To establish the sense of Congress that Congress should enact, and the President should sign, bipartisan legislation to strengthen public safety and to enhance wireless communications.

IN THE SENATE OF THE UNITED STATES

MAY 9, 2011

Mr. ROCKEFELLER (for himself and Mrs. HUTCHISON) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

NOVEMBER 14, 2012

Reported by Mr. ROCKEFELLER, with an amendment

[Strike out all after the enacting clause and insert the part printed in italic]

A BILL

To establish the sense of Congress that Congress should enact, and the President should sign, bipartisan legislation to strengthen public safety and to enhance wireless communications.

1  Be it enacted by the Senate and House of Representa-
2  tives of the United States of America in Congress assembled,
SECTION 1. SHORT TITLE.

This Act may be cited as the “Strengthening Public-safety and Enhancing Communications Through Reform, Utilization, and Modernization Act” or the “SPECTRUM Act”.

SEC. 2. SENSE OF CONGRESS.

It is the sense of Congress that Congress should enact, and the President should sign, bipartisan legislation to strengthen public safety and to enhance wireless communications by—

(1) providing sufficient wireless spectrum and other resources to build a nationwide interoperable wireless public safety broadband network;

(2) encouraging more efficient, flexible, and effective use of spectrum; a valuable and finite public resource;

(3) promoting voluntary market mechanisms to ensure the optimal allocation of spectrum;

(4) reforming the Federal Government’s spectrum management practices; and

(5) engaging in advanced research and development into emerging wireless technologies.

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “Public Safety Spectrum and Wireless Innovation Act”.

S 911 RS
(b) **Table of Contents.**—The table of contents for this Act is as follows:

Sec. 1. Short title; table of contents.
Sec. 2. Definitions.

**Title I—Reallocation of Public Safety Spectrum**

Sec. 101. Reallocation of D block to public safety.
Sec. 102. Flexible use of narrowband spectrum.

**Title II—Governance of Public Safety Spectrum**

Subtitle A—Public Safety Broadband Corporation

Sec. 201. Single public safety wireless network licensee.
Sec. 203. Board of Directors of the Corporation.
Sec. 204. Officers, employees, and committees of the Corporation.
Sec. 205. Nonprofit and nonpolitical nature of the Corporation.
Sec. 206. Powers, duties, and responsibilities of the Corporation.
Sec. 207. Initial funding for the Corporation.
Sec. 208. Permanent self-funding; duty to assess and collect fees for network use.
Sec. 209. Audit and report.
Sec. 210. Annual report to Congress.
Sec. 211. Public safety roaming and priority access.
Sec. 212. Transitional analysis of public safety network attributes.
Sec. 213. Prohibition on direct offering of commercial telecommunications service directly to consumers.
Sec. 214. Provision of technical assistance.

Subtitle B—Public Safety Commitments

Sec. 221. State and Local Implementation Fund.
Sec. 222. State and local implementation.
Sec. 223. Public safety wireless communications research and development.
Sec. 224. Advanced information and communications technology research.

**Title III—Spectrum Auction Authority**

Sec. 301. Extension of auction authority.
Sec. 302. Auction of spectrum.
Sec. 303. Incentive auction authority.
Sec. 304. Efficient use of public safety spectrum.
Sec. 305. Report on satellite broadband.
Sec. 306. Federal infrastructure sharing.

**Title IV—Public Safety Trust Fund**

Sec. 401. Public Safety Trust Fund.

**Title V—Spectrum Policy**

Subtitle A—Inventory and Planning

Sec. 501. Radio spectrum inventory.
Sec. 502. Federal spectrum planning.

Subtitle B—Markets

Sec. 511. Promoting secondary spectrum markets.
Sec. 512. Unlicensed use in 5 GHz.
Sec. 513. Experimental licenses.
Sec. 514. Repurposing Federal spectrum for commercial purposes and Federal spectrum sharing.
Sec. 515. Report on spectrum sharing.

Subtitle C—Efficiency and Management

Sec. 521. Functional responsibility of the NTIA to ensure efficient use of spectrum.
Sec. 522. Spectrum efficiency analytic tools.
Sec. 523. Study on receiver performance and spectrum efficiency.
Sec. 524. Frequency assignment.
Sec. 525. Spectrum opportunity cost transparency.
Sec. 526. System certification.
Sec. 527. Report to Congress on improving spectrum management.
Sec. 528. Wireless facilities deployment.

TITLE VI—STUDIES ON NEXT GENERATION 9-1-1 SERVICES

Sec. 601. Definitions.
Sec. 602. NHTSA report on costs for requirements and specifications of Next Generation 9–1–1 services.
Sec. 603. FCC recommendations for legal and statutory framework for Next Generation 9–1–1 services.

TITLE VII—MISCELLANEOUS

Sec. 701. Severability.
Sec. 702. Rule of construction.

TITLE VIII—COMPLIANCE WITH STATUTORY PAY-AS-YOU-GO ACT

Sec. 801. Budget compliance.

1 SEC. 2. DEFINITIONS.

In this Act, the following definitions shall apply:

(1) 700 MHz BAND.—The term “700 MHz band” means the portion of the electromagnetic spectrum between the frequencies from 698 megahertz to 806 megahertz.

(2) 700 MHz D BLOCK SPECTRUM.—The term “700 MHz D block spectrum” means the portion of
the electromagnetic spectrum between the frequencies
from 758 megahertz to 763 megahertz and between the
frequencies from 788 megahertz to 793 megahertz.

(3) APPROPRIATE COMMITTEES OF CONGRESS.—
Except as otherwise specifically provided, the term
“appropriate committees of Congress” means—

(A) the Committee on Commerce, Science,
and Transportation of the Senate; and

(B) the Committee on Energy and Com-
merce of the House of Representatives.

(4) ASSISTANT SECRETARY.—The term “Assist-
ant Secretary” means the Assistant Secretary of Com-
merce for Communications and Information.

(5) COMMISSION.—The term “Commission”
means the Federal Communications Commission.

(6) CORPORATION.—The term “Corporation”
means the Public Safety Broadband Corporation es-
tablished under subtitle A of title II.

(7) EXISTING PUBLIC SAFETY BROADBAND SPECTRUM.—The term “existing public safety broadband
spectrum” means the portion of the electromagnetic
spectrum between the frequencies—

(A) from 763 megahertz to 768 megahertz;

(B) from 793 megahertz to 798 megahertz;
(C) from 768 megahertz to 769 megahertz;

and

(D) from 798 megahertz to 799 megahertz.

(8) **FEDERAL ENTITY.**—The term “Federal entity” has the same meaning as in section 113(i) of the *National Telecommunications and Information Administration Organization Act (47 U.S.C. 923(i)).*

(9) **NARROWBAND SPECTRUM.**—The term “narrowband spectrum” means the portion of the electromagnetic spectrum between the frequencies from 769 megahertz to 775 megahertz and between the frequencies from 799 megahertz to 805 megahertz.

(10) **NIST.**—The term “NIST” means the *National Institute of Standards and Technology.*

(11) **NTIA.**—The term “NTIA” means the *National Telecommunications and Information Administration.*

(12) **PUBLIC SAFETY ENTITY.**—The term “public safety entity” means an entity that provides public safety services.

(13) **PUBLIC SAFETY SERVICES.**—The term “public safety services”—

(A) has the meaning given the term in section 337(f) of the *Communications Act of 1934 (47 U.S.C. 337(f)); and*
(B) includes services provided by emergency
response providers, as that term is defined in
section 2 of the Homeland Security Act of 2002

**TITLE I—REALLOCATION OF PUBLIC SAFETY SPECTRUM**

**SEC. 101. REALLOCATION OF D BLOCK TO PUBLIC SAFETY.**

(a) In General.—The Commission shall reallocate
the 700 MHz D block spectrum for use by public safety enti-
ties in accordance with the provisions of this Act.

(b) Spectrum Allocation.—Section 337(a) of the
Communications Act of 1934 (47 U.S.C. 337(a)) is amend-
ed—

(1) by striking “24” in paragraph (1) and in-
serting “34”; and

(2) by striking “36” in paragraph (2) and in-
serting “26”.

**SEC. 102. FLEXIBLE USE OF NARROWBAND SPECTRUM.**

The Commission may allow the narrowband spectrum
to be used in a flexible manner, including usage for public
safety broadband communications, subject to such technical
and interference protection measures as the Commission
may require.
TITLE II—GOVERNANCE OF PUBLIC SAFETY SPECTRUM
Subtitle A—Public Safety Broadband Corporation

SEC. 201. SINGLE PUBLIC SAFETY WIRELESS NETWORK LICENSEE.

(a) REALLOCATION AND GRANT OF LICENSE.—Notwithstanding any other provision of law, and subject to the provisions of this Act, the Commission shall reallocate and grant a license to the Public Safety Broadband Corporation established under section 202 for the use of the 700 MHz D block spectrum and existing public safety broadband spectrum.

(b) TERM OF LICENSE.—

(1) INITIAL LICENSE.—The license granted under subsection (a) shall be for an initial term of 10 years from the date of the initial issuance of the license.

(2) RENEWAL OF LICENSE.—Prior to expiration of the term of the initial license granted under subsection (a) or the expiration of any subsequent renewal of such license, the Corporation shall submit to the Commission an application for the renewal of such license. Such renewal application shall demonstrate that, during the preceding license term, the Corporation has met the duties and obligations set
forth under this Act. A renewal license granted under this paragraph shall be for a term of not to exceed 10 years.

(c) Facilitation of Transition.—The Commission shall take all actions necessary to facilitate the transition of the existing public safety broadband spectrum to the Public Safety Broadband Corporation established under section 202.

SEC. 202. ESTABLISHMENT OF PUBLIC SAFETY BROADBAND CORPORATION.

(a) Establishment.—There is authorized to be established a private, nonprofit corporation, to be known as the “Public Safety Broadband Corporation”, which is neither an agency nor establishment of the United States Government or the District of Columbia Government.

(b) Application of Provisions.—The Corporation shall be subject to the provisions of this Act, and, to the extent consistent with this Act, to the District of Columbia Nonprofit Corporation Act (sec. 29–301.01 et seq., D.C. Official Code).

(c) Residence.—The Corporation shall have its place of business in the District of Columbia and shall be considered, for purposes of venue in civil actions, to be a resident of the District of Columbia.
(d) Powers Under DC Act.—In order to carry out the duties and activities of the Corporation, the Corporation shall have the usual powers conferred upon a nonprofit corporation by the District of Columbia Nonprofit Corporation Act.

(e) Incorporation.—The members of the initial Board of Directors of the Corporation shall serve as incorporators and shall take whatever steps that are necessary to establish the Corporation under the District of Columbia Nonprofit Corporation Act.

Section 203. Board of Directors of the Corporation.

(a) Membership.—The management of the Corporation shall be vested in a Board of Directors (referred to in this subtitle as the “Board”), which shall consist of the following members:

(1) Federal Members.—The following individuals, or their respective designees, shall serve as Federal members:

(A) The Secretary of Commerce.

(B) The Secretary of Homeland Security.

(C) The Attorney General of the United States.

(D) The Director of the Office of Management and Budget.

(2) Non-Federal Members.—
(A) **IN GENERAL.—** The Secretary of Commerce shall appoint 11 individuals to serve as non-Federal members of the Board.

(B) **STATE AND LOCAL INTERESTS TO BE REPRESENTED.—** In making appointments under subparagraph (A), the Secretary of Commerce, in consultation with the Secretary of Homeland Security and the Attorney General of the United States, should—

(i) appoint at least 3 individuals to represent the collective interests of the States, localities, tribes, and territories;

(ii) seek to ensure geographic and regional representation of the United States in such appointments; and

(iii) seek to ensure rural and urban representation in such appointments.

(C) **PUBLIC SAFETY INTERESTS TO BE REPRESENTED.—** In making appointments under subparagraph (A), the Secretary of Commerce should appoint at least 3 individuals who have served or are currently serving as public safety professionals.

(D) **REQUIRED QUALIFICATIONS.—**
(i) **In general.**—Each non-Federal member appointed under subparagraph (A) should meet at least 1 of the following criteria:

(I) **Public safety experience.**—Knowledge and experience in the use of Federal, State, local, or tribal public safety or emergency response.

(II) **Technical expertise.**—Technical expertise and fluency regarding broadband communications, including public safety communications.

(III) **Network expertise.**—Expertise in building, deploying, and operating commercial telecommunications networks.

(IV) **Financial expertise.**—Expertise in financing and funding telecommunications networks.

(ii) **Expertise to be represented.**—In making appointments under subparagraph (A), the Secretary of Commerce shall appoint—
(I) at least one individual who satisfies the requirement under subclause (II) of clause (i);

(II) at least one individual who satisfies the requirement under subclause (III) of clause (i); and

(III) at least one individual who satisfies the requirement under subclause (IV) of clause (i).

(E) INDEPENDENCE.—

(i) IN GENERAL.—Each non-Federal member of the Board shall be independent and neutral.

(ii) INDEPENDENCE DETERMINATION.—In order to be considered independent for purposes of this subparagraph, a member of the Board—

(I) may not, other than in his or her capacity as a member of the Board or any committee thereof—

(aa) accept any consulting, advisory, or other compensatory fee from the Corporation; or
(bb) be a person associated
with the Corporation or with any
affiliated company thereof; and
(II) shall be disqualified from any
deliberation involving any transaction
of the Corporation in which the Board
member has a financial interest in the
outcome of the transaction.

(F) NOT OFFICERS OR EMPLOYEES.—The
non-Federal members of the Board shall not, by
reason of such membership, be considered to be
officers or employees of the United States Gov-
ernment or of the District of Columbia Govern-
ment.

(G) CITIZENSHIP.—No individual other
than a citizen of the United States may serve as
a non-Federal member of the Board.

(b) TERMS OF APPOINTMENT.—
(1) INITIAL APPOINTMENT DEADLINE.—Members
of the Board shall be appointed not later than 180
days after the date of the enactment of this Act.

(2) TERMS.—
(A) LENGTH.—
(i) FEDERAL MEMBERS.—Each Fed-
eral member of the Board shall serve as a
member of the Board for the life of the Corporation.

(ii) Non-Federal Members.—The term of office of each non-Federal member of the Board shall be 3 years. No non-Federal member of the Board may serve more than 2 consecutive full 3-year terms.

(B) Expiration of Term.—Any member whose term has expired may serve until such member’s successor has taken office, or until the end of the calendar year in which such member’s term has expired, whichever is earlier.

(C) Appointment to Fill Vacancy.—Any non-Federal member appointed to fill a vacancy occurring prior to the expiration of the term for which that member’s predecessor was appointed shall be appointed for the remainder of the predecessor’s term.

(D) Staggered Terms.—With respect to the initial non-Federal members of the Board—

(i) 4 members shall serve for a term of 3 years;

(ii) 4 members shall serve for a term of 2 years; and
(iii) 3 members shall serve for a term of 1 year.

(3) VACANCIES.—A vacancy in the membership of the Board shall not affect the Board’s powers, and shall be filled in the same manner as the original member was appointed.

(c) CHAIR.—

(1) SELECTION.—The Secretary of Commerce shall select, from among the non-Federal members of the Board, an individual to serve for a 2-year term as Chair of the Board.

(2) CONSECUTIVE TERMS.—An individual may not serve for more than 2 consecutive terms as Chair of the Board.

(3) REMOVAL FOR CAUSE.—The Secretary of Commerce may remove the Chair of the Board and any non-Federal member for good cause.

(d) REMOVAL.—All members of the Board may by majority vote—

(1) remove any non-Federal member of the Board from office for conduct determined by the Board to be detrimental to the Board or Corporation; and

(2) request that the Secretary of Commerce exercise his or her authority to remove the Chair of the
Board for conduct determined by the Board to be detrimental to the Board or Corporation.

(e) MEETINGS.—

(1) FREQUENCY.—The Board shall meet in accordance with the bylaws of the Corporation—

(A) at the call of the Chairperson; and

(B) not less frequently than once each quarter.

(2) TRANSPARENCY.—Meetings of the Board, including any committee of the Board, shall be open to the public. The Board may, by majority vote, close any such meeting only for the time necessary to preserve the confidentiality of commercial or financial information that is privileged or confidential, to discuss personnel matters, or to discuss legal matters affecting the Corporation, including pending or potential litigation.

(f) QUORUM.—Eight members of the Board shall constitute a quorum, including at least 6 non-Federal members of the Board.

(g) BYLAWS.—A majority of the members of the Board of Directors may amend the bylaws of the Corporation.

(h) ATTENDANCE.—Members of the Board of Directors may attend meetings of the Corporation and vote in person, via telephone conference, or via video conference.
(i) **Prohibition on Compensation.**—A member of the Board of the Corporation shall serve without pay, and shall not otherwise benefit, directly or indirectly, as a result of their service to the Corporation, but shall be allowed a per diem allowance for travel expenses, at rates authorized for an employee of an agency under subchapter I of chapter 57 of title 5, United States Code, while away from the home or regular place of business of the member in the performance of the duties of the Corporation.

**Sec. 204. Officers, Employees, and Committees of the Corporation.**

(a) **Officers and Employees.**—

(1) **In general.**—The Corporation shall have a Chief Executive Officer, and such other officers and employees as may be named and appointed by the Board for terms and at rates of compensation fixed by the Board pursuant to this subsection. The Chief Executive Officer may name and appoint such employees as are necessary. All officers and employees shall serve at the pleasure of the Board.

(2) **Limitation.**—No individual other than a citizen of the United States may be an officer of the Corporation.

(3) **Nonpolitical nature of appointment.**—No political test or qualification shall be used in se-
lecting, appointing, promoting, or taking other personnel actions with respect to officers, agents, or employees of the Corporation.

(4) Compensation.—

(A) In General.—The Board may hire and fix the compensation of employees hired under this subsection as may be necessary to carry out the purposes of the Corporation.

(B) Approval of Compensation by Federal Members.—Notwithstanding any other provision of law, or any bylaw adopted by the Corporation, all rates of compensation, including benefit plans and salary ranges, for officers and employees of the Board, shall be jointly approved by the Federal members of the Board.

(C) Limitation on Other Compensation.—No officer or employee of the Corporation may receive any salary or other compensation (except for compensation for services on boards of directors of other organizations that do not receive funds from the Corporation, on committees of such boards, and in similar activities for such organizations) from any sources other than the Corporation for services rendered during the pe-
period of the employment of the officer or employee by the Corporation.

(5) SERVICE ON OTHER BOARDS.—Service by any officer on boards of directors of other organizations, on committees of such boards, and in similar activities for such organizations shall be subject to annual advance approval by the Board and subject to the provisions of the Corporation’s Statement of Ethical Conduct.

(6) RULE OF CONSTRUCTION.—No officer or employee of the Board or of the Corporation shall be considered to be an officer or employee of the United States Government or of the government of the District of Columbia.

(b) ADVISORY COMMITTEES.—The Board—

(1) shall establish a standing public safety advisory committee to assist the Board in carrying out its duties and responsibilities under this subtitle; and

(2) may establish additional standing or ad hoc committees, panels, or councils as the Board determines are necessary.

(c) SELECTION OF AGENTS, CONSULTANTS, AND EXPERTS.—
(1) IN GENERAL.—The Board shall select parties to serve as its agents, consultants, or experts in a fair, transparent, and objective manner.

(2) BINDING AND FINAL.—If the selection of an agent, consultant, or expert satisfies the requirements under paragraph (1), the selection of that agent, consultant, or expert shall be final and binding.

SEC. 205. NONPROFIT AND NONPOLITICAL NATURE OF THE CORPORATION.

(a) STOCK.—The Corporation shall have no power to issue any shares of stock, or to declare or pay any dividends.

(b) PROFIT.—No part of the income or assets of the Corporation shall inure to the benefit of any director, officer, employee, or any other individual associated with the Corporation, except as salary or reasonable compensation for services.

(c) POLITICS.—The Corporation may not contribute to or otherwise support any political party or candidate for elective public office.

(d) PROHIBITION ON LOBBYING ACTIVITIES.—The Corporation shall not engage in lobbying activities (as defined in section 3(7) of the Lobbying Disclosure Act of 1995 (5 U.S.C. 1602(7))).
SEC. 206. POWERS, DUTIES, AND RESPONSIBILITIES OF THE CORPORATION.

(a) General Powers.—The Corporation shall have the authority to do the following:

(1) To adopt and use a corporate seal.

(2) To have succession until dissolved by an Act of Congress.

(3) To prescribe, through the actions of its Board, bylaws not inconsistent with Federal law and the laws of the District of Columbia, regulating the manner in which the Corporation’s general business may be conducted and the manner in which the privileges granted to the Corporation by law may be exercised.

(4) To exercise, through the actions of its Board, all powers specifically granted by the provisions of this subtitle, and such incidental powers as shall be necessary.

(5) To hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence as the Corporation considers necessary to carry out its responsibilities and duties.

(6) To obtain grants and funds from and make contracts with individuals, private companies, organizations, institutions, and Federal, State, regional, and local agencies.
(7) To accept, hold, administer, and utilize gifts, donations, and bequests of property, both real and personal, for the purposes of aiding or facilitating the work of the Corporation.

(8) To issue notes or bonds to purchasers of such instruments in the private capital markets.

(9) To incur indebtedness to carry out the purposes of this subtitle.

(10) To spend funds under paragraph (6) in a manner authorized by the Board, but only for purposes that will advance or enhance public safety communications consistent with this Act.

(11) To establish reserve accounts with funds that the Corporation may receive from time to time that exceed the amounts required by the Corporation to timely pay its debt service and other obligations.

(12) To expend the funds placed in any reserve accounts established under paragraph (11) (including interest earned on any such amounts) in a manner authorized by the Board, but only for purposes that—

(A) will advance or enhance public safety communications consistent with this Act; or

(B) are otherwise approved by an Act of Congress.
(13) To take such other actions as the Corporation (through its Board) may from time to time determine necessary, appropriate, or advisable to accomplish the purposes of this subtitle.

(b) DUTY AND RESPONSIBILITY TO DEPLOY AND OPERATE A NATIONWIDE PUBLIC SAFETY INTEROPERABLE BROADBAND NETWORK.—

(1) IN GENERAL.—The Corporation shall hold the single public safety wireless license granted under section 201 and take all actions necessary to ensure the building, deployment, and operation of a nationwide public safety interoperable broadband network in consultation with Federal, State, tribal, and local public safety entities, the Director of NIST, the Commission, and the public safety advisory committee established in section 204(b)(1), including by, at a minimum—

(A) ensuring nationwide standards for use and access of the network;

(B) issuing open, transparent, and competitive requests for proposals to private sector entities for the purposes of building, operating, and maintaining the network;

(C) encouraging that such requests leverage, to the maximum extent economically desirable,
existing commercial wireless infrastructure to
speed deployment of the network; and

(D) managing and overseeing the imple-
mentation and execution of contracts or agree-
ments with non-Federal entities to build, oper-
ate, and maintain the network.

(2) INTEROPERABILITY.—In carrying out the du-
ties and responsibilities of this subsection, including
issuing requests for proposals, the Corporation shall—

(A) ensure the safety, security, and resil-
iency of the network, including requirements for
protecting and monitoring the network to protect
against cyberattack;

(B) promote competition in the equipment
market, including devices for public safety com-
munications, by requiring that equipment for
use on the network be—

(i) built to open, non-proprietary, com-
mercially available standards;

(ii) capable of being used by any pub-
lic safety entity and by multiple vendors
across all public safety broadband networks
operating in the 700 MHz band; and

(iii) backward-compatible with exist-
ing second and third generation commercial
networks to the extent that such capabilities are necessary and technically and economically reasonable; and

(C) promote integration of the network with public safety answering points or their equivalent.

(3) RURAL COVERAGE.—In carrying out the duties and responsibilities of this subsection, including issuing requests for proposals, the Corporation, consistent with the license granted under section 201, shall require deployment phases with substantial rural coverage milestones as part of each phase of the construction and deployment of the network. To the maximum extent economically desirable, such proposals shall include partnerships with existing commercial mobile providers to utilize cost-effective opportunities to speed deployment in rural areas.

(4) EXECUTION OF AUTHORITY.—In carrying out the duties and responsibilities of this subsection, the Corporation may—

(A) obtain grants from and make contracts with individuals, private companies, and Federal, State, regional, and local agencies;

(B) hire or accept voluntary services of consultants, experts, advisory boards, and panels to
aid the Corporation in carrying out such duties and responsibilities;

(C) receive payment for use of—

(i) network capacity licensed to the Corporation; and

(ii) network infrastructure constructed, owned, or operated by the Corporation; and

(D) take such other actions as may be necessary to accomplish the purposes set forth in this subsection.

(c) Other Specific Duties and Responsibilities.—

(1) Establishment of Network Policies.—

In carrying out the requirements under subsection (b), the Corporation shall develop—

(A) requests for proposals with appropriate—

(i) timetables for construction, including by taking into consideration the time needed to build out to rural areas and the advantages offered through partnerships with existing commercial providers under paragraph (3);

(ii) coverage areas, including coverage in rural and nonurban areas;
(iii) service levels;

(iv) performance criteria; and

(v) other similar matters for the construction and deployment of such network;

(B) the technical and operational requirements of the network;

(C) practices, procedures, and standards for the management and operation of such network;

(D) terms of service for the use of such network, including billing practices; and

(E) ongoing compliance review and monitoring of the—

(i) management and operation of such network;

(ii) practices and procedures of the entities operating on and the personnel using such network; and

(iii) necessary training needs of network operators and users.

(2) STATE AND LOCAL PLANNING.—

(A) REQUIRED CONSULTATION.—In developing requests for proposals and otherwise carrying out its responsibilities under this Act, the Corporation shall consult with regional, State, tribal, and local jurisdictions regarding the dis-
tribution and expenditure of any amounts required to carry out the policies established under paragraph (1), including with regard to the—

(i) construction of an Evolved Packet Core and any Radio Access Network build out;

(ii) placement of towers;

(iii) coverage areas of the network, whether at the regional, State, tribal, or local level;

(iv) adequacy of hardening, security, reliability, and resiliency requirements;

(v) assignment of priority to local users;

(vi) assignment of priority and selection of entities seeking access to or use of the nationwide public safety interoperable broadband network established under subsection (b); and

(vii) training needs of local users.

(B) METHOD OF CONSULTATION.—The consultation required under subparagraph (A) shall occur between the Corporation and the single officer or governmental body designated under section 222(d).
(3) LEVERAGING EXISTING INFRASTRUCTURE.—

In carrying out the requirement under subsection (b), the Corporation shall enter into agreements to utilize, to the maximum extent economically desirable, existing—

(A) commercial or other communications infrastructure; and

(B) Federal, State, tribal, or local infrastructure.

(4) MAINTENANCE AND UPGRADES.—The Corporation shall ensure the maintenance, operation, and improvement of the nationwide public safety interoperable broadband network established under subsection (b), including by ensuring that the Corporation updates and revises any policies established under paragraph (1) to take into account new and evolving technologies.

(5) ROAMING AGREEMENTS.—The Corporation shall negotiate and enter into, as it determines appropriate, roaming agreements with commercial network providers to allow the nationwide public safety interoperable broadband network to roam onto commercial networks and gain prioritization of public safety communications over such networks in times of an emergency.
(6) **Network Infrastructure and Device Criteria.**—The Director of NIST, in consultation with the Corporation and the Commission, shall ensure the development of a list of certified devices and components meeting appropriate protocols and standards for public safety entities and commercial vendors to adhere to, if such entities or vendors seek to have access to, use of, or compatibility with the nationwide public safety interoperable broadband network established under subsection (b).

(7) **Representation Before Standard Setting Entities.**—The Director of NIST, in consultation with the Corporation, the Commission, and the public safety advisory committee established under section 204(b)(1), shall represent the interests of public safety users of the nationwide public safety interoperable broadband network established under subsection (b) before any proceeding, negotiation, or other matter in which a standards organization, standards body, standards development organization, or any other recognized standards-setting entity regarding the development of standards relating to interoperability.

(8) **Prohibition on Negotiation with Foreign Governments.**—The Corporation shall not have
the authority to negotiate or enter into any agree-
ments with a foreign government on behalf of the
United States.

(d) USE OF MAILS.—The Corporation may use the
United States mails in the same manner and under the
same conditions as the departments and agencies of the
United States.

SEC. 207. INITIAL FUNDING FOR THE CORPORATION.

(a) NTIA LOANS TO THE CORPORATION.—

(1) IN GENERAL.—Prior to the commencement of
incentive auctions to be carried out under section
309(j)(8)(F) of the Communications Act of 1934 or
the auction of spectrum pursuant to section 302, the
NTIA is authorized to make loans to the Corporation.

(2) CONDITION OF LOANS.—At the time of appli-
cation for, and as a condition to, any such loan, the
Corporation shall file with the NTIA a statement
with respect to the anticipated use of the proceeds of
the loan.

(3) NTIA APPROVAL.—If the NTIA determines
that such loan is necessary for the Corporation to
carry out its duties and responsibilities under this
subtitle and that the Corporation has submitted a
plan which provides as reasonable an assurance of
prompt repayment as may be feasible under the cir-
cumstances, then the NTIA shall so certify to the Sec-
retary of the Treasury, and issue notes or other obli-
gations to the Secretary of the Treasury pursuant to
subsection (b).

(b) **NTIA Notes Issued to Treasury.**—

(1) **In general.**—To enable the NTIA to make
loans under subsection (a), the NTIA is authorized to
issue to the Secretary of the Treasury notes or other
obligations, in such forms and denominations, bear-
ing such maturities, and subject to such terms and
conditions, as may be prescribed by the Secretary of
the Treasury.

(2) **Interest on notes.**—

(A) **Establishment.**—Any notes or other
obligations issued pursuant to paragraph (1)
shall bear interest at a rate determined by the
Secretary of the Treasury, taking into consid-
eration the current average market yield on out-
standing marketable obligations of the United
States of comparable maturities during the
month preceding the issuance of the notes or
other obligations.

(B) **Reduction.**—The Secretary of the
Treasury may reduce the interest rate set forth
under subparagraph (A) if he determines such reduction to be in the national interest.

(3) AUTHORITY OF THE TREASURY TO SELL NOTES.—The Secretary of the Treasury may at any time sell any of the notes or other obligations acquired by him under this subsection. All redemptions, purchases, and sales by the Secretary of the Treasury of such notes or other obligations shall be treated as public debt transactions of the United States.

SEC. 208. PERMANENT SELF-FUNDING; DUTY TO ASSESS AND COLLECT FEES FOR NETWORK USE.

(a) IN GENERAL.—The Corporation is authorized to assess and collect the following fees:

(1) NETWORK USER FEE.—A user or subscription fee from each entity, including any public safety entity or secondary user, that seeks access to or use of the nationwide public safety interoperable broadband network established under this subtitle.

(2) LEASE FEES RELATED TO NETWORK CAPACITY.—

(A) IN GENERAL.—A fee from any entity that seeks to enter into a covered leasing agreement.

(B) COVERED LEASING AGREEMENT.—For purposes of subparagraph (A), a “covered leasing
“agreement” means a written agreement between the Corporation and secondary user to permit—

(i) access to network capacity on a secondary basis for non-public safety services; and

(ii) the spectrum allocated to such entity to be used for commercial transmissions along the dark fiber of the long-haul network of such entity.

(3) LEASE FEES RELATED TO NETWORK EQUIPMENT AND INFRASTRUCTURE.—A fee from any entity that seeks access to or use of any equipment or infrastructure, including antennas or towers, constructed or otherwise owned by the Corporation.

(b) ESTABLISHMENT OF FEE AMOUNTS; PERMANENT SELF-FUNDING.—The total amount of the fees assessed for each fiscal year pursuant to this section shall be sufficient, and shall not exceed the amount necessary, to recoup the total expenses of the Corporation in carrying out its duties and responsibilities described under this subtitle for the fiscal year involved.

(c) REQUIRED REINVESTMENT OF FUNDS.—The Corporation shall reinvest amounts received from the assessment of fees under this section in the nationwide public safety interoperable broadband network by using such funds
only for constructing, maintaining, or improving the net-
work.

SEC. 209. AUDIT AND REPORT.

(a) AUDIT.—

(1) IN GENERAL.—The financial transactions of
the Corporation for any fiscal year during which
Federal funds are available to finance any portion of
its operations shall be audited by the Comptroller
General of the United States annually in accordance
with the principles and procedures applicable to com-
mercial corporate transactions and under such rules
and regulations as may be prescribed by the Com-
troller General. Each audit conducted by the Com-
troller General under this paragraph shall be made
available to Congress.

(2) LOCATION.—Any audit conducted under
paragraph (1) shall be conducted at the place or
places where accounts of the Corporation are nor-
mally kept.

(3) ACCESS TO CORPORATION BOOKS AND DOCU-
MENTS.—

(A) IN GENERAL.—For purposes of an audit
conducted under paragraph (1), the representa-
tives of the Comptroller General shall—
(i) have access to all books, accounts, records, reports, files, and all other papers, things, or property belonging to or in use by the Corporation that pertain to the financial transactions of the Corporation and are necessary to facilitate the audit; and

(ii) be afforded full facilities for verifying transactions with the balances or securities held by depositories, fiscal agents, and custodians.

(B) REQUIREMENT.—All books, accounts, records, reports, files, papers, and property of the Corporation shall remain in the possession and custody of the Corporation.

(b) REPORT.—

(1) IN GENERAL.—The Comptroller General of the United States shall submit a report of each audit conducted under subsection (a) to—

(A) the appropriate committees of Congress;

(B) the President; and

(C) the Corporation.

(2) CONTENTS.—Each report submitted under paragraph (1) shall contain—

(A) such comments and information as the Comptroller General determines necessary to in-
form Congress of the financial operations and condition of the Corporation;

(B) any recommendations of the Comptroller General relating to the financial operations and condition of the Corporation; and

(C) a description of any program, expenditure, or other financial transaction or undertaking of the Corporation that was observed during the course of the audit, which, in the opinion of the Comptroller General, has been carried on or made without the authority of law.

SEC. 210. ANNUAL REPORT TO CONGRESS.

(a) In General.—Not later than 1 year after the date of enactment of this Act, and each year thereafter, the Corporation shall submit an annual report covering the preceding fiscal year to the appropriate committees of Congress.

(b) Required Content.—The report required under subsection (a) shall include—

(1) a comprehensive and detailed report of the operations, activities, financial condition, and accomplishments of the Corporation under this section; and

(2) such recommendations or proposals for legislative or administrative action as the Corporation deems appropriate.
(c) Availability to Testify.—The directors, officers, employees, and agents of the Corporation shall be available to testify before the appropriate committees of the Congress with respect to—

(1) the report required under subsection (a);
(2) the report of any audit made by the Comptroller General under section 209; or
(3) any other matter which such committees may determine appropriate.

SEC. 211. PUBLIC SAFETY ROAMING AND PRIORITY ACCESS.

The Commission may adopt rules, if necessary in the public interest, to improve the ability of public safety networks to roam onto commercial networks and to gain priority access to commercial networks in an emergency if—

(1) the public safety entity equipment is technically compatible with the commercial network;
(2) the commercial network is reasonably compensated; and
(3) such access does not preempt or otherwise terminate or degrade all existing voice conversations or data sessions.

SEC. 212. TRANSITIONAL ANALYSIS OF PUBLIC SAFETY NETWORK ATTRIBUTES.

(a) Establishment of Evaluation Framework.—

Not later than 180 days after the date of enactment of this
Act, the Director of NIST, in consultation with the Secretary of Homeland Security, the Attorney General, and the Director of the Office of Management and Budget, shall develop an evaluation framework. The development of such an evaluation framework shall be informed by a study commissioned by the Director of NIST and completed by an independent and neutral agent, consultant, or expert, who has—

(1) at least 5 years of technical and economic experience in analyzing the costs and effectiveness of communications networks; and

(2) agreed not to contract or subcontract with the Corporation for at least 3 years from the date such study is completed other than for follow-on and related studies.

(b) CONSIDERATIONS.—The evaluation framework required to be developed under subsection (a) shall take into consideration the public safety network attributes identified in a report completed by the Visiting Committee on Advanced Technology of NIST. The report required under this subsection shall identify the desired attributes of the nationwide public safety interoperable broadband network to be established under this title, as well as any other attributes the Secretary of Commerce may request.
(c) REQUIRED EVALUATIONS.—The evaluation framework required to be developed under subsection (a) shall evaluate—

(1) the marginal cost of each public safety network attribute in developing, deploying, and operating the nationwide public safety interoperable broadband network to be established under this title;

(2) the benefit of each public safety network attribute to the nationwide public safety interoperable broadband network;

(3) the economic feasibility of requiring that each public safety attribute be required as part of the nationwide public safety interoperable broadband network;

(4) the resulting competitive vendor supply ecosystem created by each public safety attribute that is a part of the nationwide public safety interoperable broadband network; and

(5) the level of variability in regional requirements for each public safety attribute that is a part of the nationwide public safety interoperable broadband network.

(d) PROVISION OF FRAMEWORK TO THE CORPORATION.—The evaluation framework required to be developed under subsection (a) shall be provided to the Board of Direc-
tors of the Corporation, and the Corporation shall utilize
the findings of such framework to develop a cost-benefit
analysis to inform the building, deployment, and operation
of the nationwide public safety interoperable broadband
network to be established under this title.

(e) OMB Responsibility.—The Director of the Office
of Management and Budget, or his designee, as a member
of the Board of Directors of the Corporation, shall have the
responsibility to ensure that evaluation framework required
to be developed under subsection (a) is appropriately uti-
lized by the Corporation.

SEC. 213. PROHIBITION ON DIRECT OFFERING OF COMMERCIAL TELECOMMUNICATIONS SERVICE DI-
RECTLY TO CONSUMERS.

(a) In General.—The Corporation shall not offer,
provide, or market commercial telecommunications or in-
formation services directly to consumers.

(b) Rule of Construction.—Nothing in this section
shall be construed to prohibit the Corporation and a sec-
ondary user from entering into a covered leasing agreement
pursuant to section 208(a)(2)(B). Nothing in this section
shall be construed to limit the Corporation from collecting
lease fees related to network equipment and infrastructure
pursuant to section 208(a)(3).
SEC. 214. PROVISION OF TECHNICAL ASSISTANCE.

The Commission may provide technical assistance to the Corporation and may take any action necessary to assist the Corporation in effectuating its duties and responsibilities under this subtitle.

Subtitle B—Public Safety

Commitments

SEC. 221. STATE AND LOCAL IMPLEMENTATION FUND.

(a) Establishment.—There is established in the Treasury of the United States a fund to be known as the “State and Local Implementation Fund”.

(b) Purpose.—The Assistant Secretary shall establish and administer the grant program under section 222 using the funds deposited in the State and Local Implementation Fund.

(c) Crediting of Receipts.—There shall be deposited into or credited to the State and Local Implementation Fund—

(1) any amounts specified in section 401; and

(2) any amounts borrowed by the Assistant Secretary under subsection (d).

(d) Borrowing Authority.—

(1) In general.—The Assistant Secretary may borrow from the general fund of the Treasury beginning on October 1, 2011, such sums as may be nec-
essary, but not to exceed $250,000,000, to implement
section 222.

(2) Reimbursement.—The Assistant Secretary
shall reimburse the general fund of the Treasury,
without interest, for any amounts borrowed under
subparagraph (A) as funds are deposited into the
State and Local Implementation Fund.

SEC. 222. STATE AND LOCAL IMPLEMENTATION.

(a) Establishment of State and Local Imple-
mentation Grant Program.—The Assistant Secretary, in
consultation with the Corporation, shall take such action
as is necessary to establish a grant program to make grants
to States to assist State, regional, tribal, and local jurisdic-
tions to identify, plan, and implement the most efficient
and effective way for such jurisdictions to utilize and inte-
grate the infrastructure, equipment, and other architecture
associated with the nationwide public safety interoperable
broadband network established under subtitle A to satisfy
the wireless communications and data services needs of that
jurisdiction, including with regards to coverage, siting, and
other needs.

(b) Matching Requirements; Federal Share.—

(1) In general.—The Federal share of the cost
of any activity carried out using a grant under this
section may not exceed 80 percent of the eligible costs
of carrying out that activity, as determined by the Assistant Secretary, in consultation with the Corporation.

(2) WAIVER.—The Assistant Secretary may waive, in whole or in part, the requirements of paragraph (1) for good cause shown if the Assistant Secretary determines that such a waiver is in the public interest.

(c) PROGRAMMATIC REQUIREMENTS.—Not later than 6 months after the establishment of the bylaws of the Corporation pursuant to section 206, the Assistant Secretary, in consultation with the Corporation, shall establish requirements relating to the grant program to be carried out under this section, including the following:

(1) Defining eligible costs for purposes of subsection (b)(1).

(2) Determining the scope of eligible activities for grant funding under this section.

(3) Prioritizing grants for activities that ensure coverage in rural as well as urban areas.

(d) CERTIFICATION AND DESIGNATION OF OFFICER OR GOVERNMENTAL BODY.—In carrying out the grant program established under this section, the Assistant Secretary shall require each State to certify in its application for grant funds that the State has designated a single officer
or governmental body to serve as the coordinator of implementa-
tion of the grant funds.

SEC. 223. PUBLIC SAFETY WIRELESS COMMUNICATIONS RE-
SEARCH AND DEVELOPMENT.

(a) NIST DIRECTED RESEARCH AND DEVELOPMENT
PROGRAM.—From amounts made available from the Public
Safety Trust Fund established under section 401, the Direc-
tor of NIST, in consultation with the Commission, the Sec-
retary of Homeland Security, and the National Institute
of Justice of the Department of Justice, as appropriate,
shall conduct research and assist with the development of
standards, technologies, and applications to advance wire-
less public safety communications.

(b) REQUIRED ACTIVITIES.—In carrying out the re-
quirement under subsection (a), the Director of NIST, in
consultation with the Corporation and the public safety ad-
visory committee established under section 204(b)(1),
shall—

(1) document public safety wireless communica-
tions technical requirements;

(2) accelerate the development of the capability
for communications between currently deployed public
safety narrowband systems and the nationwide public
safety interoperable broadband network to be estab-
lished under this title;
(3) establish a research plan, and direct research, that addresses the wireless communications needs of public safety entities beyond what can be provided by the current generation of broadband technology;

(4) accelerate the development of mission critical voice, including device-to-device “talkaround” capability over broadband networks, public safety prioritization, authentication capabilities, and standard application programing interfaces for the nationwide public safety interoperable broadband network to be established under this title, if necessary and practical;

(5) accelerate the development of communications technology and equipment that can facilitate the eventual migration of public safety narrowband communications to the nationwide public safety interoperable broadband network to be established under this title; and

(6) convene working groups of relevant government and commercial parties to achieve the requirements in paragraphs (1) through (5).

SEC. 224. ADVANCED INFORMATION AND COMMUNICATIONS TECHNOLOGY RESEARCH.

(a) TELECOMMUNICATIONS INNOVATION ACCELERATION.—
(1) IN GENERAL.—In order to accelerate the pace of innovation with respect to advanced telecommunications capability (as such term is defined in section 706(c)(1) of the Telecommunications Act of 1996 (47 U.S.C. 1302), the Director of NIST and the Director of the National Science Foundation shall expand existing programs to support and promote innovation in the United States through transformative telecommunications research.

(2) COMPETITIONS.—The Director of NIST and the Director of the National Science Foundation shall, on an annual basis, jointly solicit proposals to address areas of national need for transformative telecommunications research, as such areas are identified by each of the Directors.

(3) TRANSFORMATIVE TELECOMMUNICATIONS RESEARCH DEFINED.—In this section, the term “transformative telecommunications research” means basic research with respect to telecommunications, as that term is defined in section 3(43) of the Communications Act of 1934 (47 U.S.C. 153(43)) that involves ideas, discoveries, or tools that —

(A) radically change understanding of an important existing scientific or engineering concept or educational practice; or
(B) leads to the creation of a new paradigm or field of science, engineering, or education related to telecommunications.

(b) ADVANCED COMMUNICATIONS SERVICES FOR ALL AMERICANS.—The Director of NIST shall continue to support research and support standards development in advanced information and communications technologies focused on enhancing or facilitating the availability and affordability of advanced communications services to all Americans, in order to implement the Institute’s responsibilities under section 2(c)(12) of the National Institute of Standards and Technology Act (15 U.S.C. 272(c)(12)). The Director of NIST shall support intramural research and cooperative research with institutions of higher education (as defined in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a))) and industry.

(c) EMERGING WIRELESS TECHNOLOGY RESEARCH.—

(1) IN GENERAL.—From amounts made available from the Public Safety Trust Fund established under section 401, the Director of the National Science Foundation shall expand existing grant programs to include transformative telecommunications research relevant to emerging wireless technologies that may enhance advanced communications services or make such services more affordable for consumers.
Areas of research to be supported through these grants may include—

(A) opportunistic spectrum sharing;
(B) wireless cyberphysical systems;
(C) more efficient use of the wireless spectrum;
(D) dynamic spectrum access, including cognitive radio technologies;
(E) interference mitigation;
(F) emerging user interface and sensing technologies;
(G) wireless ad hoc networks;
(H) network resiliency and cybersecurity;
(I) communications interoperability, particularly between heterogeneous network technologies;
(J) pervasive information technology;
(K) nanoelectronics for communications applications;
(L) low-power communications electronics;
(M) networking protocols and architectures;
and
(N) such other related areas as the Director finds appropriate.
(2) APPLICATIONS.—The Director of the National Science Foundation shall establish criteria for the award of grants under paragraph (1). Grants awarded under paragraph (1) shall be awarded on a merit-reviewed competitive basis. The Director of the National Science Foundation shall give priority to grants that offer the potential for transformative breakthroughs.

(3) LIMITATION ON USE.—Not more than 5 percent of any amounts made available in a fiscal year from the Public Safety Trust Fund established under section 401 may be used by the Director of the National Science Foundation to cover the administrative expenses incurred in carrying out this subsection.

(d) DARPA RESEARCH.—

(1) IN GENERAL.—From amounts made available from the Public Safety Trust Fund established under section 401, the Defense Advanced Research Projects Agency (referred to in this subsection as “DARPA”) shall conduct wireless communications research to develop more secure, reliable, and flexible radio-frequency systems for Federal wireless users. Areas of research to be supported by this subsection include, but are not limited to—
(A) technologies to increase wireless data transmission speeds to enable the next generation of Federal networks;

(B) spectrum sharing and interference mitigation techniques to enable more efficient uses of wireless spectrum;

(C) technologies to allow and foster the reallocation of spectrum, if appropriate, for non-Federal use; and

(D) research that fosters the conversion of the Department of Defense’s wireless communications systems, and those of other Federal users, to more advanced or more efficient systems.

(2) COOPERATION.—In carrying out this subsection, DARPA shall collaborate where appropriate with NTIA, NIST, NSF, and other interested Federal agencies.

(3) LIMITATION ON USE.—Not more than 5 percent of any amounts made available in a fiscal year from the Public Safety Trust Fund established under section 401 may be used by DARPA to cover the administrative expenses incurred in carrying out this subsection.

(4) OMB REVIEW.—Amounts appropriated to DARPA under this subsection shall be available upon
approval by the Director of the Office of Management
and Budget of an implementation plan that has been
developed and submitted to the Director by the head
of DARPA.

TITLE III—SPECTRUM AUCTION

AUTHORITY

SEC. 301. EXTENSION OF AUCTION AUTHORITY.

Section 309(j)(11) of the Communications Act of 1934
(47 U.S.C. 309(j)(11)) is amended by striking “2012” and
inserting “2021”.

SEC. 302. AUCTION OF SPECTRUM.

(a) IDENTIFICATION OF SPECTRUM.—Not later than 1
year after the date of enactment of this Act, the Assistant
Secretary shall identify and make available for immediate
reallocation, at a minimum, 15 megahertz of contiguous
spectrum at frequencies located between 1675 megahertz and
1710 megahertz, inclusive, minus the geographic exclusion
zones, or any amendment thereof, identified in NTIA’s Oc-
tober 2010 report entitled “An Assessment of Near-Term Vi-
ability of Accommodating Wireless Broadband Systems in
1675–1710 MHz, 1755–1780 MHz, 3500–3650 MHz, and
4200–4220 MHz, 4380–4400 MHz Bands”.

(b) AUCTION.—Not later than January 31, 2014, the
Commission shall conduct the auctions of the following li-
censes, by commencing the bidding for:
(1) The spectrum between the frequencies of 1915 megahertz and 1920 megahertz, inclusive.

(2) The spectrum between the frequencies of 1995 megahertz and 2000 megahertz, inclusive.

(3) The spectrum between the frequencies of 2020 megahertz and 2025 megahertz, inclusive.

(4) The spectrum between the frequencies of 2155 megahertz and 2175 megahertz, inclusive.

(5) The spectrum between the frequencies of 2175 megahertz and 2180 megahertz, inclusive.

(6) The spectrum between the frequencies of 1755 megahertz and 1780 megahertz, inclusive.

(7) The spectrum identified pursuant to subsection (a).

(c) AUCTION ORGANIZATION.—The Commission may, if technically feasible and consistent with the public interest, combine the spectrum identified in paragraphs (4), (5), and the portion of paragraph (6) between the frequencies of 1755 megahertz and 1780 megahertz, inclusive, of subsection (b) in an auction of licenses for paired spectrum blocks.

(d) FURTHER REALLOCATION OF CERTAIN OTHER SPECTRUM.—

(1) COVERED SPECTRUM.—For purposes of this subsection, the term “covered spectrum” means the
portion of the electromagnetic spectrum between the
frequencies of 3550 to 3650 megahertz, inclusive,
minus the geographic exclusion zones, or any amend-
ment thereof, identified in NTIA’s October 2010 re-
port entitled “An Assessment of Near-Term Viability
of Accommodating Wireless Broadband Systems in
1675–1710 MHz, 1755–1780 MHz, 3550–3650 MHz,
and 4200–4220 MHz, 4380–4400 MHz Bands”.

(2) IN GENERAL.—Consistent with requirements
of section 309(j) of the Communications Act of 1934,
the Commission shall reallocate covered spectrum for
assignment by competitive bidding unless the Presi-
dent of the United States determines that—

(A) such spectrum cannot be reallocated due
to the need to protect incumbent Federal systems
from interference; or

(B) allocation of other spectrum—

(i) better serves the public interest, con-
venience, and necessity; and

(ii) can reasonably be expected to
produce receipts comparable to what the
covered spectrum might auction for without
the geographic exclusion zones.

(3) ACTIONS REQUIRED IF COVERED SPECTRUM
CANNOT BE REALLOCATED.—
(A) IN GENERAL.—If the President makes a determination under paragraph (2) that the covered spectrum cannot be reallocated, then the President shall, within 1 year after the date of such determination—

(i) identify alternative bands of frequencies totaling more than 20 megahertz and no more than 100 megahertz of spectrum used primarily by Federal agencies that satisfy the requirements of clauses (i) and (ii) of paragraph (2)(B);

(ii) report to the appropriate committees of Congress and the Commission an identification of such alternative spectrum for assignment by competitive bidding; and

(iii) make such alternative spectrum for assignment immediately available for reallocation.

(B) AUCTION.—If the President makes a determination under paragraph (2) that the covered spectrum cannot be reallocated, the Commission shall commence the bidding of the alternative spectrum identified pursuant to subparagraph (A) within 3 years of the date of enactment of this Act.
(4) Actions required if covered spectrum can be reallocated.—If the President does not make a determination under paragraph (1) that the covered spectrum cannot be reallocated, the Commission shall commence the competitive bidding for the covered spectrum within 3 years of the date of enactment of this Act.

(e) Proceeds.—Notwithstanding section 309(j)(8)(A) of the Communications Act of 1934, and except as provided in subparagraphs (B), (C), and (D) of such section, all proceeds (including deposits and up front payments from successful bidders) from the auctions to be carried out pursuant to subsections (b) and (d) shall be deposited with the Public Safety Trust Fund established under section 401.

(f) Amendments to design requirements related to competitive bidding.—Section 309(j) of the Communications Act of 1934 (47 U.S.C. 309(j)) is amended—

(1) in paragraph (3)—

(A) in subparagraph (E)(ii), by striking “; and” and inserting a semicolon;

(B) in subparagraph (F), by striking the period at the end and inserting a semicolon; and

(C) by adding at the end the following:
“(G) ensuring that there is an adequate opportunity for applicants to obtain licenses covering both large and small geographic areas, as such areas are determined by the Commission;”;

and

(2) by amending clause (i) of the second sentence of paragraph (8)(C) to read as follows:

“(i) the deposits—

“(I) of successful bidders of any auction conducted pursuant to subparagraph (F) or to section 302 of the Public Safety Spectrum and Wireless Innovation Act shall be paid to the Public Safety Trust Fund established under section 401 of such Act; and

“(II) of successful bidders of any other auction shall be paid to the Treasury;”.

SEC. 303. INCENTIVE AUCTION AUTHORITY.

(a) IN GENERAL.—Paragraph (8) of section 309(j) of the Communications Act of 1934 (47 U.S.C. 309(j)) is amended—

(1) in subparagraph (A), by striking “(B), (D), and (E),” and inserting “(B), (D), (E), and (F),”;

and
(2) by adding at the end the following:

“(F) INCENTIVE AUCTION AUTHORITY.—

“(i) AUTHORITY.—Notwithstanding any other provision of law, if the Commission determines that it is consistent with the public interest in utilization of the spectrum for a licensee to relinquish voluntarily some or all of its licensed spectrum usage rights in order to permit the assignment of new initial licenses through a competitive bidding process subject to new service rules, or the designation of new spectrum for unlicensed use, the Commission may disburse to that licensee a portion of any auction proceeds that the Commission determines, in its discretion, are attributable to the licensee’s relinquished spectrum usage rights, provided that television broadcast stations required to be carried pursuant to sections 338, 614, or 615 that voluntarily elect to share a channel shall retain the rights to carriage set forth in such sections and the rules of the Commission, as such rights apply to such station at its shared location.

“(ii) PROHIBITION.—
“(I) IN GENERAL.—The Commission may not reclaim spectrum licensed on a primary basis to a television broadcast station, directly or indirectly, on an involuntary basis for purposes of providing spectrum to carry out an incentive auction under this subparagraph.

“(II) EXCEPTION.—The Commission may reclaim spectrum licensed to a television broadcast station licensee for the purposes of providing spectrum to carry out an incentive auction under this subparagraph, only if the Commission assigns an identical amount of contiguous spectrum, located between channels 14 and 50, in the same geographic market, if the spectrum was reclaimed from between channels 14 and 51, or located between channels 2 and 13, inclusive, in the same geographic market, to the television broadcast station licensee if the spectrum was reclaimed from between channels 2 and 13, provided that—
“(aa) the Commission may not involuntarily co-locate multiple television broadcast station licensees on the same channel; and

“(bb) television broadcast stations required to be carried pursuant to sections 338, 614, or 615 that voluntarily elect to share a channel shall retain the rights to carriage set forth in such sections and the rules of the Commission, as such rights apply to such station at its shared location.

“(III) REPACKING.—When assigning spectrum to television broadcast station licensees pursuant to subclause (II), if the Commission determines that it is in the public interest to modify the spectrum usage rights of any incumbent licensee in order to facilitate the assignment of such new initial licenses subject to new service rules, or the designation of spectrum for an unlicensed use, the Commission may disburse to such licensee a portion of the
auction proceeds for the purpose of re-
locating to any alternative frequency
or location that the Commission may
designate, and the Commission shall,
to the extent technically feasible and in
the public interest, make reasonable ef-
forts to—

“(aa) preserve the amount of
population covered by a licensee’s
signal within the licensee’s service
area;

“(bb) avoid any involuntary
increase in interference to the li-
censee’s signal that may otherwise
result from new spectrum assign-
ments;

“(cc) allow licensees assigned
to broadcast channels 2 through 6
to relocate to channels in the
UHF range, if possible and con-
sistent with the goals of the incen-
tive auction, as determined by the
Commission; and

“(dd) allow low power tele-
vision broadcast licensees assigned
to channels in the UHF range that are impacted by relocation of other licensees pursuant to this subclause to relocate to channels in the VHF range.

“(IV) UNLICENSED SPECTRUM.—

With respect to frequency bands between 54 and 72 MHz, 76 and 88 MHz, 174 and 216 MHz, 470 and 698 MHz, 84 MHz shall be assigned via a competitive bidding process. A portion of the proceeds from the competitive bidding of the frequency bands identified in the prior sentence may, if consistent with the public interest, be disbursed to other licensees, for the purpose of ensuring that unlicensed spectrum remains available in these frequency bands, nationwide, and in each local market.

“(iii) TREATMENT OF REVENUES.—

Notwithstanding subparagraph (A), and except as provided in subparagraphs (B), (C), and (D), all proceeds (including deposits and up front payments from successful bid-
ders) from the auction of spectrum under this subparagraph shall be deposited with the Public Safety Trust Fund established under section 401 of the Public Safety Spectrum and Wireless Innovation Act.

“(G) Establishment of Incentive Auction Relocation Fund.—

“(i) In general.—There is established in the Treasury of the United States a fund to be known as the ‘Incentive Auction Relocation Fund’.

“(ii) Administration.—The Assistant Secretary shall administer the Incentive Auction Relocation Fund using the amounts deposited pursuant to this section.

“(iii) Crediting of receipts.—There shall be deposited into or credited to the Incentive Auction Relocation Fund any amounts specified in section 401 of the Public Safety Spectrum and Wireless Innovation Act.

“(iv) Availability.—Amounts in the Incentive Auction Relocation Fund shall be available to the NTIA for use—
“(I) for a period not to exceed 18 months following the later of—

“(aa) the completion of incentive auction from which such amounts were derived; or

“(bb) the date on which the Commission issues all the new channel assignments pursuant to any repacking required under subparagraph (F)(ii); and

“(II) without further appropriation.

“(v) USE OF FUNDS.—Amounts in the Incentive Auction Relocation Fund may only be used by the NTIA, in consultation with the Commission, to cover—

“(I) the reasonable costs of television broadcast stations that are relocated to a different spectrum channel or geographic location following an incentive auction under subparagraph (F), or that are impacted by such relocations, including to cover the cost of new equipment, installation, and construction; and
“(II) the costs incurred by multi-channel video programming distribu-
tors for new equipment, installation, and construction related to the car-
riage of such relocated stations or the carriage of stations that voluntarily
elect to share a channel, but retain their existing rights to carriage pursu-
ant to sections 338, 614, and 615.”.

(b) Incentive Auctions to Repurpose Certain Mobile Satellite Services Spectrum for Terres-
trial Broadband Use.—To the extent that the Commis-
sion makes available spectrum licenses on some or all of
the frequencies between 2000 and 2020 MHz and 2180 and
2200 MHz for terrestrial broadband use, such licenses shall
be assigned pursuant to the authority provided in section
309(j)(8) of the Communications Act of 1934 (47 U.S.C.
309(j)(8)), including, as appropriate, subparagraph (F) of
such section.

(c) Sense of Congress.—It is the sense of Congress
that any spectrum identified for auction under this section
should be licensed—

(1) on a flexible use basis to the extent technolo-
logically feasible; and
(2) consistent with the public interest, convenience, and necessity.

SEC. 304. EFFICIENT USE OF PUBLIC SAFETY SPECTRUM.

(a) STUDY AND REPORT.—Not later than 180 days after the date of enactment of this Act and not later than every 2 years thereafter, the Commission shall conduct a study and submit a report to the appropriate committees of Congress and to the Corporation on the spectrum used by public safety licensees or for public safety services pursuant to section 337(f) of the Communications Act of 1934 (47 U.S.C. 337).

(b) REQUIREMENTS.—The report required under subsection (a) shall—

(1) inventory the spectrum assigned to public safety use; and

(2) include—

(A) the amount of spectrum allocated to public safety use;

(B) the number of licensees and amount of spectrum assigned to each licensee;

(C) a general description of technologies and systems in each band;

(D) an approximation of network coverage, as appropriate, of major systems (such as an es-
tion of land mobile radio coverage by population) in major metropolitan areas; and

(E) an approximate number of users of major systems, such as the number of first responders using land mobile radio, in major metro areas;

(3) assess if spectrum is adequate to meet the current and future needs for public safety services; and

(4) assess the opportunity for return of any additional spectrum to the Commission for reallocation.

SEC. 305. REPORT ON SATELLITE BROADBAND.

Not later than 2 years after the date of enactment of this Act, the Comptroller General of the United States shall conduct a study and submit to the appropriate committees of Congress a report on the current and future capabilities of fixed and mobile satellite broadband to assist public safety entities during an emergency.

SEC. 306. FEDERAL INFRASTRUCTURE SHARING.

The Administrator of General Services shall establish rules to allow public safety entities licensed or otherwise permitted to use spectrum allocated to the Public Safety Broadband Corporation to have access to those components of Federal infrastructure appropriate for the construction
and maintenance of the nationwide public safety interoperable broadband network to be established under title II.

SEC. 307. REPORT ON UNLICENSED SPECTRUM.

Not later than 5 years after the date of enactment of this Act, the Commission shall submit to the appropriate committees of Congress a report on—

(1) the status of development of any spectrum designated as unlicensed spectrum by the Commission under this Act; and

(2) the use of any unlicensed spectrum described in paragraph (1).

TITLE IV—PUBLIC SAFETY TRUST FUND

SEC. 401. PUBLIC SAFETY TRUST FUND.

(a) Establishment of Public Safety Trust Fund.—

(1) In general.—There is established in the Treasury of the United States a trust fund to be known as the “Public Safety Trust Fund”.

(2) Crediting of receipts.—

(A) In general.—There shall be deposited into or credited to the Public Safety Trust Fund the proceeds from the auction of spectrum carried out pursuant to—

(i) section 302 of this Act; and
(ii) section 309(j)(8)(F) of the Communications Act of 1934, as added by section 303 of this Act.

(B) AVAILABILITY.—Amounts deposited into or credited to the Public Safety Trust Fund in accordance with subparagraph (A) shall remain available until the end of fiscal year 2021. Upon the expiration of the period described in the prior sentence such amounts shall be deposited in the General Fund of the Treasury, where such amounts shall be dedicated for the sole purpose of deficit reduction.

(b) USE OF FUND.—Amounts deposited in the Public Safety Trust Fund shall be used in the following manner:

(1) PAYMENT OF AUCTION INCENTIVE.—

(A) REQUIRED DISBURSALS.—Amounts in the Public Safety Trust Fund shall be used to make any required disbursal of payments to licensees required pursuant to—

(i) clause (i) and subclauses (III) and (IV) of clause (ii) of section 309(j)(8)(F) of the Communications Act of 1934; and

(ii) section 303(b) of this Act.

(B) NOTIFICATION TO CONGRESS.—
(i) **IN GENERAL.**—At least 3 months in advance of any incentive auction conducted pursuant to subparagraph (F) of section 309(j)(8) of the Communications Act of 1934, the Chairman of the Commission, in consultation with the Director of the Office of Management and Budget, shall notify the appropriate committees of Congress—

(I) of the methodology for calculating the disbursement of payments to certain licensees required pursuant to clause (i) and subclauses (III) and (IV) of clause of (ii) of such section; and

(II) that such methodology considers the value of the spectrum voluntarily relinquished in its current use and the timeliness with which the licensee will clear its use of such spectrum.

(ii) **DEFINITION.**—In this clause, the term “appropriate committees of Congress” means—
(I) the Committee on Commerce, Science, and Transportation of the Senate;

(II) the Committee on Appropriations of the Senate;

(III) the Committee on Energy and Commerce of the House of Representatives; and

(IV) the Committee on Appropriations of the House of Representatives.

(2) Incentive Auction Relocation Fund.—Not less than 5 percent of the amounts in the Public Safety Trust Fund but not more than $1,000,000,000 shall be deposited in the Incentive Auction Relocation Fund established under section 309(j)(8)(G) of the Communications Act of 1934.

(3) State and Local Implementation Fund.—$250,000,000 shall be deposited in the State and Local Implementation Fund established under section 221.

(4) Public Safety Broadband Corporation.—$11,750,000,000 shall deposited with the Public Safety Broadband Corporation established under section 202, of which pursuant to its responsibilities and duties set forth under section 206 to deploy and
operate a nationwide public safety interoperable broadband network—

(A) not less than $10,500,000,000 shall be made available for any Radio Access Network build out; and

(B) not less than $1,250,000,000 shall be made available to develop an Evolved Packet Core.

(5) Public Safety Research and Development.—$100,000,000 per year for each of the fiscal years 2012 through 2016 shall be made available for use by the Director of NIST to carry out the research program established under section 223.

(6) Advanced Information and Technology Research.—$200,000,000 per year for each of the fiscal years 2012 through 2016 shall be made available to carry out the programs established under section 224, of which—

(A) $130,000,000 per year shall be made available to the Director of the National Science Foundation to carry out the grant program established under section 224(c); and

(B) $70,000,000 per year shall be made available to DARPA to carry out the research program established under section 224(d).
(7) DEFICIT REDUCTION.—Any amounts remaining after the deduction of the amounts required under paragraphs (1) through (6) shall be deposited in the General Fund of the Treasury, where such amounts shall be dedicated for the sole purpose of deficit reduction.

(c) INVESTMENT.—Amounts in the Public Safety Trust Fund shall be invested in accordance with section 9702 of title 31, United States Code, and any interest on, and proceeds from, any such investment shall be credited to, and become a part of, the Fund.

TITLE V—SPECTRUM POLICY
Subtitle A—Inventory and Planning

SEC. 501. RADIO SPECTRUM INVENTORY.

(a) SPECTRUM INVENTORY.—Part I of title III of the Communications Act of 1934 (47 U.S.C. 301 et seq.) is amended by adding at the end the following:

“SEC. 342. SPECTRUM INVENTORY.

“(a) RADIO SPECTRUM INVENTORY.—Not later than 180 days after the date of enactment of the Public Safety Spectrum and Wireless Innovation Act, and biennially thereafter, the Commission, in consultation with the NTIA and the Office of Science and Technology Policy, shall carry out the following activities:
“(1) REPORT.—Prepare a report that includes an inventory of each radio spectrum band, from 300 MHz to 3.5 GHz, at a minimum, managed by each such agency. Except as provided in subsection (b), the report shall include—

“(A) the licensee or government user authorized in the band;

“(B) the total spectrum authorized for each licensee or government user (in percentage terms and in sum) in the band;

“(C) the approximate number of transmitters, end-user terminals, or receivers, excluding unintended radiators, that have been deployed or authorized, for each licensee or government user, in the band; and

“(D) if such information is available—

“(i) the type of transmitters, end-user terminals, or receivers, excluding unintended radiators, operating in the band and whether they are space-, air-, or ground-based;

“(ii) the type of transmitters, end-user terminals, or receivers, excluding unintended radiators, authorized to operate in
the band and whether they are space-, air-
, or ground-based;

“(iii) contour maps or other informa-
tion that illustrate the coverage area, re-
ceiver performance, and other parameters
relevant to an assessment of the availability
of spectrum in each band;

“(iv) the approximate geolocation of
base stations or fixed transmitters;

“(v) the approximate extent of use, by
geography, of each band of frequencies, such
as the amount and percentage of time of
use, number of end-users, or other measures
as appropriate to the particular band;

“(vi) the activities, capabilities, func-
tions, or missions supported by the trans-
mitters, end-user terminals, or receivers;
and

“(vii) the types of unlicensed devices
authorized to operate in the band.

“(2) Public access.—Create a centralized por-
tal or website utilizing data from the Commission
and the NTIA to make a centralized inventory of the
bands of each agency available to the public via an
Internet-accessible website.
“(3) Updates.—Make all reasonable efforts to maintain and update the information required under paragraph (2) no less frequently than quarterly to reflect, at a minimum, any transfer or auction of licenses or change in allocation, assignment, or authorization.

“(4) FCC to bear costs.—Notwithstanding any other provision of law, all costs incurred by the Commission and the NTIA in establishing and maintaining the centralized inventory and the centralized portal or website shall be borne exclusively by the Commission.

“(5) Paperwork Reduction Act exemption.—Any forms prescribed by the Commission under this section, and any information-gathering activities of the Commission under this section, shall not be subject to the provisions of sections 3507 or 3512 of title 44, United States Code (44 U.S.C. 3507, 3512).

“(b) National Security; Classified Information.—

“(1) In general.—If the head of a Federal agency determines that disclosure of information required by subsection (a) would be harmful to the national security of the United States, the agency shall—
“(A) notify the NTIA of its determination;

and

“(B) provide to the NTIA—

“(i) the other publicly releasable information required by subsection (a);

“(ii) to the maximum extent practicable, a summary description of the information with respect to which the determination was made; and

“(iii) an annex containing the information with respect to which the determination was made.

“(2) CLASSIFIED INFORMATION.—If the head of a Federal agency determines that any information required by subsection (a) is classified in accordance with Executive Order 13526 of December 29, 2009, or any successor Executive Order establishing or modifying the uniform system for classifying, safeguarding, and declassifying national security information, the agency shall—

“(A) notify the NTIA of its determination;

and

“(B) provide to the NTIA—

“(i) the information required by subsection (a)(1) that is not classified;
“(ii) to the maximum extent practicable, a summary description of the information that is classified; and

“(iii) an annex containing the information that is classified.

“(3) ANNEX RESTRICTION.—The NTIA shall make an annex described in paragraph (1)(B)(iii) or (2)(B)(iii) available to the Commission. Neither the NTIA nor the Commission may make any such annex available to the public pursuant to subsection (a)(2) or to any unauthorized person through any other means.

“(c) PUBLIC SAFETY NONDISCLOSURE.—

“(1) IN GENERAL.—If a licensee of non-Federal spectrum determines that public disclosure of certain information held by that licensee and required to be included in the report under subsection (a) would reveal information for which public disclosure would be detrimental to public safety, or that the licensee is otherwise prohibited by law from disclosing, the licensee may petition the Commission for a partial or total exemption from inclusion on the centralized portal or website under subsection (a)(2) and in the reports required under subsection (d).
“(2) **Burdens.**—A licensee seeking an exemption under this subsection bears the burden of justifying the exemption and shall provide clear and convincing evidence to support the requested exemption.

“(3) **Information Required.**—If the Commission grants an exemption under this subsection, the licensee shall provide to the Commission—

“(A) the publicly releasable information required by subsection (a)(1) for the inventory;

“(B) to the maximum extent practicable, a summary description, suitable for public release, of the information for which public disclosure would be detrimental to public safety or that the licensee is prohibited by law from disclosing; and

“(C) an annex, under appropriate cover, containing the information that the Commission has determined should be withheld from public disclosure.

“(d) **Informing the Congress.**—

“(1) **In General.**—Except as provided in paragraph (3), the NTIA and the Commission shall submit each report required by subsection (a)(1) to the appropriate committees of Congress.

“(2) **Nondisclosure of Annexes.**—Each such report shall be submitted in unclassified form, but
may include 1 or more annexes as provided for by subsections (b)(1)(B)(iii), (b)(2)(B)(iii), and (c)(3)(C). No Congressional committee may make any such annex available to the public or to any unauthorized person.

“(3) CLASSIFIED ANNEXES.—If a report includes a classified annex as provided for by subsection (b)(2)(B)(iii), the NTIA and the Commission shall—

“(A) submit the classified annex only to the appropriate committees of Congress with primary oversight jurisdiction for the user agencies or licensees concerned; and

“(B) provide notice of the submission to the other appropriate committees of Congress.

“(e) DEFINITIONS.—In this section:

“(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term ‘appropriate committees of Congress’ means the Committee on Commerce, Science, and Transportation of the Senate, the Committee on Energy and Commerce of the House of Representatives, and any other congressional committee with primary oversight jurisdiction for the user agencies or licensees concerned.
“(2) NTIA.—The term ‘NTIA’ means the National Telecommunications and Information Administration.”.

(b) Progress Report.—Within 180 days after the date of enactment of this title, the Commission and the NTIA shall provide an update as to the status of the inventory and report required by section 342(a) of the Communications Act of 1934, as added by subsection (a), to the appropriate committees of Congress.

SEC. 502. FEDERAL SPECTRUM PLANNING.

(a) Review of Evaluation Process.—Not later than 6 months after the date of enactment of this title, the Comptroller General of the United States shall—

(1) conduct a review of the processes that Federal entities utilize to evaluate their spectrum needs and manage their spectrum resources;

(2) make recommendations on how to improve such processes; and

(3) submit a written report to the appropriate committees of Congress on the review, analysis, and recommendations made pursuant to paragraphs (1) and (2).

(b) Revision of Evaluation Process.—

(1) In General.—Not later than 1 year after the date of enactment of this title, each Federal entity
shall establish, update, or revise the process used by
such entity to evaluate their proposed spectrum needs,
taking into account any applicable recommendations
made in the report required under subsection (a).

(2) REQUIRED INCLUSIONS.—

(A) ANALYSIS OF OPTIONS.—Each process
described under paragraph (1), whether newly
established or otherwise revised, shall include an
analysis and assessment of—

(i) the options available to a Federal
entity to obtain associated communications
services that are the most spectrum-efficient;
and

(ii) the effective alternatives available
to such entity that will permit the entity to
continue to satisfy the mission requirements
of the entity.

(B) ANALYSIS SUBMITTED TO NTIA.—The
analysis and assessment carried out pursuant to
subparagraph (A) shall be submitted by the Fed-
eral entity to the NTIA at the same time that the
entity seeks certification or recertification, if ap-
plicable, of spectrum support from the NTIA
pursuant to the requirements of the National
Telecommunications and Information Adminis-
(c) **Spectrum Plans of Federal Entities.**—

(1) **In General.**—Not later than 1 year after the date of enactment of this title, and every 2 years thereafter, each Federal entity shall provide an entity-specific strategic spectrum plan to the Assistant Secretary and the Director of the Office of Management and Budget.

(2) **Required Inclusions.**—Each strategic spectrum plan submitted pursuant to paragraph (1) shall include—

(A) the spectrum requirements of the entity;

(B) the planned uses of new technologies or expanded services requiring spectrum over a period of time agreed to by the entity;

(C) suggested spectrum-efficient approaches to meeting the spectrum requirements identified under subparagraph (A); and

(D) progress reports on what the entity is doing to improve its spectrum management.

(d) **National Security; Classified Information.**—

(1) **In General.**—If the head of a Federal entity determines that disclosure of information required by
subsection (c) would be harmful to the national secu-

rity of the United States, the entity shall—

(A) notify the NTIA of its determination;

and

(B) provide to the NTIA—

(i) the other publicly releasable infor-

mation required by subsection (c);

(ii) to the maximum extent prac-

ticable, a summary description of the infor-
mation with respect to which the determina-
tion was made; and

(iii) an annex containing the informa-
tion with respect to which the determina-
tion was made.

(2) CLASSIFIED INFORMATION.—If the head of a

Federal entity determines that any information re-
quired by subsection (c) is classified in accordance

with Executive Order 13526 of December 29, 2009, or

any successor Executive Order establishing or modi-

fying the uniform system for classifying, safe-
guarding, and declassifying national security infor-
mation, the entity shall—

(A) notify the NTIA of its determination;

and

(B) provide to the NTIA—
(i) the information required by subsection (c) that is not classified;
(ii) to the maximum extent practicable, a summary description of the information that is classified; and
(iii) an annex containing the information that is classified.

(3) ANNEX RESTRICTION.—The NTIA shall make an annex described in paragraph (1)(B)(iii) or (2)(B)(iii) available to the Secretary of Commerce and the Director of the Office of Management and Budget. Neither the NTIA, the Secretary of Commerce, nor the Director of the Office of Management and Budget may make any such annex available to the public or to any unauthorized person through any other means.

(e) FEDERAL STRATEGIC SPECTRUM PLAN.—

(1) DEVELOPMENT AND SUBMISSION.—

(A) IN GENERAL.—Not later than 6 months after the receipt of the initial entity-specific strategic spectrum plans required under subsection (c), the Secretary of Commerce shall develop a Federal Strategic Spectrum Plan, in coordination with the Assistant Secretary and the Director of the Office of Management and Budget.
(B) Submission to Congress.—Consistent with the requirements set forth in subsection (d)(3), the Secretary of Commerce shall submit the Federal Strategic Spectrum Plan developed under subparagraph (A) to the appropriate committees of Congress.

(C) Nondisclosure of Annexes.—The Federal Strategic Spectrum Plan required to be submitted under subparagraph (B) shall be submitted in unclassified form, but shall include, if appropriate, 1 or more annexes as provided for by subsections (d)(1)(B)(iii) and (d)(2)(B)(iii). No Congressional committee may make any such annex available to the public or to any unauthorized person.

(D) Classified Annexes.—If the Federal Strategic Spectrum Plan includes a classified annex as provided for by subsection (d)(2)(B)(iii), the Secretary of Commerce shall—

(i) submit the classified annex only to the appropriate committees of Congress with primary oversight jurisdiction for the user entities or licensees concerned; and
(ii) provide notice of the submission to
the other appropriate committees of Con-
gress.

(E) DEFINITION.—In this subsection, the
term “appropriate committees of Congress”
means the Committee on Commerce, Science, and
Transportation of the Senate, the Committee on
Energy and Commerce of the House of Rep-
resentatives, and any other congressional com-
mittee with primary oversight jurisdiction for
the user entity or licensees concerned.

(2) INCORPORATION OF ENTITY PLANS.—The
Federal Strategic Spectrum Plan developed under
paragraph (1) shall incorporate, consistent with the
requirements of subsection (d), the initial entity-spe-
cific strategic spectrum plans submitted under sub-
section (c).

(3) REQUIRED INCLUSIONS.—The Federal Stra-
tegic Spectrum Plan developed under paragraph (1)
shall include—

(A) information on how spectrum assigned
and used by Federal entities is being used;

(B) opportunities to increase efficient use of
infrastructure and spectrum assigned and used
by Federal entities;
(C) an assessment of the future spectrum needs of the Federal Government; and

(D) plans to incorporate such needs in the NTIA’s frequency assignment, equipment certification, and review processes.

(4) UPDATES.—The Secretary of Commerce shall revise and update the Federal Strategic Spectrum Plan developed under paragraph (1) accordingly pursuant to the biennial submission of the entity-specific strategic spectrum plans submitted under subsection (c).

(f) NATIONAL STRATEGIC SPECTRUM PLAN.—

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this title, the NTIA and the Commission, in consultation with other Federal, State, local, and tribal governments and commercial spectrum interests, shall develop a quadrennial National Strategic Spectrum Plan.

(2) REQUIRED INCLUSION.—The National Strategic Spectrum Plan shall include the following:

(A) The Federal Strategic Spectrum Plan developed under subsection (e).

(B) Long-range spectrum planning of both commercial, State and local government, and Federal Government users.
(C) New technologies or expanded services requiring spectrum.

(D) The nature and characteristics of the new radio communication systems required and the nature and characteristics of the spectrum required.

(E) Efficient approaches to meeting the future spectrum requirements of all users, including—

(i) requiring certain standards-based technologies that improve spectrum efficiencies;

(ii) spectrum sharing and reuse opportunities;

(iii) possible reallocation; and

(iv) any other approaches that promote efficient use of spectrum.

(F) An evaluation of current auction processes to determine the effectiveness of such processes in—

(i) promoting competition;

(ii) improving spectrum use efficiency;

and
(iii) maximizing the full economic
value to customers, industry, and the tax-
payer of the spectrum.

Subtitle B—Markets

SEC. 511. PROMOTING SECONDARY SPECTRUM MARKETS.

(a) IN GENERAL.—Not later than 18 months after the
date of enactment of this title, the Commission shall conduct
a rulemaking proceeding to determine how to further pro-
mote a more robust secondary spectrum market.

(b) CONSIDERATION.—In carrying out the rulemaking
required under subsection (a), the Commission shall con-
sider the feasability and value of establishing a national
database to collect and disseminate information on sec-
ondary spectrum market opportunities.

SEC. 512. UNLICENSED USE IN 5 GHZ.

(a) MODIFICATION OF REGULATIONS.—

(1) IN GENERAL.—Not later than 1 year after
the date of enactment of this title, the Commission
shall modify part 15 of title 47, Code of Federal Reg-
ulations, to allow unlicensed devices intended and
marketed for indoor use to operate in the 5350–5470
MHz band.

(2) CONCERNS AND CONSIDERATIONS.—In car-
rying out the modification requirement set forth
under paragraph (1), the Commission shall allow the
unlicensed devices described in paragraph (1) to operate in the 5350–5470 MHz band, on an indoor basis only, if it—

(A) finds that technical solutions will protect licensed users, including use of existing, modified, or new spectrum sharing technologies and solutions, such as dynamic frequency selection; and

(B) determines that the primary mission of Federal spectrum users in the 5350–5470 MHz band will not be compromised by the introduction of unlicensed devices in the 5350–5470 MHz band.

(b) NTIA STUDY.—

(1) IN GENERAL.—Not later than 8 months after the date of enactment of this title, and in consultation with the Commission, the NTIA shall conduct and submit a study as provided in paragraph (2) evaluating known and proposed sharing technologies and the risk to Federal users if unlicensed U–NII devices were allowed to operate indoors in the 5350–5470 MHz band.

(2) SUBMITTING STUDY.—The study required by paragraph (1) shall be submitted to the appropriate committees of Congress and the Commission.
SEC. 513. EXPERIMENTAL LICENSES.
Not later than 9 months after the date of enactment of this title, the Commission shall revise part 5 of chapter I of title 47, Code of Federal Regulations, to—

(1) streamline such regulations to promote greater experimentation;
(2) broaden opportunities for market trials;
(3) promote advancements in health care;
(4) establish innovation zones; and
(5) establish a process by which qualified entities, including colleges, universities, public and private companies, and non-profit research organizations, will be permitted to use a broad range of radio frequencies for research and experimentation on a non-interference basis without having to obtain prior authorization from the Commission for the use of specific frequencies.

SEC. 514. REPURPOSING FEDERAL SPECTRUM FOR COMMERCIAL PURPOSES AND FEDERAL SPECTRUM SHARING.

(a) ELIGIBLE FEDERAL ENTITIES.—Section 113(g)(1) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 923(g)(1)) is amended to read as follows:

“(1) ELIGIBLE FEDERAL ENTITIES.—Any Federal entity that operates a Federal Government sta-
tion authorized to use a band of frequencies specified in paragraph (2) and that incurs relocation costs because of planning for a potential auction of spectrum frequencies, a planned auction of spectrum frequencies, or the reallocation of spectrum frequencies from Federal use to exclusive non-Federal use, or shared Federal and non-Federal use shall receive payment for such costs from the Spectrum Relocation Fund, in accordance with section 118 of this Act. For purposes of this paragraph, Federal power agencies exempted under subsection (c)(4) that choose to relocate from the frequencies identified for reallocation pursuant to subsection (a), are eligible to receive payment under this paragraph.”.

(b) ELIGIBLE FREQUENCIES.—Section 113(g)(2)(B) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 923(g)(2)(B)) is amended to read as follows:

“(B) any other band of frequencies reallocated from Federal use to non-Federal or shared use, whether for licensed or unlicensed use, after January 1, 2003, that is assigned—

“(i) by competitive bidding pursuant to section 309(j) of the Communications Act of 1934 (47 U.S.C. 309(j)); or
“(ii) as a result of an Act of Congress or any other administrative or executive direction.”.

(c) DEFINITION OF RELOCATION AND SHARING COSTS.—Section 113(g)(3) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 923(g)(3)) is amended to read as follows:

“(3) DEFINITION OF RELOCATION AND SHARING COSTS.—For purposes of this subsection, the terms ‘relocation costs’ and ‘sharing costs’ mean the costs incurred by a Federal entity to plan for a potential or planned auction or sharing of spectrum frequencies and to achieve comparable capability of systems, regardless of whether that capability is achieved by relocating to a new frequency assignment, relocating a Federal Government station to a different geographic location, modifying Federal Government equipment to mitigate interference or use less spectrum, in terms of bandwidth, geography, or time, and thereby permitting spectrum sharing (including sharing among relocated Federal entities and incumbents to make spectrum available for non-Federal use) or relocation, or by utilizing an alternative technology. Comparable capability of systems includes the acquisition of state-of-the-art replacement systems intended to meet com-
parable operational scope, which may include incidental increases in functionality, including those necessary to achieve security, reliability, and resiliency.

Such costs include—

“(A) the costs of any modification or replacement of equipment, spares, associated auxiliary equipment, software, facilities, operating manuals, training costs, or regulations that are attributable to relocation or sharing;

“(B) the costs of all engineering, equipment, software, site acquisition, and construction costs, as well as any legitimate and prudent transaction expense, including term-limited Federal civil servant and contractor staff necessary to carry out the relocation activities of an eligible Federal entity, and reasonable additional costs incurred by the Federal entity that are attributable to relocation or sharing, including increased recurring costs associated with the replacement of facilities;

“(C) the costs of research, engineering studies, economic analyses, or other expenses reasonably incurred in connection with—

“(i) calculating the estimated relocation costs that are provided to the Commis-
sion pursuant to paragraph (4) of this subsection, or in calculating the estimated sharing costs;

“(ii) determining the technical or operational feasibility of relocation to 1 or more potential relocation bands; or

“(iii) planning for or managing a relocation or sharing project (including spectrum coordination with auction winners) or potential relocation or sharing project;

“(D) the one-time costs of any modification of equipment reasonably necessary to accommodate commercial use of shared frequencies or, in the case of frequencies reallocated to exclusive commercial use, prior to the termination of the Federal entity’s primary allocation or protected status, when the eligible frequencies as defined in paragraph (2) of this subsection are made available for private sector uses by competitive bidding and a Federal entity retains primary allocation or protected status in those frequencies for a period of time after the completion of the competitive bidding process;

“(E) the costs associated with the accelerated replacement of systems and equipment if
such acceleration is necessary to ensure the timely relocation of systems to a new frequency assignment or the timely accommodation of sharing of Federal frequencies; and

“(F) the costs of the use of commercial systems (including systems not utilizing spectrum) to replace Federal systems discontinued or relocated pursuant to this Act, including lease (including lease of land), subscription, and equipment costs over an appropriate period, such as the anticipated life of an equivalent Federal system or other period determined by the Director of the Office of Management and Budget.”.

(d) SPECTRUM SHARING.—Section 113(g) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 923(g)) is amended by adding at the end the following:

“(7) SPECTRUM SHARING.—A Federal entity is permitted to allow access to its frequency assignments by a non-Federal entity upon approval of NTIA, in consultation with the Director of the Office of Management and Budget. Such non-Federal entities shall comply with all applicable rules of the Commission and the NTIA, including any regulations promulgated pursuant to this section. Any remuneration as-
sociated with such access shall be deposited into the
Spectrum Relocation Fund established under section
118. A Federal entity that incurs costs as a result of
such access is eligible for payment from the Fund for
the purposes specified in paragraph (3) of this sec-
tion. The revenue associated with such access shall be
at least 110 percent of the estimated Federal costs.”.

(e) SPECTRUM RELOCATION FUND.—Section 118 of
the National Telecommunications and Information Admin-
istration Organization Act (47 U.S.C. 928) is amended—

(1) in subsection (b), by inserting before the pe-
period at the end the following: “and any payments
made by non-Federal entities for access to Federal
spectrum pursuant to section 113(g)(7) (47 U.S.C.
113(g)(7))”;

(2) by amending subsection (c) to read as fol-

“(c) USE OF FUNDS.—

“(1) FUNDS FROM AUCTIONS.—The amounts in
the Fund from auctions of eligible frequencies are au-
thorized to be used to pay relocation costs, as such
costs are defined in section 113(g)(3), of an eligible
Federal entity incurring such costs with respect to re-
location from any eligible frequency.
“(2) FUNDS FROM PAYMENTS BY NON-FEDERAL ENTITIES.—The amounts in the Fund from payments by non-Federal entities for access to Federal spectrum are authorized to be used to pay the sharing costs, as such costs are defined in section 113(g)(3), of an eligible Federal entity incurring such costs.

“(3) TRANSFER OF FUNDS.—

“(A) IN GENERAL.—Subject to subparagraph (B), the Director of OMB may transfer at any time (including prior to any auction or contemplated auction, or sharing initiative) such sums as may be available in the Fund to an eligible Federal entity to pay eligible relocation or sharing costs related to pre-auction estimates or research, as such costs are described in section 113(g)(3)(C).

“(B) NOTIFICATION.—No funds may be transferred pursuant to subparagraph (A) unless the notification provided under subsection (d)(2)(B) of this section includes a certification from the Director of OMB that—

“(i) funds transferred before an auction will likely allow for a timely relocation, thereby increasing net expected auction proceeds by an amount equal to or
greater than the time value of the amount of funds transferred; and

“(ii) the auction is intended to occur within 5 years of transfer of funds.

“(C) APPLICABILITY.—

“(i) PRIOR COSTS INCURRED.—The Director of OMB may transfer up to $10,000,000 to eligible Federal entities for eligible relocation or sharing costs related to pre-auction estimates or research, as such costs are described in section 113(g)(3)(C), for costs incurred prior to the date of the enactment of the Public Safety Spectrum and Wireless Innovation Act, but after June 28th, 2010.

“(ii) SUPPLEMENT NOT SUPPLANT.—Any amounts transferred by the Director of OMB pursuant to clause (i) shall be in addition to any amounts that the Director of OMB may transfer after the date of the enactment of the Public Safety Spectrum and Wireless Innovation Act.”;

(3) in subsection (d)—

(A) in paragraph (1), by inserting “and sharing” before “costs”;
(B) in paragraph (2)(B)—

(i) by inserting “and sharing” before “costs”; and

(ii) by inserting “and sharing” before the period at the end; and

(C) by amending paragraph (3) to read as follows:

“(3) REVERSION OF UNUSED FUNDS.—

“(A) IN GENERAL.—Any amounts in the Fund that are remaining after the payment of the relocation and sharing costs that are payable from the Fund shall revert to and be deposited in the General Fund of the Treasury not later than 8 years after the date of the deposit of such proceeds to the Fund, unless within 60 days in advance of the reversion of such funds, the Director of OMB, in consultation with the Assistant Secretary for Communications and Information, notifies the appropriate committees of Congress that such funds are needed to complete or to implement current or future relocations or sharing initiatives.

“(B) DEFINITION.—In this paragraph, the term ‘appropriate committees of Congress’ means
“(i) the Committee on Appropriations of the Senate;

“(ii) the Committee on Commerce, Science, and Transportation of the Senate;

“(iii) the Committee on Appropriations of the House of Representatives; and

“(iv) the Committee on Energy and Commerce of the House of Representatives.”;

(4) in subsection (e)(2)—

(A) by inserting “and sharing” before “costs”;

(B) by inserting “or sharing” before “is complete”; and

(C) by inserting “or sharing” before “in accordance”; and

(5) by adding at the end the following:

“(f) ADDITIONAL PAYMENTS FROM THE FUND.—Notwithstanding subsections (c) through (e), after the date of the enactment of the Public Safety Spectrum and Wireless Innovation Act, and following the credit of any amounts specified in subsection (b), there are hereby appropriated from the Fund and available to the Director of the OMB up to 10 percent of the amounts deposited in the Fund from the auction of licenses for frequencies of spectrum vacated by Federal entities, or up to 10 percent of the amounts de-
possessed in the Fund by non-Federal entities for sharing of
Federal spectrum. The Director of OMB, in consultation
with the Assistant Secretary for Communications and In-
formation, may use such amounts to pay eligible Federal
entities for the purpose of encouraging timely access to such
spectrum, provided that—

“(1) any such payment by the Director of OMB
is based on the market value of the spectrum, the
timeliness with which the licensee cleared its use of
such spectrum, and the need for such spectrum in
order for the Federal entity to conduct its essential
missions;

“(2) any such payment by the Director of OMB
is used to carry out the purposes specified in subpara-
graphs (A) through (F) of paragraph (3) of subsection
113(g) to achieve enhanced capability for those sys-
tems affected by reallocation of Federal spectrum to
commercial use, or by sharing of Federal frequencies
with non-Federal entities;

“(3) the amount remaining in the Fund after
any such payment by the Director is not less than 10
percent of the winning bids in the relevant auction,
or is not less than 10 percent of the payments from
non-Federal entities in the relevant sharing agree-
ment; and
“(d) any such payment by the Director shall not be made until 30 days after the Director has notified the Committees on Appropriations and Commerce, Science, and Transportation of the Senate, and the Committees on Appropriations and Energy and Commerce of the House of Representatives.”.

(f) Competitive Bidding; Treatment of Revenues.—Subparagraph (D) of section 309(j)(8) of the Communications Act of 1934 (47 U.S.C. 309(j)(8)) is amended by inserting “excluding frequencies identified by the Federal Communications Commission to be auctioned in conjunction with eligible frequencies described in section 113(g)(2)” before “shall be deposited”.

(g) Public Disclosure and Nondisclosure.—If the head of an executive agency of the Federal Government determines that public disclosure of any information contained in notifications and reports required by sections 113 or 118 of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 923 and 928) would reveal classified national security information or other information for which there is a legal basis for nondisclosure and such public disclosure would be detrimental to national security, homeland security, public safety, or jeopardize law enforcement investigations, the head of the executive agency shall notify the NTIA of that deter-
mination prior to release of such information. In that event, such classified information shall be included in a separate annex, as needed. These annexes shall be provided to the appropriate subcommittee in accordance with appropriate national security stipulations, but shall not be disclosed to the public or provided to any unauthorized person through any other means.

SEC. 515. REPORT ON SPECTRUM SHARING.

(a) Identification of Spectrum; Report to Congress.—Not later than 1 year after the date of enactment of this Act, the NTIA shall conduct a study and submit a report to the appropriate committees of Congress—

(1) that identifies spectrum between 225 MHz and 3700 MHz operated or licensed by a Federal entity that the NTIA, in consultation with the Commission, determines appropriate for sharing with non-government entities or non-Federal government entities, including, after taking into account any spectrum identified by the NTIA in its October 2010 report entitled “An Assessment of the Near-Term Viability of Accommodating Wireless Broadband Systems in the 1675-1710 MHz, 1755-1780 MHz, 3500-3650 MHz, and 4200-4220 MHz, 4380-4400 MHz Bands”, the additional 100 MHz most likely to be appropriate for wireless broadband operations; and
(2) on how Federal entities can utilize dynamic spectrum sharing technologies to allow non-government entities or non-Federal government entities to share underutilized spectrum without interference to the primary usage by the Federal Government of that spectrum, including through use of cognitive radio and sensing technologies and database and geolocation approaches.

(b) CONSIDERATIONS.—In carrying out the study and report required under subsection (a), the NTIA should consider—

(1) radio systems that are utilized in fixed or predictable geographic locations;

(2) radio systems that are only utilized intermittently at fixed or predictable times;

(3) spectrum allocations in which radio systems are currently not deployed; and

(4) spectrum that is harmonized regionally or globally.

(c) PUBLIC CONSULTATION AND RULE CHANGES.—

(1) IN GENERAL.—Not later than 6 months after the report required under subsection (a) is submitted, the NTIA shall conduct a public consultation and, with the Interdepartment Radio Advisory Committee,
develop rules for Federal users to increase spectrum sharing by Federal entities.

(2) CONSIDERATIONS.—In carrying out the rule-making required under paragraph (1), the NTIA shall consider—

(A) the findings of the report required under subsection (a); and

(B) the recommendations in the Final Report, dated November 8, 2010, issued by the Interference and Dynamic Spectrum Access Subcommittee of the Commerce Spectrum Management Advisory Committee.

Subtitle C—Efficiency and Management

SEC. 521. FUNCTIONAL RESPONSIBILITY OF THE NTIA TO ENSURE EFFICIENT USE OF SPECTRUM.

Section 103(b)(2) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 902(b)(2)) is amended—

(1) by redesignating subparagraphs (B) through (T) as subparagraphs (C) through (U), respectively; and

(2) by inserting after subparagraph (A) the following:
“(B) The responsibility to promote the best possible and most efficient use of electromagnetic spectrum resources across the Federal Government, subject to and consistent with the needs and missions of Federal agencies.”.

SEC. 522. SPECTRUM EFFICIENCY ANALYTIC TOOLS.

(a) In General.—Not later than 18 months after the date of enactment of this title, the NTIA, in consultation with NIST and the Commission, as appropriate, shall develop analytic tools or metrics for the NTIA and Federal entities to measure the spectrum efficiency of Federal spectrum systems used by such entities.

(b) Required Consideration.—In developing the tools or metrics to measure spectrum efficiency pursuant to subsection (a)(1), the NTIA shall consider the conclusions reached in the report entitled “Definitions of Efficiency in Spectrum Use”, authored by the Commerce Spectrum Management Advisory Committee and dated October 1, 2008.

SEC. 523. STUDY ON RECEIVER PERFORMANCE AND SPECTRUM EFFICIENCY.

(a) In General.—The Comptroller General of the United States shall conduct a study to consider efforts to ensure that each transmission system that employs radio spectrum is designed and operated so that reasonable use
of adjacent spectrum does not excessively impair the function-
ning of such system.

(b) REQUIRED CONSIDERATIONS.—At a minimum, the
study required under subsection (a) shall consider—

(1) the value of—

(A) improving receiver performance as it
relates to increasing spectral efficiency;

(B) improving operation of services in adja-
cent frequencies; and

(C) narrowing the guard bands between ad-
jaent spectrum use.

(2) the role of manufacturers, commercial licens-
ees, and government users with respect to their trans-
mission systems and use of adjacent spectrum de-
scribed in subsection (a);

(3) the feasibility of industry self-compliance
with respect to the design and operational require-
ments of transmission systems and the reasonable use
of adjacent spectrum described in subsection (a); and

(4) the value of Commission and NTIA action to
establish, by rule, technical requirements or standards
for non-Federal or Federal use, respectively, with re-
spect to the reasonable use of adjacent spectrum de-
scribed in subsection (a).
(c) **DEFINITION.**—For purposes of this section, the term “transmission system” means any telecommunications, broadcast, satellite, commercial mobile service, or other communications system that employs radio spectrum.

(d) **REPORT.**—Not later than 1 year after the date of enactment of this Act, the Comptroller General of the United States shall submit a report to the appropriate committees of Congress on the results of the study required under subsection (a).

**SEC. 524. FREQUENCY ASSIGNMENT.**

(a) **EXAMINATION.**—Not later than 6 months after the date of enactment of this title, the NTIA, in consultation with the Interdepartment Radio Advisory Committee, shall—

1. examine its frequency assignment processes, including the 5-year frequency assignment review program, and
2. consider best practices to determine if the current approach for collecting and validating data from Federal entities can be streamlined or improved to help ensure that such entities are managing current and future spectrum assignments efficiently.

(b) **REQUIRED CONSIDERATIONS.**—In carrying out the requirements of subsection (a), the NTIA shall consider—
(1) providing Federal entities with specific guidance or requirements on how to justify to the NTIA that requested spectrum frequency assignments would fulfill an established mission need and that other means of communication are not appropriate or available;

(2) requiring Federal entities to submit documentation, as part of the spectrum frequency assignment process;

(3) verifying that such entity has completed an analysis to support the use and need of the requested assignment; and

(4) requiring managers of spectrum resources at each Federal entity to validate, verify, or attest to the accuracy of spectrum information submitted by their entity to the NTIA.

SEC. 525. SPECTRUM OPPORTUNITY COST TRANSPARENCY.

(a) Analysis of Economic Opportunity Cost.—

(1) Development of Framework.—

(A) In general.—Not later than 1 year after the date of enactment of this title, the NTIA, in consultation with the Commission and the Director of the Office of Management and Budget, shall develop a framework for determining the annual economic opportunity cost of
each specific Federal spectrum band assigned or
otherwise allocated for use by Federal entities.

(B) CONSIDERATIONS.—In developing the
framework required under subparagraph (A), the
NTIA shall take into account the spectrum pric-
ing methodologies adopted by other countries
which utilize administered incentive pricing of
spectrum for government users.

(2) SCOPE.—The framework developed under
paragraph (1) shall cover all Federally allocated spec-
trum bands between 150 MHz and 6000 MHz, inclu-
sive.

(3) GOALS.—The goal of the framework devel-
oped under paragraph (1) is—

(A) to provide Federal entities with a sus-
tained long-term signal of spectrum value to in-
form the spectrum management decisions of such
entities; and

(B) to provide the public with increased
transparency about how Federal entities use a
scarcely physical resource.

(4) REQUIREMENTS.—The framework developed
under paragraph (1) shall—

(A) define the term “opportunity cost” as
the value of the spectrum, in dollar terms, as if
such spectrum were to be reallocated to the highest commercial alternative use that currently does not have access to that spectrum;

(B) be updated, on an annual basis, to take into account observed market valuations from spectrum auctions, secondary spectrum trading, and other market indicators of spectrum value;

(C) determine the opportunity costs borne by each Federal entity for each spectrum band that is entirely under the control of a single agency; and

(D) determine the opportunity costs for spectrum assigned or otherwise allocated to Federal entities for both primary use and secondary use.

(b) Report on Opportunity Costs.—Each Federal entity that has been assigned or otherwise allocated use of a Federal spectrum band shall report, as an off-budget item, the opportunity cost borne by the entity for each spectrum band the entity uses—

(1) in the budget of the entity to be included in the budget of the United States Government submitted by the President under section 1105 of title 31, United States Code; and
1 (2) in the annual financial statement of the entity required to be filed under section 3515 of title 31, United States Code.

(c) **SPECTRUM VALUE ANALYSIS.**—Not later than 5 years after the date of the enactment of this title, and every 5 years thereafter, each Federal entity that has been assigned or otherwise allocated use of a Federal spectrum band, or otherwise utilizes such spectrum, shall engage in an analysis comparing the opportunity cost of that spectrum, as such cost is determined by the framework developed by the NTIA under subsection (a), to the projected costs of the entity relocating to other government spectrum holdings, co-locating with other government agencies, leasing other non-Federal spectrum, or contracting out for its spectrum activities.

(d) **SPECTRUM TECHNOLOGY STUDY.**—

(1) **IN GENERAL.**—Not later than 18 months after the date of the enactment of this title, and every 5 years thereafter, the Comptroller General of the United States, in consultation with NTIA, shall examine the technologies and equipment used by Federal entities operating on Federal spectrum allocations and determine if such technologies and equipment are the most spectrum efficient available.
(2) Certain determinations made.—If the results of any study required under paragraph (1) determines that the technologies and equipment of Federal entities operating on Federal spectrum allocations are not the most spectrum efficient available, the Comptroller General shall determine—

(A) what the costs would be to upgrade such systems to more up-to-date and readily available systems;

(B) what benefits would be gained from upgrading, particularly any cost savings or increases in spectrum utilization efficiency; and

(C) if there are any possible problems with upgrading to more up-to-date systems.

SEC. 526. SYSTEM CERTIFICATION.

Not later than 6 months after the date of enactment of this title, the Director of the Office of Management and Budget shall update and revise section 33.4 of OMB Circular A–11 to reflect the recommendations regarding such Circular made in the Commerce Spectrum Management Advisory Committee Incentive Subcommittee report, adopted January 11, 2011.
SEC. 527. REPORT TO CONGRESS ON IMPROVING SPECTRUM MANAGEMENT.

Not later than 3 months after the date of enactment of this title, the NTIA shall submit to the appropriate committees of Congress a report on the status of the NTIA’s plan to implement the recommendations contained in the “President’s Memorandum on Improving Spectrum Management for the 21st Century”, 49 Weekly Comp. Pres. Doc. 2875, Nov. 29, 2004.

SEC. 528. WIRELESS FACILITIES DEPLOYMENT.

(a) FACILITY MODIFICATIONS.—

(1) IN GENERAL.—Notwithstanding section 704 of the Telecommunications Act of 1996 or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower that does not substantially change the physical dimensions of such tower.

(2) ELIGIBLE FACILITIES REQUEST.—For purposes this subsection, the term “eligible facilities request” means any request for modification of an existing wireless tower that involves—

(A) collocation of new transmission equipment;

(B) removal of transmission equipment;

and
(C) replacement of transmission equipment.

(b) FEDERAL EASEMENTS AND RIGHTS-OF-WAY.—

(1) GRANT.—If an executive agency, a State, a political subdivision or agency of a State, or a person, firm, or organization applies for the grant of an easement or rights-of-way to, in, over, or on a building owned by the Federal Government for the right to install, construct, and maintain wireless service antenna structures and equipment, and backhaul transmission, the executive agency having control of the building may grant to the applicant, on behalf of the Federal Government, an easement or rights-of-way to perform such installation, construction, and maintenance.

(2) APPLICATION.—The Administrator of the General Services Administration shall develop a common form for rights-of-way applications required under paragraph (1) for all executive agencies that shall be used by applicants with respect to the buildings or property of each such agency.

(3) FEE.—

(A) IN GENERAL.—Notwithstanding any other provision of law, in making a grant of an easement or rights-of-way pursuant to paragraph (1), the Administrator of the General Services Administration shall impose a fee, which shall be paid by the applicant, for each building or property interest, that is involved in such grant.
Services Administration shall establish a fee for the award of such grant that is based on direct cost recovery.

(B) Exceptions.—The Administrator of the General Services Administration may establish exceptions to the fee amount required under subparagraph (A)—

(i) in consideration of the public benefit provided by a grant of an easement or rights-of-way; and

(ii) in the interest of expanding wireless and broadband coverage.

(4) Use of Fees Collected.—Any fee amounts collected by an executive agency pursuant to paragraph (2) shall be made available, without further appropriation, to such agency for purposes of the agency's telecommunications and information technology needs and any excess funds shall then be deposited into the Federal Building Fund.

(c) Master Contracts for Wireless Tower Sittings.—

(1) In General.—Notwithstanding section 704 of the Telecommunications Act of 1996 or any other provision of law, and not later than 60 days after the
date of enactment of this Act, the Administrator of the
General Services Administration shall—

(A) develop 1 or more master contracts that
shall govern the placement of wireless service an-
tenna structures on buildings and property
owned by the Federal Government; and

(B) in developing the master contract, with
respect to the siting of wireless service antenna
structures, standardize the treatment of the
placement of wireless service antenna structures
on rooftop or building facades, the placement of
equipment on rooftops or inside buildings, and
technology, and any other key issues that the Ad-
ministrator determines appropriate.

(2) APPLICABILITY.—The master contract devel-
oped by the Administrator of the General Services Ad-
ministration under paragraph (1) shall apply to all
publicly accessible property owned by the Federal
Government, unless the Administrator decides that
issues with respect to the siting of a wireless service
antenna structure on a specific building or property
warrant nonstandard treatment of a specific prop-
erty.

(3) APPLICATION.—The Administrator of the
General Services Administration shall develop a com-
mon form or set of forms for wireless service antenna structure siting applications required under this section for all executive agencies that shall be used by applicants with respect to the buildings of each such agency.

**TITLE VI—STUDIES ON NEXT GENERATION 9-1-1 SERVICES**

**SEC. 601. DEFINITIONS.**

As used in this title, the following definitions shall apply:

1. **9–1–1 SERVICES.**—The term “9–1–1 services” includes both E9–1–1 services and Next Generation 9–1–1 services.

2. **E9–1–1 SERVICES.**—The term “E9–1–1 services” means both phase I and phase II enhanced 9–1–1 services, as described in section 20.18 of the Commission’s regulations (47 C.F.R. 20.18), as in effect on the date of enactment of this title, or as subsequently revised by the Commission.

3. **NEXT GENERATION 9–1–1 SERVICES.**—The term “Next Generation 9–1–1 services” means an IP-based system comprised of hardware, software, data, and operational policies and procedures that—
(A) provides standardized interfaces from emergency call and message services to support emergency communications;

(B) processes all types of emergency calls, including voice, data, and multimedia information;

(C) acquires and integrates additional emergency call data useful to call routing and handling;

(D) delivers the emergency calls, messages, and data to the appropriate public safety answering point and other appropriate emergency entities;

(E) supports data or video communications needs for coordinated incident response and management; or

(F) provides broadband service to public safety answering points or other first responder entities.

(4) Public Safety Answering Point.—The term “public safety answering point” has the meaning given the term in section 222 of the Communications Act of 1934 (47 U.S.C. 222).
SEC. 602. NHTSA REPORT ON COSTS FOR REQUIREMENTS AND SPECIFICATIONS OF NEXT GENERATION 9–1–1 SERVICES.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this title, the Administrator of the National Highway Traffic Safety Administration, in consultation with the Commission and the Secretary of Homeland Security, shall prepare and submit a report to Congress that analyzes and determines detailed costs for specific Next Generation 9–1–1 service requirements and specifications.

(b) PURPOSE OF REPORT.—The purpose of the report required under subsection (a) is to serve as a resource for Congress as it considers creating a coordinated, long-term funding mechanism for the deployment and operation, accessibility, application development, equipment procurement, and training of personnel for Next Generation 9–1–1 services.

(c) REQUIRED INCLUSIONS.—The report required under subsection (a) shall include the following:

(1) How costs would be broken out geographically and/or allocated among public safety answering points, broadband service providers, and third-party providers of Next Generation 9-1-1 services.

(2) An assessment of the current state of Next Generation 9–1–1 service readiness among public safety answering points.
(3) How differences in public safety answering points’ access to broadband across the country may affect costs.

(4) A technical analysis and cost study of different delivery platforms such as wireline, wireless, and satellite.

(5) An assessment of the architectural characteristics, feasibility, and limitations of Next Generation 9–1–1 service delivery.

(6) An analysis of the needs for Next Generation 9–1–1 service of persons with disabilities.

(7) Standards and protocols for Next Generation 9–1–1 service and for incorporating Voice over Internet Protocol and “Real-Time Text” standards.

SEC. 603. FCC RECOMMENDATIONS FOR LEGAL AND STATUTORY FRAMEWORK FOR NEXT GENERATION 9–1–1 SERVICES.

Not later than 1 year after the date of enactment of this title, the Commission, in coordination with the Secretary of Homeland Security and the Administrator of the National Highway Traffic Safety Administration, shall prepare and submit a report to Congress that contains recommendations for the legal and statutory framework for Next Generation 9–1–1 services, consistent with recommendations in the National Broadband Plan developed
by the Commission pursuant to Public Law 111–5, including the following:

(1) A legal and regulatory framework for the development of Next Generation 9–1–1 services and the transition from legacy 9–1–1 to Next Generation 9–1–1 networks.

(2) Legal mechanisms to ensure efficient and accurate transmission of 9–1–1 caller information to emergency response agencies.

(3) Recommendations for removing jurisdictional barriers and inconsistent legacy regulations including—

(A) proposals that would require States to remove regulatory roadblocks to Next Generation 9–1–1 services development, while recognizing existing State authority over 9–1–1 services;

(B) eliminating outdated 9–1–1 regulations at the Federal level; and

(C) preempting inconsistent State regulations.

**TITLE VII—MISCELLANEOUS**

**SEC. 701. SEVERABILITY.**

If any provision of this Act or an amendment made by this Act, or the application of the provision to any person or circumstance, is held to be unconstitutional, the re-
mainder of this Act and the amendments made by this Act, and the application of the provisions of this Act and the amendments made by this Act to any other person or circumstance, shall not be affected thereby.

SEC. 702. RULE OF CONSTRUCTION.

Nothing in this Act shall be construed as adding or subtracting from the authority the Commission may or may not have to regulate broadband Internet access service.

TITLE VIII—COMPLIANCE WITH STATUTORY PAY-AS-YOU-GO ACT

SEC. 801. BUDGET COMPLIANCE.

The budgetary effects of this Act, for the purpose of complying with the Statutory Pay-As-You-Go Act of 2010, shall be determined by reference to the latest statement titled “Budgetary Effects of PAYGO Legislation” for this Act, submitted for printing in the Congressional Record by the Chairman of the Senate Budget Committee, provided that such statement has been submitted prior to the vote on passage.
A BILL

To establish the sense of Congress that Congress should enact and the President should sign bipartisan legislation to strengthen public safety and to enhance wireless communications.

November 14, 2012

Reported with an amendment