of funding with respect to the deployment of broadband internet access service intended for use by residential and mobile customers;

(3) update the maps created under paragraph (1) not less frequently than biannually using the most recent data collected from providers under subsection (b)(2);

(4) consult with—

(A) the Secretary of Agriculture to enable the Secretary of Agriculture to consult the maps created under paragraph (1) when considering the awarding of funds for the deployment of broadband internet access service under any program administered by the Administrator of the Rural Utilities Service; and

(B) the National Telecommunications and Information Administration to enable the Administration to consult the maps created under paragraph (1) when considering the awarding of funds for the deployment of broadband internet access service under any future program administered by the Administration;

(5) make available to any Federal agency, upon request, the maps created under paragraph (1); and

(6) make public, including on a publicly available website, at an appropriate level of granularity—

(A) the maps created under paragraph (1); and

(B) the data collected by the Commission with respect to the availability of broadband internet access service and the quality of service with respect to broadband internet access service.

**(d) Delayed effective date for quality of service rules**

Any requirement of a rule issued under subsection (a)(1) that relates to quality of service shall take effect not earlier than the date that is 180 days after the date on which the Commission issues that rule.

(June 19, 1934, ch. 652, title VIII, §802, as added Pub. L. 116-130, §2, Mar. 23, 2020, 134 Stat. 229;

amended Pub. L. 117-58, div. F, title I, §§60102(h)(2)(E)(i), 60103(d)(1), (e), Nov. 15, 2021, 135 Stat. 1198, 1205.)

**Editorial Notes**

AMENDMENTS

2021—Subsec. (b)(1)(D). Pub. L. 117-58, §60103(d)(1), added subpar. (D).

Subsec. (b)(5)(C)(i). Pub. L. 117-58, §60102(h)(2)(E)(i), substituted “challenges, which shall require that the Commission resolve a challenge not later than 90 days after the date on which a final response by a provider to a challenge to the accuracy of a map or information described in subparagraph (A) is complete” for “challenges”.

Subsec. (c)(6). Pub. L. 117-58, §60103(e), inserted “, including on a publicly available website,” after “make public” in introductory provisions. Directory language amending “the matter preceding paragraph (6)” was executed as if it had referred to the matter preceding subpar. (A), to reflect the probable intent of Congress.

**Statutory Notes and Related Subsidiaries**

DATA MAPPING TO SAVE MOMS’ LIVES

Pub. L. 117-247, Dec. 20, 2022, 136 Stat. 2347, provided that:

“SECTION 1. SHORT TITLE.

“This Act may be cited as the ‘Data Mapping to Save Moms’ Lives Act’.

“SEC. 2. MAPPING BROADBAND CONNECTIVITY AND MATERNAL HEALTH OUTCOMES.

“(a) INCORPORATION OF MATERNAL MORTALITY AND SEVERE MATERNAL MORBIDITY DATA.—Not later than 180 days after the date of the enactment of this Act [Dec. 20, 2022], the Federal Communications Commission shall incorporate publicly available data on maternal mortality and severe maternal morbidity, including for not less than 1 year postpartum, into the Mapping Broadband Health in America platform of the Commission.

“(b) CONSULTATION WITH CDC.—The Federal Communications Commission shall consult with the Director of the Centers for Disease Control and Prevention regarding the maternal mortality and severe maternal morbidity data that should be incorporated under subsection (a).”

IMPLEMENTATION

For requirement to implement amendment made by section 60102(h)(2)(E)(i) of Pub. L. 117-58 as soon as possible after Nov. 15, 2021, see section 1702(h)(2)(E)(iii) of this title.

**§ 643. Enforcement**

It shall be unlawful for an entity or individual to willfully and knowingly, or recklessly, submit information or data under this subchapter that is materially inaccurate or incomplete with respect to the availability of broadband internet access service or the quality of service with respect to broadband internet access service.

(June 19, 1934, ch. 652, title VIII, §803, as added Pub. L. 116-130, §2, Mar. 23, 2020, 134 Stat. 236.)

**§ 644. Improving data accuracy**

**(a) Audits**

The Commission shall conduct regular audits of information submitted to the Commission by providers under section 642(b)(2) of this title to ensure that the providers are complying with this subchapter.