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112TH CONGRESS 1ST SESSION S. 911

[Report No. 112–

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
	(legislative day,),)
	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,

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SECTION	_	SHURT	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

- 2 This Act may be cited as the "Strengthening Public-3 safety and Enhancing Communications Through Reform, Utilization, and Modernization Act" or the "SPECTRUM 4 5 Act". 6 SEC. 2. SENSE OF CONGRESS. 7 It is the sense of Congress that Congress should enact, and the President should sign, bipartisan legislation 9 to strengthen public safety and to enhance wireless com-10 munications by— 11 (1) providing sufficient wireless spectrum and 12 other resources to build a nationwide interoperable 13 wireless public safety broadband network; 14 (2) encouraging more efficient, flexible, and ef-15 fective use of spectrum, a valuable and finite public 16 resource; 17 (3) promoting voluntary market mechanisms to 18 ensure the optimal allocation of spectrum; 19 (4) reforming the Federal Government's spec-20 trum management practices; and 21 (5) engaging in advanced research and develop-22 ment into emerging wireless technologies. SECTION 1. SHORT TITLE; TABLE OF CONTENTS.
- 23
- 24 (a) Short Title.—This Act may be cited as the
- "Public Safety Spectrum and Wireless Innovation Act". 25

1 (b) Table of Contents for

2 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. 202. Establishment of Public Safety Broadband Corporation.
- 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.
- Sec. 307. Report on unlicensed spectrum.

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.

- 2 In this Act, the following definitions shall apply:
- 3 (1) 700 MHz BAND.—The term "700 MHz band"
- 4 means the portion of the electromagnetic spectrum be-
- 5 tween the frequencies from 698 megahertz to 806
- 6 megahertz.
- 7 (2) 700 MHZ D BLOCK SPECTRUM.—The term
- 8 "700 MHz D block spectrum" means the portion of

1	the electromagnetic spectrum between the frequencies
2	from 758 megahertz to 763 megahertz and between the
3	frequencies from 788 megahertz to 793 megahertz.
4	(3) Appropriate committees of congress.—
5	Except as otherwise specifically provided, the term
6	"appropriate committees of Congress" means—
7	(A) the Committee on Commerce, Science,
8	and Transportation of the Senate; and
9	(B) the Committee on Energy and Com-
10	merce of the House of Representatives.
11	(4) Assistant secretary.—The term "Assist-
12	ant Secretary" means the Assistant Secretary of Com-
13	merce for Communications and Information.
14	(5) Commission.—The term "Commission"
15	means the Federal Communications Commission.
16	(6) Corporation.—The term "Corporation"
17	means the Public Safety Broadband Corporation es-
18	tablished under subtitle A of title II.
19	(7) Existing public safety broadband spec-
20	TRUM.—The term "existing public safety broadband
21	spectrum" means the portion of the electromagnetic
22	spectrum between the frequencies—
23	(A) from 763 megahertz to 768 megahertz;
24	(B) from 793 megahertz to 798 megahertz;

1	(C) from 768 megahertz to 769 megahertz;
2	and
3	(D) from 798 megahertz to 799 megahertz.
4	(8) Federal entity.—The term "Federal enti-
5	ty" has the same meaning as in section 113(i) of the
6	National Telecommunications and Information Ad-
7	ministration Organization Act (47 U.S.C. 923(i)).
8	(9) Narrowband spectrum.—The term
9	"narrowband spectrum" means the portion of the elec-
10	tromagnetic spectrum between the frequencies from
11	769 megahertz to 775 megahertz and between the fre-
12	quencies from 799 megahertz to 805 megahertz.
13	(10) NIST.—The term "NIST" means the Na-
14	tional Institute of Standards and Technology.
15	(11) NTIA.—The term "NTIA" means the Na-
16	tional Telecommunications and Information Admin-
17	istration.
18	(12) Public safety entity.—The term "public
19	safety entity"means an entity that provides public
20	safety services.
21	(13) Public safety services.—The term
22	"public safety services"—
23	(A) has the meaning given the term in sec-
24	tion 337(f) of the Communications Act of 1934
25	(47 U.S.C. 337(f)); and

1	(B) includes services provided by emergency
2	response providers, as that term is defined in
3	section 2 of the Homeland Security Act of 2002
4	(6 U.S.C. 101).
5	TITLE I—REALLOCATION OF
6	PUBLIC SAFETY SPECTRUM
7	SEC. 101. REALLOCATION OF D BLOCK TO PUBLIC SAFETY.
8	(a) In General.—The Commission shall reallocate
9	the 700 MHz D block spectrum for use by public safety enti-
10	ties in accordance with the provisions of this Act.
11	(b) Spectrum Allocation.—Section 337(a) of the
12	Communications Act of 1934 (47 U.S.C. 337(a)) is amend-
13	ed—
14	(1) by striking "24" in paragraph (1) and in-
15	serting "34"; and
16	(2) by striking "36" in paragraph (2) and in-
17	serting "26".
18	SEC. 102. FLEXIBLE USE OF NARROWBAND SPECTRUM.
19	The Commission may allow the narrowband spectrum
20	to be used in a flexible manner, including usage for public
21	safety broadband communications, subject to such technical
22	and interference protection measures as the Commission
23	may require.

1	TITLE II—GOVERNANCE OF
2	PUBLIC SAFETY SPECTRUM
3	Subtitle A—Public Safety
4	Broadband Corporation
5	SEC. 201. SINGLE PUBLIC SAFETY WIRELESS NETWORK LI-
6	CENSEE.
7	(a) Reallocation and Grant of License.—Not-
8	withstanding any other provision of law, and subject to the
9	provisions of this Act, the Commission shall reallocate and
10	grant a license to the Public Safety Broadband Corporation
11	established under section 202 for the use of the 700 MHz
12	D block spectrum and existing public safety broadband
13	spectrum.
14	(b) Term of License.—
15	(1) Initial license.—The license granted under
16	subsection (a) shall be for an initial term of 10 years
17	from the date of the initial issuance of the license.
18	(2) Renewal of license.—Prior to expiration
19	of the term of the initial license granted under sub-
20	section (a) or the expiration of any subsequent re-
21	newal of such license, the Corporation shall submit to
22	the Commission an application for the renewal of
23	such license. Such renewal application shall dem-
24	onstrate that, during the preceding license term, the
25	Corporation has met the duties and obligations set

- 1 forth under this Act. A renewal license granted under
- 2 this paragraph shall be for a term of not to exceed 10
- 3 years.
- 4 (c) Facilitation of Transition.—The Commission
- 5 shall take all actions necessary to facilitate the transition
- 6 of the existing public safety broadband spectrum to the Pub-
- 7 lic Safety Broadband Corporation established under section
- 8 202.

9 SEC. 202. ESTABLISHMENT OF PUBLIC SAFETY BROADBAND

- 10 **CORPORATION.**
- 11 (a) Establishment.—There is authorized to be estab-
- 12 lished a private, nonprofit corporation, to be known as the
- 13 "Public Safety Broadband Corporation", which is neither
- 14 an agency nor establishment of the United States Govern-
- 15 ment or the District of Columbia Government.
- 16 (b) Application of Provisions.—The Corporation
- 17 shall be subject to the provisions of this Act, and, to the
- 18 extent consistent with this Act, to the District of Columbia
- 19 Nonprofit Corporation Act (sec. 29–301.01 et seq., D.C. Of-
- 20 ficial Code).
- 21 (c) Residence.—The Corporation shall have its place
- 22 of business in the District of Columbia and shall be consid-
- 23 ered, for purposes of venue in civil actions, to be a resident
- 24 of the District of Columbia.

1	(d) Powers Under DC Act.—In order to carry out
2	the duties and activities of the Corporation, the Corporation
3	shall have the usual powers conferred upon a nonprofit cor-
4	poration by the District of Columbia Nonprofit Corporation
5	Act.
6	(e) Incorporation.—The members of the initial
7	Board of Directors of the Corporation shall serve as
8	incorporators and shall take whatever steps that are nec-
9	essary to establish the Corporation under the District of Co-
10	lumbia Nonprofit Corporation Act.
11	SEC. 203. BOARD OF DIRECTORS OF THE CORPORATION.
12	(a) Membership.—The management of the Corpora-
13	tion shall be vested in a Board of Directors (referred to in
14	this subtitle as the "Board"), which shall consist of the fol-
15	lowing members:
16	(1) Federal members.—The following individ-
17	uals, or their respective designees, shall serve as Fed-
18	eral members:
19	(A) The Secretary of Commerce.
20	(B) The Secretary of Homeland Security.
21	(C) The Attorney General of the United
22	States.
23	(D) The Director of the Office of Manage-
24	ment and Budget.
25	(2) Non-federal members.—

I	(A) IN GENERAL.—The Secretary of Com-
2	merce shall appoint 11 individuals to serve as
3	non-Federal members of the Board.
4	(B) State and local interests to be
5	REPRESENTED.—In making appointments under
6	subparagraph (A), the Secretary of Commerce, in
7	consultation with the Secretary of Homeland Se-
8	curity and the Attorney General of the United
9	States, should—
10	(i) appoint at least 3 individuals to
11	represent the collective interests of the
12	States, localities, tribes, and territories;
13	(ii) seek to ensure geographic and re-
14	gional representation of the United States
15	in such appointments; and
16	(iii) seek to ensure rural and urban
17	representation in such appointments.
18	(C) Public safety interests to be rep-
19	RESENTED.—In making appointments under
20	subparagraph (A), the Secretary of Commerce
21	should appoint at least 3 individuals who have
22	served or are currently serving as public safety
23	professionals.
24	(D) REQUIRED QUALIFICATIONS.—

1	(i) In General.—Each non-Federal
2	member appointed under subparagraph (A)
3	should meet at least 1 of the following cri-
4	teria:
5	(I) Public safety experi-
6	ENCE.—Knowledge and experience in
7	the use of Federal, State, local, or trib-
8	al public safety or emergency response.
9	(II) TECHNICAL EXPERTISE.—
10	Technical expertise and fluency regard-
11	ing broadband communications, in-
12	cluding public safety communications.
13	(III) Network expertise.—Ex-
14	pertise in building, deploying, and op-
15	erating commercial telecommuni-
16	cations networks.
17	(IV) Financial expertise.—Ex-
18	pertise in financing and funding tele-
19	$communications\ networks.$
20	(ii) Expertise to be rep-
21	RESENTED.—In making appointments
22	under subparagraph (A), the Secretary of
23	Commerce shall appoint—

(I) at least one individual who
satisfies the requirement under sub-
clause (II) of clause (i);
(II) at least one individual who
satisfies the requirement under sub-
clause (III) of clause (i); and
(III) at least one individual who
satisfies the requirement under sub-
clause (IV) of clause (i).
(E) Independence.—
(i) In General.—Each non-Federal
member of the Board shall be independent
and neutral.
(ii) Independence determina-
TION.—In order to be considered inde-
pendent 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

1	(bb) be a person associated
2	with the Corporation or with any
3	affiliated company thereof; and
4	(II) shall be disqualified from any
5	deliberation involving any transaction
6	of the Corporation in which the Board
7	member has a financial interest in the
8	outcome of the transaction.
9	(F) Not officers or employees.—The
10	non-Federal members of the Board shall not, by
11	reason of such membership, be considered to be
12	officers or employees of the United States Gov-
13	ernment or of the District of Columbia Govern-
14	ment.
15	(G) Citizenship.—No individual other
16	than a citizen of the United States may serve as
17	a non-Federal member of the Board.
18	(b) Terms of Appointment.—
19	(1) Initial appointment deadline.—Members
20	of the Board shall be appointed not later than 180
21	days after the date of the enactment of this Act.
22	(2) TERMS.—
23	(A) Length.—
24	(i) FEDERAL MEMBERS.—Each Fed-
25	eral member of the Board shall serve as a

1	member of the Board for the life of the Cor-
2	poration.
3	(ii) Non-federal members.—The
4	term of office of each non-Federal member of
5	the Board shall be 3 years. No non-Federal
6	member of the Board may serve more than
7	2 consecutive full 3-year terms.
8	(B) Expiration of term.—Any member
9	whose term has expired may serve until such
10	member's successor has taken office, or until the
11	end of the calendar year in which such member's
12	term has expired, whichever is earlier.
13	(C) Appointment to fill vacancy.—Any
14	non-Federal member appointed to fill a vacancy
15	occurring prior to the expiration of the term for
16	which that member's predecessor was appointed
17	shall be appointed for the remainder of the pred-
18	ecessor's term.
19	(D) Staggered terms.—With respect to
20	the initial non-Federal members of the Board—
21	(i) 4 members shall serve for a term of
22	3 years;
23	(ii) 4 members shall serve for a term of
24	2 years; and

1	(iii) 3 members shall serve for a term
2	of 1 year.
3	(3) VACANCIES.—A vacancy in the membership
4	of the Board shall not affect the Board's powers, and
5	shall be filled in the same manner as the original
6	member was appointed.
7	(c) Chair.—
8	(1) Selection.—The Secretary of Commerce
9	shall select, from among the non-Federal members of
10	the Board, an individual to serve for a 2-year term
11	as Chair of the Board.
12	(2) Consecutive terms.—An individual may
13	not serve for more than 2 consecutive terms as Chair
14	of the Board.
15	(3) Removal for cause.—The Secretary of
16	Commerce may remove the Chair of the Board and
17	any non-Federal member for good cause.
18	(d) Removal.—All members of the Board may by ma-
19	jority vote—
20	(1) remove any non-Federal member of the
21	Board from office for conduct determined by the
22	Board to be detrimental to the Board or Corporation,
23	and
24	(2) request that the Secretary of Commerce exer-
25	cise his or her authority to remove the Chair of the

1	Board for conduct determined by the Board to be det-
2	rimental to the Board or Corporation.
3	(e) Meetings.—
4	(1) Frequency.—The Board shall meet in ac-
5	cordance with the bylaws of the Corporation—
6	(A) at the call of the Chairperson; and
7	(B) not less frequently than once each quar-
8	ter.
9	(2) Transparency.—Meetings of the Board, in-
10	cluding any committee of the Board, shall be open to
11	the public. The Board may, by majority vote, close
12	any such meeting only for the time necessary to pre-
13	serve the confidentiality of commercial or financial
14	information that is privileged or confidential, to dis-
15	cuss personnel matters, or to discuss legal matters af-
16	fecting the Corporation, including pending or poten-
17	$tial\ litigation.$
18	(f) Quorum.—Eight members of the Board shall con-
19	stitute a quorum, including at least 6 non-Federal members
20	of the Board.
21	(g) Bylaws.—A majority of the members of the Board
22	of Directors may amend the bylaws of the Corporation.
23	(h) Attendance.—Members of the Board of Directors
24	may attend meetings of the Corporation and vote in person,
25	via telephone conference, or via video conference.

1	(i) Prohibition on Compensation.—A member of
2	the Board of the Corporation shall serve without pay, and
3	shall not otherwise benefit, directly or indirectly, as a result
4	of their service to the Corporation, but shall be allowed a
5	per diem allowance for travel expenses, at rates authorized
6	for an employee of an agency under subchapter I of chapter
7	57 of title 5, United States Code, while away from the home
8	or regular place of business of the member in the perform-
9	ance of the duties of the Corporation.
10	SEC. 204. OFFICERS, EMPLOYEES, AND COMMITTEES OF
11	THE CORPORATION.
12	(a) Officers and Employees.—
13	(1) In general.—The Corporation shall have a
14	Chief Executive Officer, and such other officers and
15	employees as may be named and appointed by the
16	Board for terms and at rates of compensation fixed
17	by the Board pursuant to this subsection. The Chief
18	Executive Officer may name and appoint such em-
19	ployees as are necessary. All officers and employees
20	shall serve at the pleasure of the Board.
21	(2) Limitation.—No individual other than a
22	citizen of the United States may be an officer of the
23	Corporation.
24	(3) Nonpolitical nature of appointment.—
	(b) Itom online milens of milentiment.

1	lecting, appointing, promoting, or taking other per-
2	sonnel actions with respect to officers, agents, or em-
3	ployees of the Corporation.
4	(4) Compensation.—
5	(A) In general.—The Board may hire and
6	fix the compensation of employees hired under
7	this subsection as may be necessary to carry out
8	the purposes of the Corporation.
9	(B) Approval of compensation by fed-
10	ERAL MEMBERS.—Notwithstanding any other
11	provision of law, or any bylaw adopted by the
12	Corporation, all rates of compensation, including
13	benefit plans and salary ranges, for officers and
14	employees of the Board, shall be jointly approved
15	by the Federal members of the Board.
16	(C) Limitation on other compensa-
17	TION.—No officer or employee of the Corporation
18	may receive any salary or other compensation
19	(except for compensation for services on boards of
20	directors of other organizations that do not re-
21	ceive funds from the Corporation, on committees
22	of such boards, and in similar activities for such
23	organizations) from any sources other than the

Corporation for services rendered during the pe-

24

1	riod of the employment of the officer or employee
2	by the Corporation.
3	(5) Service on other boards.—Service by
4	any officer on boards of directors of other organiza-
5	tions, on committees of such boards, and in similar
6	activities for such organizations shall be subject to an-
7	nual advance approval by the Board and subject to
8	the provisions of the Corporation's Statement of Eth-
9	$ical\ Conduct.$
10	(6) Rule of construction.—No officer or em-
11	ployee of the Board or of the Corporation shall be con-
12	sidered to be an officer or employee of the United
13	States Government or of the government of the Dis-
14	trict of Columbia.
15	(b) Advisory Committees.—The Board—
16	(1) shall establish a standing public safety advi-
17	sory committee to assist the Board in carrying out its
18	duties and responsibilities under this subtitle; and
19	(2) may establish additional standing or ad hoc
20	committees, panels, or councils as the Board deter-
21	mines are necessary.
22	(c) Selection of Agents, Consultants, and Ex-
23	PERTS.—

1	(1) In GENERAL.—The Board shall select parties
2	to serve as its agents, consultants, or experts in a fair,
3	transparent, and objective manner.
4	(2) BINDING AND FINAL.—If the selection of an
5	agent, consultant, or expert satisfies the requirements
6	under paragraph (1), the selection of that agent, con-
7	sultant, or expert shall be final and binding.
8	SEC. 205. NONPROFIT AND NONPOLITICAL NATURE OF THE
9	CORPORATION.
10	(a) Stock.—The Corporation shall have no power to
11	issue any shares of stock, or to declare or pay any divi-
12	dends.
13	(b) Profit.—No part of the income or assets of the
14	Corporation shall inure to the benefit of any director, offi-
15	cer, employee, or any other individual associated with the
16	Corporation, except as salary or reasonable compensation
17	for services.
18	(c) Politics.—The Corporation may not contribute to
19	or otherwise support any political party or candidate for
20	elective public office.
21	(d) Prohibition on Lobbying Activities.—The
22	Corporation shall not engage in lobbying activities (as de-
23	fined in section 3(7) of the Lobbying Disclosure Act of 1995
24	(5 U.S.C. 1602(7))).

1	SEC. 206. POWERS, DUTIES, AND RESPONSIBILITIES OF THE
2	CORPORATION.
3	(a) General Powers.—The Corporation shall have
4	the authority to do the following:
5	(1) To adopt and use a corporate seal.
6	(2) To have succession until dissolved by an Act
7	of Congress.
8	(3) To prescribe, through the actions of its
9	Board, bylaws not inconsistent with Federal law and
10	the laws of the District of Columbia, regulating the
11	manner in which the Corporation's general business
12	may be conducted and the manner in which the privi-
13	leges granted to the Corporation by law may be exer-
14	cised.
15	(4) To exercise, through the actions of its Board,
16	all powers specifically granted by the provisions of
17	this subtitle, and such incidental powers as shall be
18	necessary.
19	(5) To hold such hearings, sit and act at such
20	times and places, take such testimony, and receive
21	such evidence as the Corporation considers necessary
22	to carry out its responsibilities and duties.
23	(6) To obtain grants and funds from and make
24	contracts with individuals, private companies, orga-
25	nizations, institutions, and Federal, State, regional,
26	and local agencies.

1	(7) To accept, hold, administer, and utilize gifts,
2	donations, and bequests of property, both real and
3	personal, for the purposes of aiding or facilitating the
4	work of the Corporation.
5	(8) To issue notes or bonds to purchasers of such
6	instruments in the private capital markets.
7	(9) To incur indebtedness to carry out the pur-
8	poses of this subtitle.
9	(10) To spend funds under paragraph (6) in a
10	manner authorized by the Board, but only for pur-
11	poses that will advance or enhance public safety com-
12	munications consistent with this Act.
13	(11) To establish reserve accounts with funds
14	that the Corporation may receive from time to time
15	that exceed the amounts required by the Corporation
16	to timely pay its debt service and other obligations.
17	(12) To expend the funds placed in any reserve
18	accounts established under paragraph (11) (including
19	interest earned on any such amounts) in a manner
20	authorized by the Board, but only for purposes that—
21	(A) will advance or enhance public safety
22	communications consistent with this Act; or
23	(B) are otherwise approved by an Act of
24	Congress.

(13) To take such other actions as the Corpora-
tion (through its Board) may from time to time deter-
mine necessary, appropriate, or advisable to accom-
plish the purposes of this subtitle.
(b) Duty and Responsibility to Deploy and Op-
erate 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 nation-
wide public safety interoperable broadband network
in consultation with Federal, State, tribal, and local
public safety entities, the Director of NIST, the Com-
mission, and the public safety advisory committee es-
tablished in section 204(b)(1), including by, at a min-
imum—
(A) ensuring nationwide standards for use
and access of the network;
(B) issuing open, transparent, and competi-
tive requests for proposals to private sector enti-
ties for the purposes of building, operating, and
maintaining the network;
(C) encouraging that such requests leverage,
to the maximum extent economically desirable,

1	existing commercial wireless infrastructure to
2	speed deployment of the network; and
3	(D) managing and overseeing the imple-
4	mentation and execution of contracts or agree-
5	ments with non-Federal entities to build, oper-
6	ate, and maintain the network.
7	(2) Interoperability.—In carrying out the du-
8	ties and responsibilities of this subsection, including
9	issuing requests for proposals, the Corporation shall—
10	(A) ensure the safety, security, and resil-
11	iency of the network, including requirements for
12	protecting and monitoring the network to protect
13	$against\ cyber attack;$
14	(B) promote competition in the equipment
15	market, including devices for public safety com-
16	munications, by requiring that equipment for
17	use on the network be—
18	(i) built to open, non-proprietary, com-
19	$mercially\ available\ standards;$
20	(ii) capable of being used by any pub-
21	lic safety entity and by multiple vendors
22	across all public safety broadband networks
23	operating in the 700 MHz band; and
24	(iii) backward-compatible with exist-
25	ing second and third generation commercial

1	networks to the extent that such capabilities
2	are necessary and technically and economi-
3	cally reasonable; and
4	(C) promote integration of the network with
5	public safety answering points or their equiva-
6	lent.
7	(3) Rural coverage.—In carrying out the du-
8	ties and responsibilities of this subsection, including
9	issuing requests for proposals, the Corporation, con-
10	sistent with the license granted under section 201,
11	shall require deployment phases with substantial
12	rural coverage milestones as part of each phase of the
13	construction and deployment of the network. To the
14	maximum extent economically desirable, such pro-
15	posals shall include partnerships with existing com-
16	mercial mobile providers to utilize cost-effective op-
17	portunities to speed deployment in rural areas.
18	(4) Execution of Authority.—In carrying
19	out the duties and responsibilities of this subsection,
20	the Corporation may—
21	(A) obtain grants from and make contracts
22	with individuals, private companies, and Fed-
23	eral, State, regional, and local agencies;
24	(B) hire or accept voluntary services of con-
25	sultants, 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 nec-
essary to accomplish the purposes set forth in
this subsection.
(c) Other Specific Duties and Responsibil-
ITIES.—
(1) Establishment of network policies.—
In carrying out the requirements under subsection
(b), the Corporation shall develop—
(A) requests for proposals with appro-
priate—
(i) timetables for construction, includ-
ing 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;

1	(iii) service levels;
2	(iv) performance criteria; and
3	(v) other similar matters for the con-
4	struction and deployment of such network;
5	(B) the technical and operational require-
6	ments of the network;
7	(C) practices, procedures, and standards for
8	the management and operation of such network;
9	(D) terms of service for the use of such net-
10	work, including billing practices; and
11	(E) ongoing compliance review and moni-
12	toring of the—
13	(i) management and operation of such
14	network;
15	(ii) practices and procedures of the en-
16	tities operating on and the personnel using
17	such network; and
18	(iii) necessary training needs of net-
19	work operators and users.
20	(2) State and local planning.—
21	(A) REQUIRED CONSULTATION.—In devel-
22	oping requests for proposals and otherwise car-
23	rying out its responsibilities under this Act, the
24	Corporation shall consult with regional, State,
25	tribal, and local jurisdictions regarding the dis-

tribution and expenditure of any amounts re-
quired 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 selec-
tion of entities seeking access to or use of
the nationwide public safety interoperable
broadband network established under sub-
section (b); and
(vii) training needs of local users.
(B) Method of consultation.—The con-
sultation required under subparagraph (A) shall
occur between the Corporation and the single of-
ficer or governmental body designated under sec-
$tion \ 222(d).$

1	(3) Leveraging existing infrastructure.—
2	In carrying out the requirement under subsection (b),
3	the Corporation shall enter into agreements to utilize,
4	to the maximum extent economically desirable, exist-
5	ing—
6	(A) commercial or other communications
7	infrastructure; and
8	(B) Federal, State, tribal, or local infra-
9	structure.
10	(4) Maintenance and upgrades.—The Cor-
11	poration shall ensure the maintenance, operation, and
12	improvement of the nationwide public safety inter-
13	operable broadband network established under sub-
14	section (b), including by ensuring that the Corpora-
15	tion updates and revises any policies established
16	under paragraph (1) to take into account new and
17	evolving technologies.
18	(5) Roaming agreements.—The Corporation
19	shall negotiate and enter into, as it determines appro-
20	priate, roaming agreements with commercial network
21	providers to allow the nationwide public safety inter-
22	operable broadband network to roam onto commercial
23	networks and gain prioritization of public safety
24	communications over such networks in times of an
25	emergency.

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(6) Network infrastructure and device 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 standards settion 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 for-Eign governments.—The Corporation shall not have

1	the authority to negotiate or enter into any agree-
2	ments with a foreign government on behalf of the
3	United States.
4	(d) Use of Mails.—The Corporation may use the
5	United States mails in the same manner and under the
6	same conditions as the departments and agencies of the
7	United States.
8	SEC. 207. INITIAL FUNDING FOR THE CORPORATION.
9	(a) NTIA LOANS TO THE CORPORATION.—
10	(1) In general.—Prior to the commencement of
11	incentive auctions to be carried out under section
12	309(j)(8)(F) of the Communications Act of 1934 or
13	the auction of spectrum pursuant to section 302, the
14	NTIA is authorized to make loans to the Corporation.
15	(2) Condition of Loans.—At the time of appli-
16	cation for, and as a condition to, any such loan, the
17	Corporation shall file with the NTIA a statement
18	with respect to the anticipated use of the proceeds of
19	$the\ loan.$
20	(3) NTIA APPROVAL.—If the NTIA determines
21	that such loan is necessary for the Corporation to
22	carry out its duties and responsibilities under this
23	subtitle and that the Corporation has submitted a
24	plan which provides as reasonable an assurance of
25	prompt repayment as may be feasible under the cir-

1 cumstances, then the NTIA shall so certify to the Sec-2 retary of the Treasury, and issue notes or other obli-3 gations to the Secretary of the Treasury pursuant to subsection (b). 4 5 (b) NTIA NOTES ISSUED TO TREASURY.— 6 (1) In general.—To enable the NTIA to make 7 loans under subsection (a), the NTIA is authorized to 8 issue to the Secretary of the Treasury notes or other 9 obligations, in such forms and denominations, bear-10 ing such maturities, and subject to such terms and 11 conditions, as may be prescribed by the Secretary of 12 the Treasury. 13 (2) Interest on notes.— 14 (A) Establishment.—Any notes or other 15 obligations issued pursuant to paragraph (1) 16 shall bear interest at a rate determined by the 17 Secretary of the Treasury, taking into consider-18 ation the current average market yield on out-19 standing marketable obligations of the United

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(B) REDUCTION.—The Secretary of the Treasury may reduce the interest rate set forth

other obligations.

States of comparable maturities during the

month preceding the issuance of the notes or

1	under subparagraph (A) if he determines such
2	reduction to be in the national interest.
3	(3) Authority of the treasury to sell
4	NOTES.—The Secretary of the Treasury may at any
5	time sell any of the notes or other obligations acquired
6	by him under this subsection. All redemptions, pur-
7	chases, and sales by the Secretary of the Treasury of
8	such notes or other obligations shall be treated as pub-
9	lic debt transactions of the United States.
10	SEC. 208. PERMANENT SELF-FUNDING; DUTY TO ASSESS
11	AND COLLECT FEES FOR NETWORK USE.
12	(a) In General.—The Corporation is authorized to
13	assess and collect the following fees:
14	(1) Network user fee.—A user or subscrip-
15	tion fee from each entity, including any public safety
16	entity or secondary user, that seeks access to or use
17	of the nationwide public safety interoperable
18	broadband network established under this subtitle.
19	(2) Lease fees related to network capac-
20	ITY.—
21	(A) In general.—A fee from any entity
22	that seeks to enter into a covered leasing agree-
23	ment.
24	(B) Covered leasing agreement.—For
25	purposes of subparagraph (A), a "covered leasing

1	agreement" means a written agreement between
2	the Corporation and secondary user to permit—
3	(i) access to network capacity on a sec-
4	ondary basis for non-public safety services;
5	and
6	(ii) the spectrum allocated to such enti-
7	ty to be used for commercial transmissions
8	along the dark fiber of the long-haul net-
9	work of such entity.
10	(3) Lease fees related to network equip-
11	MENT AND INFRASTRUCTURE.—A fee from any entity
12	that seeks access to or use of any equipment or infra-
13	structure, including antennas or towers, constructed
14	or otherwise owned by the Corporation.
15	(b) Establishment of Fee Amounts; Permanent
16	Self-funding.—The total amount of the fees assessed for
17	each fiscal year pursuant to this section shall be sufficient,
18	and shall not exceed the amount necessary, to recoup the
19	total expenses of the Corporation in carrying out its duties
20	and responsibilities described under this subtitle for the fis-
21	cal year involved.
22	(c) Required Reinvestment of Funds.—The Cor-
23	poration shall reinvest amounts received from the assess-
24	ment of fees under this section in the nationwide public
25	safety interoperable broadband network by using such funds

1	only for constructing, maintaining, or improving the net-
2	work.
3	SEC. 209. AUDIT AND REPORT.
4	(a) AUDIT.—
5	(1) In general.—The financial transactions of
6	the Corporation for any fiscal year during which
7	Federal funds are available to finance any portion of
8	its operations shall be audited by the Comptroller
9	General of the United States annually in accordance
10	with the principles and procedures applicable to com-
11	mercial corporate transactions and under such rules
12	and regulations as may be prescribed by the Comp-
13	troller General. Each audit conducted by the Comp-
14	troller General under this paragraph shall be made
15	available to Congress.
16	(2) Location.—Any audit conducted under
17	paragraph (1) shall be conducted at the place or
18	places where accounts of the Corporation are nor-
19	mally kept.
20	(3) Access to corporation books and docu-
21	MENTS.—
22	(A) In General.—For purposes of an audit
23	conducted under paragraph (1), the representa-
24	tives of the Comptroller General shall—

1	(i) have access to all books, accounts,
2	records, reports, files, and all other papers,
3	things, or property belonging to or in use by
4	the Corporation that pertain to the finan-
5	cial transactions of the Corporation and are
6	necessary to facilitate the audit; and
7	(ii) be afforded full facilities for
8	verifying transactions with the balances or
9	securities held by depositories, fiscal agents,
10	and custodians.
11	(B) Requirement.—All books, accounts,
12	records, reports, files, papers, and property of the
13	Corporation shall remain in the possession and
14	custody of the Corporation.
15	(b) Report.—
16	(1) In General.—The Comptroller General of
17	the United States shall submit a report of each audit
18	conducted under subsection (a) to—
19	(A) the appropriate committees of Congress;
20	(B) the President; and
21	(C) the Corporation.
22	(2) Contents.—Each report submitted under
23	paragraph (1) shall contain—
24	(A) such comments and information as the
25	Comptroller General determines necessary to in-

1	form Congress of the financial operations and
2	condition of the Corporation;
3	(B) any recommendations of the Comp-
4	troller General relating to the financial oper-
5	ations and condition of the Corporation; and
6	(C) a description of any program, expendi-
7	ture, or other financial transaction or under-
8	taking of the Corporation that was observed dur-
9	ing the course of the audit, which, in the opinion
10	of the Comptroller General, has been carried on
11	or made without the authority of law.
12	SEC. 210. ANNUAL REPORT TO CONGRESS.
13	(a) In General.—Not later than 1 year after the date
14	of enactment of this Act, and each year thereafter, the Cor-
15	poration shall submit an annual report covering the pre-
16	ceding fiscal year to the appropriate committees of Con-
17	gress.
18	(b) Required Content.—The report required under
19	subsection (a) shall include—
20	(1) a comprehensive and detailed report of the
21	operations, activities, financial condition, and accom-
22	plishments of the Corporation under this section; and
23	(2) such recommendations or proposals for legis-
24	lative or administrative action as the Corporation
25	deems appropriate.

1	(c) Availability to Testify.—The directors, officers
2	employees, and agents of the Corporation shall be available
3	to testify before the appropriate committees of the Congress
4	with respect to—
5	(1) the report required under subsection (a);
6	(2) the report of any audit made by the Comp
7	troller General under section 209; or
8	(3) any other matter which such committees may
9	determine appropriate.
10	SEC. 211. PUBLIC SAFETY ROAMING AND PRIORITY ACCESS
11	The Commission may adopt rules, if necessary in the
12	public interest, to improve the ability of public safety net
13	works to roam onto commercial networks and to gain pri
14	ority access to commercial networks in an emergency if—
15	(1) the public safety entity equipment is tech
16	nically compatible with the commercial network;
17	(2) the commercial network is reasonably com
18	pensated; and
19	(3) such access does not preempt or otherwise ter
20	minate or degrade all existing voice conversations or
21	data sessions.
22	SEC. 212. TRANSITIONAL ANALYSIS OF PUBLIC SAFETY
23	NETWORK ATTRIBUTES.
24	(a) Establishment of Evaluation Framework.—
25	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 3 Director of the Office of Management and Budget, shall de-4 velop an evaluation framework. The development of such an evaluation framework shall be informed by a study commis-5 sioned by the Director of NIST and completed by an inde-6 pendent and neutral agent, consultant, or expert, who has— 8 (1) at least 5 years of technical and economic ex-9 perience in analyzing the costs and effectiveness of 10 communications networks; and 11 (2) agreed not to contract or subcontract with the 12 Corporation for at least 3 years from the date such 13 study is completed other than for follow-on and re-14 lated studies. 15 (b) Considerations.—The evaluation framework required to be developed under subsection (a) shall take into 16 17 consideration the public safety network attributes identified in a report completed by the Visiting Committee on Ad-18 vanced Technology of NIST. The report required under this 19 subsection shall identify the desired attributes of the nation-21 wide public safety interoperable broadband network to be established under this title, as well as any other attributes the Secretary of Commerce may request.

1	(c) Required Evaluations.—The evaluation frame-
2	work required to be developed under subsection (a) shall
3	evaluate—
4	(1) the marginal cost of each public safety net-
5	work attribute in developing, deploying, and oper-
6	ating the nationwide public safety interoperable
7	broadband network to be established under this title,
8	(2) the benefit of each public safety network at-
9	tribute to the nationwide public safety interoperable
10	broadband network;
11	(3) the economic feasibility of requiring that
12	each public safety attribute be required as part of the
13	nationwide public safety interoperable broadband net-
14	work;
15	(4) the resulting competitive vendor supply eco-
16	system created by each public safety attribute that is
17	a part of the nationwide public safety interoperable
18	broadband network; and
19	(5) the level of variability in regional require-
20	ments for each public safety attribute that is a part
21	of the nationwide public safety interoperable
22	$broadband\ network.$
23	(d) Provision of Framework to the Corpora-
24	TION.—The evaluation framework required to be developed
25	under subsection (a) shall be provided to the Board of Direc-

- 1 tors of the Corporation, and the Corporation shall utilize
- 2 the findings of such framework to develop a cost-benefit
- 3 analysis to inform the building, deployment, and operation
- 4 of the nationwide public safety interoperable broadband
- 5 network to be established under this title.
- 6 (e) OMB RESPONSIBILITY.—The Director of the Office
- 7 of Management and Budget, or his designee, as a member
- 8 of the Board of Directors of the Corporation, shall have the
- 9 responsibility to ensure that evaluation framework required
- 10 to be developed under subsection (a) is appropriately uti-
- 11 lized by the Corporation.
- 12 SEC. 213. PROHIBITION ON DIRECT OFFERING OF COMMER-
- 13 CIAL TELECOMMUNICATIONS SERVICE DI-
- 14 RECTLY TO CONSUMERS.
- 15 (a) In General.—The Corporation shall not offer,
- 16 provide, or market commercial telecommunications or in-
- 17 formation services directly to consumers.
- 18 (b) Rule of Construction.—Nothing in this section
- 19 shall be construed to prohibit the Corporation and a sec-
- 20 ondary user from entering into a covered leasing agreement
- 21 pursuant to section 208(a)(2)(B). Nothing in this section
- 22 shall be construed to limit the Corporation from collecting
- 23 lease fees related to network equipment and infrastructure
- 24 pursuant to section 208(a)(3).

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1	SEC. 214. PROVISION OF TECHNICAL ASSISTANCE.
2	The Commission may provide technical assistance to
3	the Corporation and may take any action necessary to as-
4	sist the Corporation in effectuating its duties and respon-
5	sibilities under this subtitle.
6	Subtitle B—Public Safety
7	Commitments
8	SEC. 221. STATE AND LOCAL IMPLEMENTATION FUND.
9	(a) Establishment.—There is established in the
10	Treasury of the United States a fund to be known as the
11	"State and Local Implementation Fund".
12	(b) Purpose.—The Assistant Secretary shall establish
13	and administer the grant program under section 222 using
14	the funds deposited in the State and Local Implementation
15	Fund.
16	(c) Crediting of Receipts.—There shall be depos-
17	ited into or credited to the State and Local Implementation
18	Fund—
19	(1) any amounts specified in section 401; and
20	(2) any amounts borrowed by the Assistant Sec-
21	retary under subsection (d).
22	(d) Borrowing Authority.—
23	(1) In General.—The Assistant Secretary may

borrow from the general fund of the Treasury begin-

ning on October 1, 2011, such sums as may be nec-

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1	essary, but not to exceed \$250,000,000, to implement
2	section 222.
3	(2) Reimbursement.—The Assistant Secretary
4	shall reimburse the general fund of the Treasury,
5	without interest, for any amounts borrowed under
6	subparagraph (A) as funds are deposited into the
7	State and Local Implementation Fund.
8	SEC. 222. STATE AND LOCAL IMPLEMENTATION.
9	(a) Establishment of State and Local Imple-
10	MENTATION GRANT PROGRAM.—The Assistant Secretary, in
11	consultation with the Corporation, shall take such action
12	as is necessary to establish a grant program to make grants
13	to States to assist State, regional, tribal, and local jurisdic-
14	tions to identify, plan, and implement the most efficient
15	and effective way for such jurisdictions to utilize and inte-
16	grate the infrastructure, equipment, and other architecture
17	associated with the nationwide public safety interoperable
18	broadband network established under subtitle A to satisfy
19	the wireless communications and data services needs of that
20	jurisdiction, including with regards to coverage, siting, and
21	other needs.
22	(b) Matching Requirements; Federal Share.—
23	(1) In general.—The Federal share of the cost
24	of any activity carried out using a grant under this
25	section may not exceed 80 percent of the eligible costs

1	of carrying out that activity, as determined by the
2	Assistant Secretary, in consultation with the Cor-
3	poration.
4	(2) WAIVER.—The Assistant Secretary may
5	waive, in whole or in part, the requirements of para-
6	graph (1) for good cause shown if the Assistant Sec-
7	retary determines that such a waiver is in the public
8	interest.
9	(c) Programmatic Requirements.—Not later than
10	6 months after the establishment of the bylaws of the Cor-
11	poration pursuant to section 206, the Assistant Secretary,
12	in consultation with the Corporation, shall establish re-
13	quirements relating to the grant program to be carried out
14	under this section, including the following:
15	(1) Defining eligible costs for purposes of sub-
16	section (b)(1).
17	(2) Determining the scope of eligible activities
18	for grant funding under this section.
19	(3) Prioritizing grants for activities that ensure
20	coverage in rural as well as urban areas.
21	(d) Certification and Designation of Officer or
22	Governmental Body.—In carrying out the grant pro-
23	gram established under this section, the Assistant Secretary
24	shall require each State to certify in its application for
25	grant funds that the State has designated a single officer

1	or governmental body to serve as the coordinator of imple-
2	mentation of the grant funds.
3	SEC. 223. PUBLIC SAFETY WIRELESS COMMUNICATIONS RE-
4	SEARCH AND DEVELOPMENT.
5	(a) NIST DIRECTED RESEARCH AND DEVELOPMENT
6	Program.—From amounts made available from the Public
7	Safety Trust Fund established under section 401, the Direc-
8	tor of NIST, in consultation with the Commission, the Sec-
9	retary of Homeland Security, and the National Institute
10	of Justice of the Department of Justice, as appropriate,
11	shall conduct research and assist with the development of
12	standards, technologies, and applications to advance wire-
13	less public safety communications.
14	(b) Required Activities.—In carrying out the re-
15	quirement under subsection (a), the Director of NIST, in
16	consultation with the Corporation and the public safety ad-
17	visory committee established under section 204(b)(1),
18	shall—
19	(1) document public safety wireless communica-
20	tions technical requirements;
21	(2) accelerate the development of the capability
22	for communications between currently deployed public
23	safety narrowband systems and the nationwide public
24	safety interoperable broadband network to be estab-
25	lished under this title;

1	(3) establish a research plan, and direct research
2	that addresses the wireless communications needs o
3	public safety entities beyond what can be provided by
4	the current generation of broadband technology;
5	(4) accelerate the development of mission critica
6	voice, including device-to-device "talkaround" capa
7	bility over broadband networks, public safety
8	prioritization, authentication capabilities, and stand
9	ard application programing interfaces for the nation
10	wide public safety interoperable broadband network to
11	be established under this title, if necessary and prac
12	tical;
13	(5) accelerate the development of communication.
14	technology and equipment that can facilitate the even
15	tual migration of public safety narrowband commu
16	nications to the nationwide public safety interoper
17	able broadband network to be established under this
18	title; and
19	(6) convene working groups of relevant govern
20	ment and commercial parties to achieve the require
21	ments in paragraphs (1) through (5).
22	SEC. 224. ADVANCED INFORMATION AND COMMUNICA
23	TIONS TECHNOLOGY RESEARCH.
24	(a) Telecommunications Innovation Accelera
25	TION.—

1 (1) In General.—In order to accelerate the pace 2 of innovation with respect to advanced telecommuni-3 cations capability (as such term is defined in section 4 706(c)(1) of the Telecommunications Act of 1996 (47) 5 U.S.C. 1302), the Director of NIST and the Director 6 of the National Science Foundation shall expand ex-7 isting programs to support and promote innovation in the United States through transformative tele-8 9 communications research. 10 (2) Competitions.—The Director of NIST and 11 the Director of the National Science Foundation shall, 12 on an annual basis, jointly solicit proposals to ad-13 dress areas of national need for transformative tele-14 communications research, as such areas are identified 15 by each of the Directors. 16 (3) Transformative telecommunications re-17 SEARCH DEFINED.—In this section, the term "trans-18 formative telecommunications research" means basic 19 research with respect to telecommunications, as that 20 term is defined in section 3(43) of the Communica-21 tions Act of 1934 (47 U.S.C. 153(43)) that involves 22 ideas, discoveries, or tools that — 23 (A) radically change understanding of an 24 important existing scientific or engineering con-25 cept or educational practice; or

1	(B) leads to the creation of a new paradigm
2	or field of science, engineering, or education re-
3	lated to telecommunications.
4	(b) Advanced Communications Services for All
5	Americans.—The Director of NIST shall continue to sup-
6	port research and support standards development in ad-
7	vanced information and communications technologies fo-
8	cused on enhancing or facilitating the availability and af-
9	fordability of advanced communications services to all
10	Americans, in order to implement the Institute's respon-
11	sibilities under section $2(c)(12)$ of the National Institute of
12	Standards and Technology Act (15 U.S.C. 272(c)(12)). The
13	Director of NIST shall support intramural research and co-
14	operative research with institutions of higher education (as
15	defined in section 101(a) of the Higher Education Act of
16	1965 (20 U.S.C. 1001(a))) and industry.
17	(c) Emerging Wireless Technology Research.—
18	(1) In general.—From amounts made avail-
19	able from the Public Safety Trust Fund established
20	under section 401, the Director of the National
21	Science Foundation shall expand existing grant pro-
22	grams to include transformative telecommunications
23	research relevant to emerging wireless technologies
24	that may enhance advanced communications services
25	or make such services more affordable for consumers.

I	Areas of research to be supported through these grants
2	may include—
3	(A) opportunistic spectrum sharing;
4	(B) wireless cyberphysical systems;
5	(C) more efficient use of the wireless spec-
6	trum;
7	(D) dynamic spectrum access, including
8	cognitive radio technologies;
9	$(E)\ interference\ mitigation;$
10	(F) emerging user interface and sensing
11	technologies;
12	(G) wireless ad hoc networks;
13	(H) network resiliency and cybersecurity;
14	(I) communications interoperability, par-
15	ticularly between heterogeneous network tech-
16	nologies;
17	$(J)\ pervasive\ information\ technology;$
18	(K) nanoelectronics for communications ap-
19	plications;
20	$(L)\ low-power\ communications\ electronics;$
21	(M) networking protocols and architectures;
22	and
23	(N) such other related areas as the Director
24	$finds\ appropriate.$

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(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—

1	(A) technologies to increase wireless data
2	transmission speeds to enable the next generation
3	of Federal networks;
4	(B) spectrum sharing and interference miti-
5	gation techniques to enable more efficient uses of
6	$wireless\ spectrum;$
7	(C) technologies to allow and foster the re-
8	allocation of spectrum, if appropriate, for non-
9	Federal use; and
10	(D) research that fosters the conversion of
11	the Department of Defense's wireless communica-
12	tions systems, and those of other Federal users,
13	to more advanced or more efficient systems.
14	(2) Cooperation.—In carrying out this sub-
15	section, DARPA shall collaborate where appropriate
16	with NTIA, NIST, NSF, and other interested Federal
17	agencies.
18	(3) Limitation on use.—Not more than 5 per-
19	cent of any amounts made available in a fiscal year
20	from the Public Safety Trust Fund established under
21	section 401 may be used by DARPA to cover the ad-
22	ministrative expenses incurred in carrying out this
23	subsection.
24	(4) OMB REVIEW.—Amounts appropriated to
25	DARPA under this subsection shall be available upon

- 1 approval by the Director of the Office of Management 2 and Budget of an implementation plan that has been 3 developed and submitted to the Director by the head 4 of DARPA. TITLE III—SPECTRUM AUCTION 5 **AUTHORITY** 6 7 SEC. 301. EXTENSION OF AUCTION AUTHORITY. 8 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". 10 SEC. 302. AUCTION OF SPECTRUM. 12 (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 14 15 reallocation, at a minimum, 15 megahertz of contiguous spectrum at frequencies located between 1675 megahertz and 16 1710 megahertz, inclusive, minus the geographic exclusion zones, or any amendment thereof, identified in NTIA's Oc-18 19 tober 2010 report entitled "An Assessment of Near-Term Vi-20 ability of Accommodating Wireless Broadband Systems in 21 1675–1710 MHz, 1755–1780 MHz, 3500–3650 MHz, and 22 4200-4220 MHz, 4380-4400 MHz Bands". 23 (b) Auction.—Not later than January 31, 2014, the Commission shall conduct the auctions of the following li-
- 24 Commission shall conduct the auctions of the following last censes, by commencing the bidding for:

1	(1) The spectrum between the frequencies of 1915
2	megahertz and 1920 megahertz, inclusive.
3	(2) The spectrum between the frequencies of 1995
4	megahertz and 2000 megahertz, inclusive.
5	(3) The spectrum between the frequencies of 2020
6	megahertz and 2025 megahertz, inclusive.
7	(4) The spectrum between the frequencies of 2155
8	megahertz and 2175 megahertz, inclusive.
9	(5) The spectrum between the frequencies of 2175
10	megahertz and 2180 megahertz, inclusive.
11	(6) The spectrum between the frequencies of 1755
12	megahertz and 1850 megahertz, inclusive.
13	(7) The spectrum identified pursuant to sub-
14	section (a).
15	(c) Auction Organization.—The Commission may,
16	if technically feasible and consistent with the public inter-
17	est, combine the spectrum identified in paragraphs (4), (5),
18	and the portion of paragraph (6) between the frequencies
19	of 1755 megahertz and 1780 megahertz, inclusive, of sub-
20	section (b) in an auction of licenses for paired spectrum
21	blocks.
22	(d) Further Reallocation of Certain Other
23	Spectrum.—
24	(1) Covered spectrum.—For purposes of this
25	subsection, the term "covered spectrum" means the

1	portion of the electromagnetic spectrum between the
2	frequencies of 3550 to 3650 megahertz, inclusive,
3	minus the geographic exclusion zones, or any amend-
4	ment thereof, identified in NTIA's October 2010 re-
5	port entitled "An Assessment of Near-Term Viability
6	of Accommodating Wireless Broadband Systems in
7	1675–1710 MHz, 1755–1780 MHz, 3550–3650 MHz,
8	and 4200–4220 MHz, 4380–4400 MHz Bands".
9	(2) In general.—Consistent with requirements
10	of section 309(j) of the Communications Act of 1934,
11	the Commission shall reallocate covered spectrum for
12	assignment by competitive bidding unless the Presi-
13	dent of the United States determines that—
14	(A) such spectrum cannot be reallocated due
15	to the need to protect incumbent Federal systems
16	from interference; or
17	(B) allocation of other spectrum—
18	(i) better serves the public interest, con-
19	venience, and necessity; and
20	(ii) can reasonably be expected to
21	produce receipts comparable to what the
22	covered spectrum might auction for without
23	the geographic exclusion zones.
24	(3) Actions required if covered spectrum
25	CANNOT BE REALLOCATED.—

1	(A) In general.—If the President makes a
2	determination under paragraph (2) that the cov-
3	ered spectrum cannot be reallocated, then the
4	President shall, within 1 year after the date of
5	such determination—
6	(i) identify alternative bands of fre-
7	quencies totaling more than 20 megahertz
8	and no more than 100 megahertz of spec-
9	trum used primarily by Federal agencies
10	that satisfy the requirements of clauses (i)
11	and (ii) of paragraph $(2)(B)$;
12	(ii) report to the appropriate commit-
13	tees of Congress and the Commission and
14	identification of such alternative spectrum
15	for assignment by competitive bidding; and
16	(iii) make such alternative spectrum
17	for assignment immediately available for
18	reallocation.
19	(B) Auction.—If the President makes a de-
20	termination under paragraph (2) that the cov-
21	ered spectrum cannot be reallocated, the Commis-
22	sion shall commence the bidding of the alter-
23	native spectrum identified pursuant to subpara-
24	graph (A) within 3 years of the date of enact-
25	ment of this Act.

1	(4) Actions required if covered spectrum
2	CAN BE REALLOCATED.—If the President does not
3	make a determination under paragraph (1) that the
4	covered spectrum cannot be reallocated, the Commis-
5	sion shall commence the competitive bidding for the
6	covered spectrum within 3 years of the date of enact-
7	ment of this Act.
8	(e) Proceeds.—Notwithstanding section $309(j)(8)(A)$
9	of the Communications Act of 1934, and except as provided
10	in subparagraphs (B), (C), and (D) of such section
11	309(j)(8), all proceeds (including deposits and up front
12	payments from successful bidders) from the auctions to be
13	carried out pursuant to subsections (b) and (d) shall be de-
14	posited with the Public Safety Trust Fund established
15	under section 401.
16	(f) Amendments to Design Requirements Re-
17	LATED TO COMPETITIVE BIDDING.—Section 309(j) of the
18	Communications Act of 1934 (47 U.S.C. 309(j)) is amend-
19	ed—
20	(1) in paragraph (3)—
21	$(A)\ in\ subparagraph\ (E)(ii),\ by\ striking\ ";$
22	and" and inserting a semicolon;
23	(B) in subparagraph (F), by striking the
24	period at the end and inserting a semicolon; and
25	(C) by adding at the end the following:

1	"(G) ensuring that there is an adequate op-
2	portunity for applicants to obtain licenses cov-
3	ering both large and small geographic areas, as
4	such areas are determined by the Commission.";
5	and
6	(2) by amending clause (i) of the second sentence
7	of paragraph $(8)(C)$ to read as follows:
8	"(i) the deposits—
9	"(I) of successful bidders of any
10	auction conducted pursuant to sub-
11	paragraph (F) or to section 302 of the
12	Public Safety Spectrum and Wireless
13	Innovation Act shall be paid to the
14	Public Safety Trust Fund established
15	under section 401 of such Act; and
16	"(II) of successful bidders of any
17	other auction shall be paid to the
18	Treasury;".
19	SEC. 303. INCENTIVE AUCTION AUTHORITY.
20	(a) In General.—Paragraph (8) of section 309(j) of
21	the Communications Act of 1934 (47 U.S.C. 309(j)) is
22	amended—
23	(1) in subparagraph (A), by striking "(B), (D),
24	and (E) ," and inserting " (B) , (D) , (E) , and (F) ,";
25	and

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1	(2) by adding at the end the following:
2	"(F) Incentive Auction Authority.—
3	"(i) Authority.—Notwithstanding
4	any other provision of law, if the Commis-
5	sion determines that it is consistent with
6	the public interest in utilization of the spec-
7	trum for a licensee to relinquish voluntarily
8	some or all of its licensed spectrum usage
9	rights in order to permit the assignment of
10	new initial licenses through a competitive
11	bidding process subject to new service rules,
12	or the designation of new spectrum for unli
13	censed use, the Commission may disburse to
14	that licensee a portion of any auction pro-
15	ceeds that the Commission determines, in its
16	discretion, are attributable to the licensee's
17	relinquished spectrum usage rights, pro-
18	vided that television broadcast stations re-
19	quired to be carried pursuant to sections
20	338, 614, or 615 that voluntarily elect to
21	share a channel shall retain the rights to
22	carriage set forth in such sections and the
23	rules of the Commission, as such rights
24	apply to such station at its shared location
25	"(ii) Prohibition.—

1	"(I) In General.—The Commis-
2	sion may not reclaim spectrum li-
3	censed on a primary basis to a tele-
4	vision broadcast station, directly or in-
5	directly, on an involuntary basis for
6	purposes of providing spectrum to
7	carry out an incentive auction under
8	$this\ subparagraph.$
9	"(II) Exception.—The Commis-
10	sion may reclaim spectrum licensed to
11	a television broadcast station licensee
12	for the purposes of providing spectrum
13	to carry out an incentive auction
14	under this subparagraph, only if the
15	Commission assigns an identical
16	amount of contiguous spectrum, located
17	between channels 14 and 50, in the
18	same geographic market, if the spec-
19	trum was reclaimed from between
20	channels 14 and 51, or located between
21	channels 2 and 13, inclusive, in the
22	same geographic market, to the tele-
23	vision broadcast station licensee if the
24	spectrum was reclaimed from between
25	channels 2 and 13, provided that—

"(aa) the Commission may	1
not involuntarily co-locate mul-	2
tiple television broadcast station	3
licensees on the same channel; and	4
``(bb) $television$ $broadcast$	5
stations required to be carried	6
pursuant to sections 338, 614, or	7
615 that voluntarily elect to share	8
a channel shall retain the rights	9
to carriage set forth in such sec-	10
tions and the rules of the Commis-	11
sion, as such rights apply to such	12
station at its shared location.	13
"(III) Repacking.—When assign-	14
ing spectrum to television broadcast	15
station licensees pursuant to subclause	16
(II), if the Commission determines that	17
it is in the public interest to modify	18
the spectrum usage rights of any in-	19
cumbent licensee in order to facilitate	20
the assignment of such new initial li-	21
censes subject to new service rules, or	22
the designation of spectrum for an un-	23
licensed use, the Commission may dis-	24
burse to such licensee a portion of the	25

1	auction proceeds for the purpose of re-
2	locating to any alternative frequency
3	or location that the Commission may
4	designate, and the Commission shall,
5	to the extent technically feasible and in
6	the public interest, make reasonable ef-
7	forts to—
8	"(aa) preserve the amount of
9	population covered by a licensee's
10	signal within the licensee's service
11	area;
12	"(bb) avoid any involuntary
13	increase in interference to the li-
14	censee's signal that may otherwise
15	result from new spectrum assign-
16	ments;
17	"(cc) allow licensees assigned
18	to broadcast channels 2 through 6
19	to relocate to channels in the
20	UHF range, if possible and con-
21	sistent with the goals of the incen-
22	tive auction, as determined by the
23	Commission; and
24	"(dd) allow low power tele-
25	vision broadcast licensees assigned
4	"(dd) allow low power tele-

1	to channels in the UHF range
2	that are impacted by relocation of
3	other licensees pursuant to this
4	subclause to relocate to channels
5	in the VHF range.
6	"(IV) Unlicensed spectrum.—
7	With respect to frequency bands be-
8	tween 54 and 72 MHz, 76 and 88
9	MHz, 174 and 216 MHz, 470 and 698
10	MHz, 84 MHz shall be assigned via a
11	competitive bidding process. A portion
12	of the proceeds from the competitive
13	bidding of the frequency bands identi-
14	fied in the prior sentence may, if con-
15	sistent with the public interest, be dis-
16	bursed to other licensees, for the pur-
17	pose of ensuring that unlicensed spec-
18	trum remains available in these fre-
19	quency bands, nationwide, and in each
20	$local\ market.$
21	"(iii) Treatment of revenues.—
22	Notwithstanding subparagraph (A), and ex-
23	cept as provided in subparagraphs (B), (C),
24	and (D), all proceeds (including deposits
25	and up front payments from successful bid-

1	ders) from the auction of spectrum under
2	this subparagraph shall be deposited with
3	the Public Safety Trust Fund established
4	under section 401 of the Public Safety Spec-
5	trum and Wireless Innovation Act.
6	"(G) Establishment of incentive auc-
7	TION RELOCATION FUND.—
8	"(i) In general.—There is established
9	in the Treasury of the United States a fund
10	to be known as the 'Incentive Auction Relo-
11	cation Fund'.
12	"(ii) Administration.—The Assistant
13	Secretary shall administer the Incentive
14	Auction Relocation Fund using the amounts
15	deposited pursuant to this section.
16	"(iii) Crediting of receipts.—
17	There shall be deposited into or credited to
18	the Incentive Auction Relocation Fund any
19	amounts specified in section 401 of the Pub-
20	lic Safety Spectrum and Wireless Innova-
21	$tion \ Act.$
22	"(iv) Availability.—Amounts in the
23	Incentive Auction Relocation Fund shall be
24	available to the NTIA for use—

1	"(I) for a period not to exceed 18
2	months following the later of—
3	"(aa) the completion of in-
4	centive auction from which such
5	amounts were derived; or
6	"(bb) the date on which the
7	Commission issues all the new
8	channel assignments pursuant to
9	any repacking required under
10	$subparagraph\ (F)(ii);\ and$
11	"(II) without further appropria-
12	tion.
13	"(v) USE OF FUNDS.—Amounts in the
14	Incentive Auction Relocation Fund may
15	only be used by the NTIA, in consultation
16	with the Commission, to cover—
17	"(I) the reasonable costs of tele-
18	vision broadcast stations that are relo-
19	cated to a different spectrum channel
20	or geographic location following an in-
21	centive auction under subparagraph
22	(F), or that are impacted by such relo-
23	cations, including to cover the cost of
24	new equipment, installation, and con-
25	struction; and

1	"(11) the costs incurred by multi-
2	channel video programming distribu-
3	tors for new equipment, installation,
4	and construction related to the car-
5	riage of such relocated stations or the
6	carriage of stations that voluntarily
7	elect to share a channel, but retain
8	their existing rights to carriage pursu-
9	ant to sections 338, 614, and 615.".
10	(b) Incentive Auctions to Repurpose Certain
11	Mobile Satellite Services Spectrum for Terres-
12	TRIAL BROADBAND USE.—To the extent that the Commis-
13	sion makes available spectrum licenses on some or all of
14	the frequencies between 2000 and 2020 MHz and 2180 and
15	2200 MHz for terrestrial broadband use, such licenses shall
16	be assigned pursuant to the authority provided in section
17	309(j)(8) of the Communications Act of 1934 (47 U.S.C.
18	309(j)(8)), including, as appropriate, subparagraph (F) of
19	such section.
20	(c) Sense of Congress.—It is the sense of Congress
21	that any spectrum identified for auction under this section
22	should be licensed—
23	(1) on a flexible use basis to the extent techno-
24	logically feasible; and

1	(2) consistent with the public interest, conven-
2	ience, and necessity.
3	SEC. 304. EFFICIENT USE OF PUBLIC SAFETY SPECTRUM.
4	(a) Study and Report.—Not later than 180 days
5	after the date of enactment of this Act and not later than
6	every 2 years thereafter, the Commission shall conduct a
7	study and submit a report to the appropriate committees
8	of Congress and to the Corporation on the spectrum used
9	by public safety licensees or for public safety services pursu-
10	ant to section 337(f) of the Communications Act of 1934
11	(47 U.S.C. 337).
12	(b) Requirements.—The report required under sub-
13	section (a) shall—
14	(1) inventory the spectrum assigned to public
15	safety use; and
16	(2) include—
17	(A) the amount of spectrum allocated to
18	public safety use;
19	(B) the number of licensees and amount of
20	spectrum assigned to each licensee;
21	(C) a general description of technologies
22	and systems in each band;
23	(D) an approximation of network coverage,
24	as appropriate, of major systems (such as an es-

1	timation of land mobile radio coverage by popu-
2	lation) in major metropolitan areas; and
3	(E) an approximate number of users of
4	major systems, such as the number of first re-
5	sponders using land mobile radio, in major
6	metro areas;
7	(3) assess if spectrum is adequate to meet the
8	current and future needs for public safety services,
9	and
10	(4) assess the opportunity for return of any ad-
11	ditional spectrum to the Commission for reallocation.
12	SEC. 305. REPORT ON SATELLITE BROADBAND.
13	Not later than 2 years after the date of enactment of
14	this Act, the Comptroller General of the United States shall
15	conduct a study and submit to the appropriate committees
16	of Congress a report on the current and future capabilities
17	of fixed and mobile satellite broadband to assist public safe-
18	ty entities during an emergency.
19	SEC. 306. FEDERAL INFRASTRUCTURE SHARING.
20	The Administrator of General Services shall establish
21	rules to allow public safety entities licensed or otherwise
22	permitted to use spectrum allocated to the Public Safety
23	Broadband Corporation to have access to those components
24	of Federal infrastructure appropriate for the construction

1	and maintenance of the nationwide public safety interoper-
2	able broadband network to be established under title II.
3	SEC. 307. REPORT ON UNLICENSED SPECTRUM.
4	Not later than 5 years after the date of enactment of
5	this Act, the Commission shall submit to the appropriate
6	committees of Congress a report on—
7	(1) the status of development of any spectrum
8	designated as unlicensed spectrum by the Commission
9	under this Act; and
10	(2) the use of any unlicensed spectrum described
11	in paragraph (1).
12	TITLE IV—PUBLIC SAFETY
13	TRUST FUND
14	SEC. 401. PUBLIC SAFETY TRUST FUND.
15	(a) Establishment of Public Safety Trust
16	FUND.—
17	(1) In general.—There is established in the
18	Treasury of the United States a trust fund to be
19	known as the "Public Safety Trust Fund".
20	(2) Crediting of receipts.—
21	(A) In General.—There shall be deposited
22	into or credited to the Public Safety Trust Fund
23	the proceeds from the auction of spectrum car-
24	ried out pursuant to—
25	(i) section 302 of this Act; and

1	(ii) section $309(j)(8)(F)$ of the Commu-
2	nications Act of 1934, as added by section
3	303 of this Act.
4	(B) Availability.—Amounts deposited into
5	or credited to the Public Safety Trust Fund in
6	accordance with subparagraph (A) shall remain
7	available until the end of fiscal year 2021. Upon
8	the expiration of the period described in the
9	prior sentence such amounts shall be deposited in
10	the General Fund of the Treasury, where such
11	amounts shall be dedicated for the sole purpose
12	of deficit reduction.
13	(b) Use of Fund.—Amounts deposited in the Public
14	Safety Trust Fund shall be used in the following manner:
15	(1) Payment of Auction incentive.—
16	(A) Required disbursals.—Amounts in
17	the Public Safety Trust Fund shall be used to
18	make any required disbursal of payments to li-
19	censees required pursuant to—
20	(i) clause (i) and subclause (IV) of
21	clause (ii) of section $309(j)(8)(F)$ of the
22	Communications Act of 1934; and
23	(ii) section 303(b) of this Act.
24	(B) Notification to congress.—

1	(i) In General.—At least 3 months in
2	advance of any incentive auction conducted
3	pursuant to subparagraph (F) of section
4	309(j)(8) of the Communications Act of
5	1934, the Chairman of the Commission, in
6	consultation with the Director of the Office
7	of Management and Budget, shall notify the
8	appropriate committees of Congress—
9	(I) of the methodology for calcu-
10	lating the disbursal of payments to cer-
11	tain licensees required pursuant to
12	clause (i) and subclauses (III) and
13	(IV) of clause of (ii) of such section;
14	and
15	(II) that such methodology con-
16	siders the value of the spectrum volun-
17	tarily relinquished in its current use
18	and the timeliness with which the li-
19	censee will clear its use of such spec-
20	trum.
21	(ii) Definition.—In this clause, the
22	term "appropriate committees of Congress"
23	means—

1	(I) the Committee on Commerce,
2	Science, and Transportation of the
3	Senate;
4	(II) the Committee on Appropria-
5	tions of the Senate;
6	(III) the Committee on Energy
7	and Commerce of the House of Rep-
8	resentatives; and
9	(IV) the Committee on Appropria-
10	tions of the House of Representatives.
11	(2) Incentive auction relocation fund.—
12	Not less than 5 percent of the amounts in the Public
13	Safety Trust Fund but not more than \$1,000,000,000
14	shall be deposited in the Incentive Auction Relocation
15	Fund established under section $309(j)(8)(G)$ of the
16	Communications Act of 1934.
17	(3) State and local implementation
18	FUND.—\$250,000,000 shall be deposited in the State
19	and Local Implementation Fund established under
20	section 221.
21	(4) Public safety broadband corpora-
22	TION.—\$11,750,000,000 shall deposited with the Pub-
23	lic Safety Broadband Corporation established under
24	section 202, of which pursuant to its responsibilities
25	and duties set forth under section 206 to deploy and

1	operate a nationwide public safety interoperable
2	broadband network—
3	(A) not less than \$10,500,000,000 shall be
4	made available for any Radio Access Network
5	build out; and
6	(B) not less than \$1,250,000,000 shall be
7	made available to develop an Evolved Packet
8	Core.
9	(5) Public safety research and develop-
10	MENT.—\$100,000,000 per year for each of the fiscal
11	years 2012 through 2016 shall be made available for
12	use by the Director of NIST to carry out the research
13	program established under section 223.
14	(6) Advanced information and technology
15	RESEARCH.—\$200,000,000 per year for each of the
16	fiscal years 2012 through 2016 shall be made avail-
17	able to carry out the programs established under sec-
18	tion 224, of which—
19	(A) \$130,000,000 per year shall be made
20	available to the Director of the National Science
21	Foundation to carry out the grant program es-
22	tablished under section 224(c); and
23	(B) \$70,000,000 per year shall be made
24	available to DARPA to carry out the research
25	program established under section 224(d).

1	(7) Deficit reduction.—Any amounts remain
2	ing after the deduction of the amounts required under
3	paragraphs (1) through (6) shall be deposited in the
4	General Fund of the Treasury, where such amounts
5	shall be dedicated for the sole purpose of deficit reduc-
6	tion.
7	(c) Investment.—Amounts in the Public Safety Trus
8	Fund shall be invested in accordance with section 9702 o
9	title 31, United States Code, and any interest on, and pro-
10	ceeds from, any such investment shall be credited to, and
11	become a part of, the Fund.
12	TITLE V—SPECTRUM POLICY
13	Subtitle A—Inventory and Planning
14	SEC. 501. RADIO SPECTRUM INVENTORY.
15	(a) Spectrum Inventory.—Part I of title III of the
16	Communications Act of 1934 (47 U.S.C. 301 et seq.) is
17	amended by adding at the end the following:
18	"SEC. 342. SPECTRUM INVENTORY.
19	"(a) Radio Spectrum Inventory.—Not later than
20	180 days after the date of enactment of the Public Safety
21	Spectrum and Wireless Innovation Act, and biennially
22	thereafter, the Commission, in consultation with the NTIA
23	
	and the Office of Science and Technology Policy, shall carry

1	"(1) Report.—Prepare a report that includes
2	an inventory of each radio spectrum band, from 300
3	MHz to 3.5 GHz, at a minimum, managed by each
4	such agency. Except as provided in subsection (b), the
5	report shall include—
6	"(A) the licensee or government user author-
7	ized in the band;
8	"(B) the total spectrum authorized for each
9	licensee or government user (in percentage terms
10	and in sum) in the band;
11	"(C) the approximate number of transmit-
12	ters, end-user terminals, or receivers, excluding
13	unintended radiators, that have been deployed or
14	authorized, for each licensee or government user,
15	in the band; and
16	"(D) if such information is available—
17	"(i) the type of transmitters, end-user
18	terminals, or receivers, excluding unin-
19	tended radiators, operating in the band and
20	whether they are space-, air-, or ground-
21	based;
22	"(ii) the type of transmitters, end-user
23	terminals, or receivers, excluding unin-
24	tended radiators, authorized to operate in

1	the band and whether they are space-, air-
2	$, \ or \ ground-based;$
3	"(iii) contour maps or other informa-
4	tion that illustrate the coverage area, re-
5	ceiver performance, and other parameters
6	relevant to an assessment of the availability
7	of spectrum in each band;
8	"(iv) the approximate geolocation of
9	base stations or fixed transmitters;
10	"(v) the approximate extent of use, by
11	geography, of each band of frequencies, such
12	as the amount and percentage of time of
13	use, number of end-users, or other measures
14	as appropriate to the particular band;
15	"(vi) the activities, capabilities, func-
16	tions, or missions supported by the trans-
17	mitters, end-user terminals, or receivers;
18	and
19	"(vii) the types of unlicensed devices
20	authorized to operate in the band.
21	"(2) Public Access.—Create a centralized por-
22	tal or website utilizing data from the Commission
23	and the NTIA to make a centralized inventory of the
24	bands of each agency available to the public via an
25	Internet-accessible website.

1	"(3) UPDATES.—Make all reasonable efforts to
2	maintain and update the information required under
3	paragraph (2) no less frequently than quarterly to re-
4	flect, at a minimum, any transfer or auction of li-
5	censes or change in allocation, assignment, or author-
6	ization.
7	"(4) FCC to bear costs.—Notwithstanding
8	any other provision of law, all costs incurred by the
9	Commission and the NTIA in establishing and main-
10	taining the centralized inventory and the centralized
11	portal or website shall be borne exclusively by the
12	Commission.
13	"(5) Paperwork reduction act exemption.—
14	Any forms prescribed by the Commission under this
15	section, and any information-gathering activities of
16	the Commission under this section, shall not be sub-
17	ject to the provisions of sections 3507 or 3512 of title
18	44, United States Code (44 U.S.C. 3507, 3512).
19	"(b) National Security; Classified Informa-
20	TION.—
21	"(1) In General.—If the head of a Federal
22	agency determines that disclosure of information re-
23	quired by subsection (a) would be harmful to the na-
24	tional security of the United States, the agency
25	shall—

1	"(A) notify the NTIA of its determination;
2	and
3	"(B) provide to the NTIA—
4	"(i) the other publicly releasable infor-
5	mation required by subsection (a);
6	"(ii) to the maximum extent prac-
7	ticable, a summary description of the infor-
8	mation with respect to which the determina-
9	tion was made; and
10	"(iii) an annex containing the infor-
11	mation with respect to which the determina-
12	tion was made.
13	"(2) Classified information.—If the head of a
14	Federal agency determines that any information re-
15	quired by subsection (a) is classified in accordance
16	with Executive Order 13526 of December 29, 2009, or
17	any successor Executive Order establishing or modi-
18	fying the uniform system for classifying, safe-
19	guarding, and declassifying national security infor-
20	mation, the agency shall—
21	"(A) notify the NTIA of its determination;
22	and
23	"(B) provide to the NTIA—
24	"(i) the information required by sub-
25	section (a)(1) that is not classified;

1	"(ii) to the maximum extent prac-
2	ticable, a summary description of the infor-
3	mation that is classified; and
4	"(iii) an annex containing the infor-
5	mation that is classified.
6	"(3) Annex restriction.—The NTIA shall
7	make an annex described in paragraph (1)(B)(iii) or
8	(2)(B)(iii) available to the Commission. Neither the
9	NTIA nor the Commission may make any such annex
10	available to the public pursuant to subsection (a)(2)
11	or to any unauthorized person through any other
12	means.
13	"(c) Public Safety Nondisclosure.—
14	"(1) In general.—If a licensee of non-Federal
15	spectrum determines that public disclosure of certain
16	information held by that licensee and required to be
17	included in the report under subsection (a) would re-
18	veal information for which public disclosure would be
19	detrimental to public safety, or that the licensee is
20	otherwise prohibited by law from disclosing, the li-
21	censee may petition the Commission for a partial or
22	total exemption from inclusion on the centralized por-
23	tal or website under subsection (a)(2) and in the re-
24	ports required under subsection (d).

1	(2) BURDEN.—A treensee seeking an exemption
2	under this subsection bears the burden of justifying
3	the exemption and shall provide clear and convincing
4	evidence to support the requested exemption.
5	"(3) Information required.—If the Commis-
6	sion grants an exemption under this subsection, the
7	licensee shall provide to the Commission—
8	"(A) the publicly releasable information re-
9	quired by subsection (a)(1) for the inventory;
10	"(B) to the maximum extent practicable, a
11	summary description, suitable for public release,
12	of the information for which public disclosure
13	would be detrimental to public safety or that the
14	licensee is prohibited by law from disclosing; and
15	"(C) an annex, under appropriate cover,
16	containing the information that the Commission
17	has determined should be withheld from public
18	disclosure.
19	"(d) Informing the Congress.—
20	"(1) In general.—Except as provided in para-
21	graph (3), the NTIA and the Commission shall sub-
22	mit each report required by subsection (a)(1) to the
23	appropriate committees of Congress.
24	"(2) Nondisclosure of Annexes.—Each such
25	report shall be submitted in unclassified form, but

1	may include 1 or more annexes as provided for by
2	subsections $(b)(1)(B)(iii),$ $(b)(2)(B)(iii),$ and
3	(c)(3)(C). No Congressional committee may make any
4	such annex available to the public or to any unau-
5	thorized person.
6	"(3) Classified annexes.—If a report includes
7	a classified annex as provided for by subsection
8	(b)(2)(B)(iii), the NTIA and the Commission shall—
9	"(A) submit the classified annex only to the
10	appropriate committees of Congress with pri-
11	mary oversight jurisdiction for the user agencies
12	or licensees concerned; and
13	"(B) provide notice of the submission to the
14	other appropriate committees of Congress.
15	"(e) Definitions.—In this section:
16	"(1) Appropriate committees of con-
17	GRESS.—The term 'appropriate committees of Con-
18	gress' means the Committee on Commerce, Science,
19	and Transportation of the Senate, the Committee on
20	Energy and Commerce of the House of Representa-
21	tives, and any other congressional committee with
22	primary oversight jurisdiction for the user agencies or
23	licensees concerned.

1	"(2) NTIA.—The term 'NTIA' means the Na-
2	tional Telecommunications and Information Admin-
3	istration.".
4	(b) Progress Report.—Within 180 days after the
5	date of enactment of this title, the Commission and the
6	NTIA shall provide an update as to the status of the inven-
7	tory and report required by section 342(a) of the Commu-
8	nications Act of 1934, as added by subsection (a), to the
9	appropriate committees of Congress.
10	SEC. 502. FEDERAL SPECTRUM PLANNING.
11	(a) Review of Evaluation Process.—Not later
12	than 6 months after the date of enactment of this title, the
13	Comptroller General of the United States shall—
14	(1) conduct a review of the processes that Federal
15	entities utilize to evaluate their spectrum needs and
16	manage their spectrum resources;
17	(2) make recommendations on how to improve
18	such processes; and
19	(3) submit a written report to the appropriate
20	committees of Congress on the review, analysis, and
21	recommendations made pursuant to paragraphs (1)
22	and (2).
23	(b) Revision of Evaluation Process.—
24	(1) In general.—Not later than 1 year after
25	the date of enactment of this title, each Federal entity

1	shall establish, update, or revise the process used by
2	such entity to evaluate their proposed spectrum needs,
3	taking into account any applicable recommendations
4	made in the report required under subsection (a).
5	(2) Required inclusions.—
6	(A) Analysis of options.—Each process
7	described under paragraph (1), whether newly
8	established or otherwise revised, shall include an
9	analysis and assessment of—
10	(i) the options available to a Federal
11	entity to obtain associated communications
12	services that are the most spectrum-efficient;
13	and
14	(ii) the effective alternatives available
15	to such entity that will permit the entity to
16	continue to satisfy the mission requirements
17	of the entity.
18	(B) Analysis submitted to ntia.—The
19	analysis and assessment carried out pursuant to
20	subparagraph (A) shall be submitted by the Fed-
21	eral entity to the NTIA at the same time that the
22	entity seeks certification or recertification, if ap-
23	plicable, of spectrum support from the NTIA
24	pursuant to the requirements of the National
25	Telecommunications and Information Adminis-

1	tration Organization Act and OMB Circular A-
2	11.
3	(c) Spectrum Plans of Federal Entities.—
4	(1) In general.—Not later than 1 year after
5	the date of enactment of this title, and every 2 years
6	thereafter, each Federal entity shall provide an entity-
7	specific strategic spectrum plan to the Assistant Sec-
8	retary and the Director of the Office of Management
9	and Budget.
10	(2) Required inclusions.—Each strategic
11	spectrum plan submitted pursuant to paragraph (1)
12	shall include—
13	(A) the spectrum requirements of the entity;
14	(B) the planned uses of new technologies or
15	expanded services requiring spectrum over a pe-
16	riod of time agreed to by the entity;
17	(C) suggested spectrum-efficient approaches
18	to meeting the spectrum requirements identified
19	under subparagraph (A); and
20	(D) progress reports on what the entity is
21	doing to improve its spectrum management.
22	(d) National Security; Classified Informa-
23	TION.—
24	(1) In General.—If the head of a Federal entity
25	determines that disclosure of information required by

1	subsection (c) would be harmful to the national secu-
2	rity of the United States, the entity shall—
3	(A) notify the NTIA of its determination;
4	and
5	(B) provide to the NTIA—
6	(i) the other publicly releasable infor-
7	mation required by subsection (c);
8	(ii) to the maximum extent prac-
9	ticable, a summary description of the infor-
10	mation with respect to which the determina-
11	tion was made; and
12	(iii) an annex containing the informa-
13	tion with respect to which the determina-
14	tion was made.
15	(2) Classified information.—If the head of a
16	Federal entity determines that any information re-
17	quired by subsection (c) is classified in accordance
18	with Executive Order 13526 of December 29, 2009, or
19	any successor Executive Order establishing or modi-
20	fying the uniform system for classifying, safe-
21	guarding, and declassifying national security infor-
22	mation, the entity shall—
23	(A) notify the NTIA of its determination;
24	and
25	(B) provide to the NTIA—

1	(i) the information required by sub-
2	section (c) that is not classified;
3	(ii) to the maximum extent prac-
4	ticable, a summary description of the infor-
5	mation that is classified; and
6	(iii) an annex containing the informa-
7	tion that is classified.
8	(3) Annex restriction.—The NTIA shall make
9	an annex described in paragraph (1)(B)(iii) or
10	(2)(B)(iii) available to the Secretary of Commerce
11	and the Director of the Office of Management and
12	Budget. Neither the NTIA, the Secretary of Com-
13	merce, nor the Director of the Office of Management
14	and Budget may make any such annex available to
15	the public or to any unauthorized person through any
16	other means.
17	(e) Federal Strategic Spectrum Plan.—
18	(1) Development and submission.—
19	(A) In general.—Not later than 6 months
20	after the receipt of the initial entity-specific stra-
21	tegic spectrum plans required under subsection
22	(c), the Secretary of Commerce shall develop a
23	Federal Strategic Spectrum Plan, in coordina-
24	tion with the Assistant Secretary and the Direc-
25	tor of the Office of Management and Budget.

1	(B) SUBMISSION TO CONGRESS.—Consistent
2	with the requirements set forth in subsection
3	(d)(3), the Secretary of Commerce shall submit
4	the Federal Strategic Spectrum Plan developed
5	under subparagraph (A) to the appropriate com-
6	mittees of Congress.
7	(C) Nondisclosure of annexes.—The
8	Federal Strategic Spectrum Plan required to be
9	submitted under subparagraph (B) shall be sub-
10	mitted in unclassified form, but shall include, if
11	appropriate, 1 or more annexes as provided for
12	by subsections $(d)(1)(B)(iii)$ and $(d)(2)(B)(iii)$.
13	No Congressional committee may make any such
14	annex available to the public or to any unau-
15	thorized person.
16	(D) Classified annexes.—If the Federal
17	Strategic Spectrum Plan includes a classified
18	annex as provided for by subsection
19	(d)(2)(B)(iii), the Secretary of Commerce shall—
20	(i) submit the classified annex only to
21	the appropriate committees of Congress with
22	primary oversight jurisdiction for the user
23	entities or licensees concerned; and

1	(ii) provide notice of the submission to
2	the other appropriate committees of Con-
3	gress.
4	(E) Definition.—In this subsection, the
5	term "appropriate committees of Congress"
6	means the Committee on Commerce, Science, and
7	Transportation of the Senate, the Committee on
8	Energy and Commerce of the House of Rep-
9	resentatives, and any other congressional com-
10	mittee with primary oversight jurisdiction for
11	the user entity or licensees concerned.
12	(2) Incorporation of entity plans.—The
13	Federal Strategic Spectrum Plan developed under
14	paragraph (1) shall incorporate, consistent with the
15	requirements of subsection (d), the initial entity-spe-
16	cific strategic spectrum plans submitted under sub-
17	section (c).
18	(3) Required inclusions.—The Federal Stra-
19	tegic Spectrum Plan developed under paragraph (1)
20	shall include—
21	(A) information on how spectrum assigned
22	and used by Federal entities is being used;
23	(B) opportunities to increase efficient use of
24	infrastructure and spectrum assigned and used
25	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 certifi-
cation, and review processes.
(4) UPDATES.—The Secretary of Commerce shall
revise and update the Federal Strategic Spectrum
Plan developed under paragraph (1) accordingly pur-
suant 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 Na-
tional Strategic Spectrum Plan.
(2) Required inclusion.—The National Stra-
tegic 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.

1	(C) New technologies or expanded services
2	requiring spectrum.
3	(D) The nature and characteristics of the
4	new radio communication systems required and
5	the nature and characteristics of the spectrum re-
6	quired.
7	(E) Efficient approaches to meeting the fu-
8	ture spectrum requirements of all users, includ-
9	ing—
10	(i) requiring certain standards-based
11	technologies that improve spectrum effi-
12	ciencies;
13	(ii) spectrum sharing and reuse oppor-
14	tunities;
15	(iii) possible reallocation; and
16	(iv) any other approaches that promote
17	efficient use of spectrum.
18	(F) An evaluation of current auction proc-
19	esses to determine the effectiveness of such proc-
20	esses in—
21	(i) promoting competition;
22	(ii) improving spectrum use efficiency;
23	and

1	(iii) maximizing the full economic		
2	value to customers, industry, and the tax-		
3	payer of the spectrum.		
4	Subtitle B—Markets		
5	SEC. 511. PROMOTING SECONDARY SPECTRUM MARKETS.		
6	(a) In General.—Not later than 18 months after the		
7	date of enactment of this title, the Commission shall conduct		
8	a rulemaking proceeding to determine how to further pro-		
9	mote a more robust secondary spectrum market.		
10	(b) Consideration.—In carrying out the rulemaking		
11	required under subsection (a), the Commission shall con-		
12	sider the feasability and value of establishing a national		
13	database to collect and disseminate information on sec-		
14	ondary spectrum market opportunities.		
15	SEC. 512. UNLICENSED USE IN 5 GHZ.		
16	(a) Modification of Regulations.—		
17	(1) In general.—Not later than 1 year after		
18	the date of enactment of this title, the Commission		
19	shall modify part 15 of title 47, Code of Federal Reg-		
20	ulations, to allow unlicensed devices intended and		
21	marketed for indoor use to operate in the 5350-5470		
22	$MHz\ band.$		
23	(2) Concerns and considerations.—In car-		
24	rying out the modification requirement set forth		
25	under paragraph (1), the Commission shall allow the		

1	unlicensed devices described in paragraph (1) to oper-
2	ate in the 5350–5470 MHz band, on an indoor basis
3	only, if it—
4	(A) finds that technical solutions will pro-
5	tect licensed users, including use of existing,
6	modified, or new spectrum sharing technologies
7	and solutions, such as dynamic frequency selec-
8	tion; and
9	(B) determines that the primary mission of
10	Federal spectrum users in the 5350–5470 MHz
11	band will not be compromised by the introduc-
12	tion of unlicensed devices in the 5350–5470 MHz
13	band.
14	(b) NTIA STUDY.—
15	(1) In General.—Not later than 8 months after
16	the date of enactment of this title, and in consultation
17	with the Commission, the NTIA shall conduct and
18	submit a study as provided in paragraph (2) evalu-
19	ating known and proposed sharing technologies and
20	the risk to Federal users if unlicensed U-NII devices
21	were allowed to operate indoors in the 5350–5470
22	MHz band.
23	(2) Submitting study.—The study required by
24	paragraph (1) shall be submitted to the appropriate
25	committees of Congress and the Commission.

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2	Not later than 9 months after the date of enactment
3	of this title, the Commission shall revise part 5 of chapter
4	I of title 47, Code of Federal Regulations, to—
5	(1) streamline such regulations to promote great-
6	$er\ experimentation;$
7	(2) broaden opportunities for market trials;
8	(3) promote advancements in health care;
9	(4) establish innovation zones; and
10	(5) establish a process by which qualified enti-
11	ties, including colleges, universities, public and pri-
12	vate companies, and non-profit research organiza-
13	tions, will be permitted to use a broad range of radio
14	frequencies for research and experimentation on a
15	non-interference basis without having to obtain prior
16	authorization from the Commission for the use of spe-
17	cific frequencies.
18	SEC. 514. REPURPOSING FEDERAL SPECTRUM FOR COM-
19	MERCIAL PURPOSES AND FEDERAL SPEC-
20	TRUM SHARING.
21	(a) Eligible Federal Entities.—Section 113(g)(1)
22	of the National Telecommunications and Information Ad-
23	$ministration \ \ Organization \ \ Act \ \ (47\ \ U.S.C.\ \ 923(g)(1)) \ \ is$
24	amended to read as follows:
25	"(1) Eligible federal entities.—Any Fed-
26	eral entity that operates a Federal Government sta-

1	tion authorized to use a band of frequencies specified
2	in paragraph (2) and that incurs relocation costs be-
3	cause of planning for a potential auction of spectrum
4	frequencies, a planned auction of spectrum fre-
5	quencies, or the reallocation of spectrum frequencies
6	from Federal use to exclusive non-Federal use, or
7	shared Federal and non-Federal use shall receive pay-
8	ment for such costs from the Spectrum Relocation
9	Fund, in accordance with section 118 of this Act. For
10	purposes of this paragraph, Federal power agencies
11	exempted under subsection $(c)(4)$ that choose to relo-
12	cate from the frequencies identified for reallocation
13	pursuant to subsection (a), are eligible to receive pay-
14	ment under this paragraph.".
15	(b) Eligible Frequencies.—Section $113(g)(2)(B)$ of
16	the National Telecommunications and Information Admin-
17	istration Organization Act (47 U.S.C. $923(g)(2)(B)$) is
18	amended to read as follows:
19	"(B) any other band of frequencies reallo-
20	cated from Federal use to non-Federal or shared
21	use, whether for licensed or unlicensed use, after
22	January 1, 2003, that is assigned—
23	"(i) by competitive bidding pursuant
24	to section 309(j) of the Communications Act
25	of 1934 (47 U.S.C. 309(j)); or

1	"(11) as a result of an Act of Congress
2	or any other administrative or executive di-
3	rection.".
4	(c) Definition of Relocation and Sharing
5	Costs.—Section $113(g)(3)$ of the National Telecommuni-
6	cations and Information Administration Organization Act
7	$(47\ U.S.C.\ 923(g)(3))$ is amended to read as follows:
8	"(3) Definition of relocation and sharing
9	costs.—For purposes of this subsection, the terms
10	'relocation costs' and 'sharing costs' mean the costs
11	incurred by a Federal entity to plan for a potential
12	or planned auction or sharing of spectrum frequencies
13	to achieve comparable capability of systems, regard-
14	less of whether that capability is achieved by relo-
15	cating to a new frequency assignment, relocating a
16	Federal Government station to a different geographic
17	location, modifying Federal Government equipment to
18	mitigate interference or use less spectrum, in terms of
19	bandwidth, geography, or time, and thereby permit-
20	ting spectrum sharing (including sharing among relo-
21	cated Federal entities and incumbents to make spec-
22	trum available for non-Federal use) or relocation, or
23	by utilizing an alternative technology. Comparable
24	capability of systems includes the acquisition of state-
25	of-the art replacement systems intended to meet com-

1	parable operational scope, which may include inci-
2	dental increases in functionality, including those nec-
3	essary to achieve security, reliability, and resiliency.
4	Such costs include—
5	"(A) the costs of any modification or re-
6	placement of equipment, spares, associated ancil-
7	lary equipment, software, facilities, operating
8	manuals, training costs, or regulations that are
9	attributable to relocation or sharing;
10	"(B) the costs of all engineering, equipment,
11	software, site acquisition, and construction costs,
12	as well as any legitimate and prudent trans-
13	action expense, including term-limited Federal
14	civil servant and contractor staff necessary to
15	carry out the relocation activities of an eligible
16	Federal entity, and reasonable additional costs
17	incurred by the Federal entity that are attrib-
18	utable to relocation or sharing, including in-
19	creased recurring costs associated with the re-
20	placement of facilities;
21	"(C) the costs of research, engineering stud-
22	ies, economic analyses, or other expenses reason-
23	ably incurred in connection with—
24	"(i) calculating the estimated reloca-
25	tion costs that are provided to the Commis-

1	sion pursuant to paragraph (4) of this sub-
2	section, or in calculating the estimated
3	sharing costs;
4	"(ii) determining the technical or oper-
5	ational feasibility of relocation to 1 or more
6	potential relocation bands; or
7	"(iii) planning for or managing a re-
8	location or sharing project (including spec-
9	trum coordination with auction winners) or
10	potential relocation or sharing project;
11	"(D) the one-time costs of any modification
12	of equipment reasonably necessary to accommo-
13	date commercial use of shared frequencies or, in
14	the case of frequencies reallocated to exclusive
15	commercial use, prior to the termination of the
16	Federal entity's primary allocation or protected
17	status, when the eligible frequencies as defined in
18	paragraph (2) of this subsection are made avail-
19	able for private sector uses by competitive bid-
20	ding and a Federal entity retains primary allo-
21	cation or protected status in those frequencies for
22	a period of time after the completion of the com-
23	petitive bidding process;
24	"(E) the costs associated with the acceler-
25	ated replacement of systems and equipment if

1	such acceleration is necessary to ensure the time-
2	ly relocation of systems to a new frequency as-
3	signment or the timely accommodation of shar-
4	ing of Federal frequencies; and
5	"(F) the costs of the use of commercial sys-
6	tems (including systems not utilizing spectrum)
7	to replace Federal systems discontinued or relo-
8	cated pursuant to this Act, including lease (in-
9	cluding lease of land), subscription, and equip-
10	ment costs over an appropriate period, such as
11	the anticipated life of an equivalent Federal sys-
12	tem or other period determined by the Director
13	of the Office of Management and Budget.".
14	(d) Spectrum Sharing.—Section 113(g) of the Na-
15	tional Telecommunications and Information Administra-
16	tion Organization Act (47 U.S.C. 923(g)) is amended by
17	adding at the end the following:
18	"(7) Spectrum sharing.—A Federal entity is
19	permitted to allow access to its frequency assignments
20	by a non-Federal entity upon approval of NTIA, in
21	consultation with the Director of the Office of Man-
22	agement and Budget. Such non-Federal entities shall
23	comply with all applicable rules of the Commission
24	and the NTIA, including any regulations promul-
25	gated pursuant to this section. Any remuneration as-

1 sociated with such access shall be deposited into the 2 Spectrum Relocation Fund established under section 3 118. A Federal entity that incurs costs as a result of such access is eligible for payment from the Fund for 4 5 the purposes specified in paragraph (3) of this sec-6 tion. The revenue associated with such access shall be 7 at least 110 percent of the estimated Federal costs.". 8 (e) Spectrum Relocation Fund.—Section 118 of the National Telecommunications and Information Admin-10 istration Organization Act (47 U.S.C. 928) is amended— 11 (1) in subsection (b), by inserting before the pe-12 riod at the end the following: "and any payments 13 made by non-Federal entities for access to Federal 14 spectrum pursuant to section 113(q)(7) (47 U.S.C. 15 113(g)(7); 16 (2) by amending subsection (c) to read as fol-17 lows: 18 "(c) Use of Funds.— 19 "(1) Funds from Auctions.—The amounts in 20 the Fund from auctions of eligible frequencies are au-21 thorized to be used to pay relocation costs, as such 22 costs are defined in section 113(q)(3), of an eligible 23 Federal entity incurring such costs with respect to re-24 location from any eligible frequency.

1	"(2) Funds from payments by non-federal
2	Entities.—The amounts in the Fund from payments
3	by non-Federal entities for access to Federal spectrum
4	are authorized to be used to pay the sharing costs, as
5	such costs are defined in section $113(g)(3)$, of an eligi-
6	ble Federal entity incurring such costs.
7	"(3) Transfer of funds.—
8	"(A) In general.—Subject to subpara-
9	graph (B), the Director of OMB may transfer at
10	any time (including prior to any auction or con-
11	templated auction, or sharing initiative) such
12	sums as may be available in the Fund to an eli-
13	gible Federal entity to pay eligible relocation or
14	sharing costs related to pre-auction estimates or
15	research, as such costs are described in section
16	113(g)(3)(C).
17	"(B) Notification.—No funds may be
18	transferred pursuant to subparagraph (A) unless
19	the notification provided under subsection
20	(d)(2)(B) of this section includes a certification
21	from the Director of OMB that—
22	"(i) funds transferred before an auc-
23	tion will likely allow for a timely reloca-
24	tion, thereby increasing net expected auc-
25	tion proceeds by an amount equal to or

1	greater than the time value of the amount
2	of funds transferred; and
3	"(ii) the auction is intended to occur
4	within 5 years of transfer of funds.
5	"(C) Applicability.—
6	"(i) Prior costs incurred.—The
7	Director of OMB may transfer up to
8	\$10,000,000 to eligible Federal entities for
9	eligible relocation or sharing costs related to
10	pre-auction estimates or research, as such
11	costs are described in section $113(g)(3)(C)$,
12	for costs incurred prior to the date of the
13	enactment of the Public Safety Spectrum
14	and Wireless Innovation Act, but after June
15	28th, 2010.
16	"(ii) Supplement not supplant.—
17	Any amounts transferred by the Director of
18	OMB pursuant to clause (i) shall be in ad-
19	dition to any amounts that the Director of
20	OMB may transfer after the date of the en-
21	actment of the Public Safety Spectrum and
22	Wireless Innovation Act.";
23	(3) in subsection (d)—
24	(A) in paragraph (1), by inserting "and
25	sharing" before "costs";

1	(B) in paragraph $(2)(B)$ —
2	(i) by inserting "and sharing" before
3	"costs"; and
4	(ii) by inserting "and sharing" before
5	the period at the end; and
6	(C) by amending paragraph (3) to read as
7	follows:
8	"(3) Reversion of unused funds.—
9	"(A) In general.—Any amounts in the
10	Fund that are remaining after the payment of
11	the relocation and sharing costs that are payable
12	from the Fund shall revert to and be deposited
13	in the General Fund of the Treasury not later
14	than 8 years after the date of the deposit of such
15	proceeds to the Fund, unless within 60 days in
16	advance of the reversion of such funds, the Direc-
17	tor of OMB, in consultation with the Assistant
18	Secretary for Communications and Information,
19	notifies the appropriate committees of Congress
20	that such funds are needed to complete or to im-
21	plement current or future relocations or sharing
22	initiatives.
23	"(B) Definition.—In this paragraph, the
24	term 'appropriate committees of Congress' means

1	"(i) the Committee on Appropriations
2	of the Senate;
3	"(ii) the Committee on Commerce,
4	Science, and Transportation of the Senate;
5	"(iii) the Committee on Appropria-
6	tions of the House of Representatives; and
7	"(iv) the Committee on Energy and
8	Commerce of the House of Representatives.";
9	(4) in subsection $(e)(2)$ —
10	(A) by inserting "and sharing" before
11	"costs";
12	(B) by inserting "or sharing" before "is
13	complete"; and
14	(C) by inserting "or sharing" before "in ac-
15	cordance"; and
16	(5) by adding at the end the following:
17	"(f) Additional Payments From the Fund.—Not-
18	withstanding subsections (c) through (e), after the date of
19	the enactment of the Public Safety Spectrum and Wireless
20	Innovation Act, and following the credit of any amounts
21	specified in subsection (b), there are hereby appropriated
22	from the Fund and available to the Director of the OMB
23	up to 10 percent of the amounts deposited in the Fund from
24	the auction of licenses for frequencies of spectrum vacated
25	by Federal entities, or up to 10 percent of the amounts de-

1	posited in the Fund by non-Federal entities for sharing of
2	Federal spectrum. The Director of OMB, in consultation
3	with the Assistant Secretary for Communications and In-
4	formation, may use such amounts to pay eligible Federal
5	entities for the purpose of encouraging timely access to such
6	spectrum, provided that—
7	"(1) any such payment by the Director of OMB
8	is based on the market value of the spectrum, the
9	timeliness with which the licensee cleared its use of
10	such spectrum, and the need for such spectrum in
11	order for the Federal entity to conduct its essential
12	missions;
13	"(2) any such payment by the Director of OMB
14	is used to carry out the purposes specified in subpara-
15	graphs (A) through (F) of paragraph (3) of subsection
16	113(g) to achieve enhanced capability for those sys-
17	tems affected by reallocation of Federal spectrum to
18	commercial use, or by sharing of Federal frequencies
19	with non-Federal entities;
20	"(3) the amount remaining in the Fund after
21	any such payment by the Director is not less than 10
22	percent of the winning bids in the relevant auction,
23	or is not less than 10 percent of the payments from
24	non-Federal entities in the relevant sharing agree-
25	ment; and

1 "(4) any such payment by the Director shall not 2 be made until 30 days after the Director has notified 3 the Committees on Appropriations and Commerce, 4 Science, and Transportation of the Senate, and the 5 Committees on Appropriations and Energy and Com-6 merce of the House of Representatives.". 7 (f) Competitive Bidding: Treatment of Reve-8 NUES.—Subparagraph (D) of section 309(j)(8) of the Communications Act of 1934 (47 U.S.C. 309(j)(8)) is amended 10 by inserting "excluding frequencies identified by the Federal Communications Commission to be auctioned in conjunction with eligible frequencies described in section 13 113(q)(2)" before "shall be deposited". 14 (g) Public Disclosure and Nondisclosure.—If 15 the head of an executive agency of the Federal Government determines that public disclosure of any information con-16 tained in notifications and reports required by sections 113 or 118 of the National Telecommunications and Informa-18 tion Administration Organization Act (47 U.S.C. 923 and 19 20 928) would reveal classified national security information 21 or other information for which there is a legal basis for 22 nondisclosure and such public disclosure would be detri-23 mental 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-

- 1 mination prior to release of such information. In that event,
- 2 such classified information shall be included in a separate
- 3 annex, as needed. These annexes shall be provided to the
- 4 appropriate subcommittee in accordance with appropriate
- 5 national security stipulations, but shall not be disclosed to
- 6 the public or provided to any unauthorized person through
- 7 any other means.

8 SEC. 515. REPORT ON SPECTRUM SHARING.

- 9 (a) Identification of Spectrum; Report to Con-
- 10 GRESS.—Not later than 1 year after the date of enactment
- 11 of this Act, the NTIA shall conduct a study and submit
- 12 a report to the appropriate committees of Congress—
- 13 (1) that identifies spectrum between 225 MHz
- and 3700 MHz operated or licensed by a Federal enti-
- 15 ty that the NTIA, in consultation with the Commis-
- sion, determines appropriate for sharing with non-
- 17 government entities or non-Federal government enti-
- 18 ties, including, after taking into account any spec-
- 19 trum identified by the NTIA in its October 2010 re-
- 20 port entitled "An Assessment of the Near-Term Via-
- 21 bility of Accommodating Wireless Broadband Systems
- 22 in the 1675-1710 MHz, 1755-1780 MHz, 3500-3650
- 23 MHz, and 4200-4220 MHz, 4380-4400 MHz Bands",
- 24 the additional 100 MHz most likely to be appropriate
- 25 for wireless broadband operations; and

1	(2) on how Federal entities can utilize dynamic
2	spectrum sharing technologies to allow non-govern-
3	ment entities or non-Federal government entities to
4	share underutilized spectrum without interference to
5	the primary usage by the Federal Government of that
6	spectrum, including through use of cognitive radio
7	and sensing technologies and database and
8	geolocation approaches.
9	(b) Considerations.—In carrying out the study and
10	report required under subsection (a), the NTIA should con-
11	sider—
12	(1) radio systems that are utilized in fixed or
13	$predictable\ geographic\ locations;$
14	(2) radio systems that are only utilized intermit-
15	tently at fixed or predictable times;
16	(3) spectrum allocations in which radio systems
17	are currently not deployed; and
18	(4) spectrum that is harmonized regionally or
19	globally.
20	(c) Public Consultation and Rule Changes.—
21	(1) In General.—Not later than 6 months after
22	the report required under subsection (a) is submitted,
23	the NTIA shall conduct a public consultation and,
24	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 Re-
port, dated November 8, 2010, issued by the In-
terference and Dynamic Spectrum Access Sub-
committee of the Commerce Spectrum Manage-
ment Advisory Committee.
Subtitle C—Efficiency and
Management
SEC. 521. FUNCTIONAL RESPONSIBILITY OF THE NTIA TO
SEC. 521. FUNCTIONAL RESPONSIBILITY OF THE NTIA TO ENSURE EFFICIENT USE OF SPECTRUM.
ENSURE EFFICIENT USE OF SPECTRUM.
Ensure efficient use of spectrum. Section $103(b)(2)$ of the National Telecommunications
ENSURE EFFICIENT USE OF SPECTRUM. Section 103(b)(2) of the National Telecommunications and Information Administration Organization Act (47)
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—
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
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;

1	"(B) The responsibility to promote the best
2	possible and most efficient use of electromagnetic
3	spectrum resources across the Federal Govern-
4	ment, subject to and consistent with the needs
5	and missions of Federal agencies.".
6	SEC. 522. SPECTRUM EFFICIENCY ANALYTIC TOOLS.
7	(a) In General.—Not later than 18 months after the
8	date of enactment of this title, the NTIA, in consultation
9	with NIST and the Commission, as appropriate, shall de-
10	velop analytic tools or metrics for the NTIA and Federal
11	entities to measure the spectrum efficiency of Federal spec-
12	trum systems used by such entities.
13	(b) REQUIRED CONSIDERATION.—In developing the
14	tools or metrics to measure spectrum efficiency pursuant
15	to subsection (a)(1), the NTIA shall consider the conclusions
16	reached in the report entitled "Definitions of Efficiency in
17	Spectrum Use", authored by the Commerce Spectrum Man-
18	agement Advisory Committee and dated October 1, 2008.
19	SEC. 523. STUDY ON RECEIVER PERFORMANCE AND SPEC-
20	TRUM EFFICIENCY.
21	(a) In General.—The Comptroller General of the
22	United States shall conduct a study to consider efforts to
23	ensure that each transmission system that employs radio
24	spectrum is designed and operated so that reasonable use

1	of adjacent spectrum does not excessively impair the func-
2	tioning of such system.
3	(b) Required Considerations.—At a minimum, the
4	study required under subsection (a) shall consider—
5	(1) the value of—
6	(A) improving receiver performance as it
7	relates to increasing spectral efficiency;
8	(B) improving operation of services in adja-
9	cent frequencies; and
10	(C) narrowing the guard bands between ad-
11	jacent spectrum use.
12	(2) the role of manufacturers, commercial licens-
13	ees, and government users with respect to their trans-
14	mission systems and use of adjacent spectrum de-
15	scribed in subsection (a);
16	(3) the feasibility of industry self-compliance
17	with respect to the design and operational require-
18	ments of transmission systems and the reasonable use
19	of adjacent spectrum described in subsection (a); and
20	(4) the value of Commission and NTIA action to
21	establish, by rule, technical requirements or standards
22	for non-Federal or Federal use, respectively, with re-
23	spect to the reasonable use of adjacent spectrum de-
24	scribed in subsection (a).

1	(c) Definition.—For purposes of this section, the
2	term "transmission system" means any telecommuni
3	cations, broadcast, satellite, commercial mobile service, or
4	other communications system that employs radio spectrum
5	(d) Report.—Not later than 1 year after the date of
6	enactment of this Act, the Comptroller General of the United
7	States shall submit a report to the appropriate committees
8	of Congress on the results of the study required under sub-
9	section (a).
10	SEC. 524. FREQUENCY ASSIGNMENT.
11	(a) Examination.—Not later than 6 months after the
12	date of enactment of this title, the NTIA, in consultation
13	with the Interdepartment Radio Advisory Committee
14	shall—
15	(1) examine its frequency assignment processes
16	including the 5-year frequency assignment review
17	program, and
18	(2) consider best practices to determine if the
19	current approach for collecting and validating date
20	from Federal entities can be streamlined or improved
21	to help ensure that such entities are managing cur-
22	rent and future spectrum assignments efficiently.
23	(b) Required Considerations.—In carrying out the
24	requirements of subsection (a), the NTIA shall consider—

1	(1) providing Federal entities with specific guid-
2	ance or requirements on how to justify to the NTIA
3	that requested spectrum frequency assignments would
4	fulfill an established mission need and that other
5	means of communication are not appropriate or
6	available;
7	(2) requiring Federal entities to submit docu-
8	mentation, as part of the spectrum frequency assign-
9	ment process;
10	(3) verifying that such entity has completed an
11	analysis to support the use and need of the requested
12	assignment; and
13	(4) requiring managers of spectrum resources at
14	each Federal entity to validate, verify, or attest to the
15	accuracy of spectrum information submitted by their
16	entity to the NTIA.
17	SEC. 525. SPECTRUM OPPORTUNITY COST TRANSPARENCY.
18	(a) Analysis of Economic Opportunity Cost.—
19	(1) Development of framework.—
20	(A) In General.—Not later than 1 year
21	after the date of enactment of this title, the
22	NTIA, in consultation with the Commission and
23	the Director of the Office of Management and
24	Budget, shall develop a framework for deter-
25	mining the annual economic opportunity cost of

1	each specific Federal spectrum band assigned or
2	otherwise allocated for use by Federal entities.
3	(B) Considerations.—In developing the
4	framework required under subparagraph (A), the
5	NTIA shall take into account the spectrum pric-
6	ing methodologies adopted by other countries
7	which utilize administered incentive pricing of
8	spectrum for government users.
9	(2) Scope.—The framework developed under
10	paragraph (1) shall cover all Federally allocated spec-
11	trum bands between 150 MHz and 6000 MHz, inclu-
12	sive.
13	(3) Goals.—The goal of the framework devel-
14	oped under paragraph (1) is—
15	(A) to provide Federal entities with a sus-
16	tained long-term signal of spectrum value to in-
17	form the spectrum management decisions of such
18	entities; and
19	(B) to provide the public with increased
20	transparency about how Federal entities use a
21	scare physical resource.
22	(4) Requirements.—The framework developed
23	under paragraph (1) shall—
24	(A) define the term "opportunity cost" as
25	the value of the spectrum, in dollar terms, as if

I	such spectrum were to be reallocated to the high-
2	est commercial alternative use that currently
3	does not have access to that spectrum;
4	(B) be updated, on an annual basis, to take
5	into account observed market valuations from
6	spectrum auctions, secondary spectrum trading,
7	and other market indicators of spectrum value;
8	(C) determine the opportunity costs borne
9	by each Federal entity for each spectrum band
10	that is entirely under the control of a single
11	agency; and
12	(D) determine the opportunity costs for
13	spectrum assigned or otherwise allocated to Fed-
14	eral entities for both primary use and secondary
15	use.
16	(b) Report on Opportunity Costs.—Each Federal
17	entity that has been assigned or otherwise allocated use of
18	a Federal spectrum band shall report, as an off-budget item,
19	the opportunity cost borne by the entity for each spectrum
20	band the entity uses—
21	(1) in the budget of the entity to be included in
22	the budget of the United States Government submitted
23	by the President under section 1105 of title 31,
24	United States Code; and

1	(2) in the annual financial statement of the enti-
2	ty required to be filed under section 3515 of title 31,
3	United States Code.
4	(c) Spectrum Value Analysis.—Not later than 5
5	years after the date of the enactment of this title, and every
6	5 years thereafter, each Federal entity that has been as-
7	signed or otherwise allocated use of a Federal spectrum
8	band, or otherwise utilizes such spectrum, shall engage in
9	an analysis comparing the opportunity cost of that spec-
10	trum, as such cost is determined by the framework developed
11	by the NTIA under subsection (a), to the projected costs of
12	the entity relocating to other government spectrum holdings,
13	co-locating with other government agencies, leasing other
14	non-Federal spectrum, or contracting out for its spectrum
15	activities.
16	(d) Spectrum Technology Study.—
17	(1) In General.—Not later than 18 months
18	after the date of the enactment of this title, and every
19	5 years thereafter, the Comptroller General of the
20	United States, in consultation with NTIA, shall ex-
21	amine the technologies and equipment used by Fed-
22	eral entities operating on Federal spectrum alloca-
23	tions and determine if such technologies and equip-
24	ment are the most spectrum efficient available.

1	(2) Certain determinations made.—If the re-
2	sults of any study required under paragraph (1) de-
3	termines that the technologies and equipment of Fed-
4	eral entities operating on Federal spectrum alloca-
5	tions are not the most spectrum efficient available, the
6	Comptroller General shall determine—
7	(A) what the costs would be to upgrade such
8	systems to more up-to-date and readily available
9	systems;
10	(B) what benefits would be gained from up-
11	grading, particularly any cost savings or in-
12	creases in spectrum utilization efficiency; and
13	(C) if there are any possible problems with
14	upgrading to more up-to-date systems.
15	SEC. 526. SYSTEM CERTIFICATION.
16	Not later than 6 months after the date of enactment
17	of this title, the Director of the Office of Management and
18	Budget shall update and revise section 33.4 of OMB Cir-
19	cular A-11 to reflect the recommendations regarding such
20	Circular made in the Commerce Spectrum Management Ad-
21	visory Committee Incentive Subcommittee report, adopted
22	January 11, 2011.

1	SEC. 527. REPORT TO CONGRESS ON IMPROVING SPEC-
2	TRUM MANAGEMENT.
3	Not later than 3 months after the date of enactment
4	of this title, the NTIA shall submit to the appropriate com-
5	mittees of Congress a report on the status of the NTIA's
6	plan to implement the recommendations contained in the
7	"President's Memorandum on Improving Spectrum Man-
8	agement for the 21st Century", 49 Weekly Comp. Pres. Doc.
9	2875, Nov. 29, 2004.
10	SEC. 528. WIRELESS FACILITIES DEPLOYMENT.
11	(a) Facility Modifications.—
12	(1) In General.—Notwithstanding section 704
13	of the Telecommunications Act of 1996 or any other
14	provision of law, a State or local government may not
15	deny, and shall approve, any eligible facilities request
16	for a modification of an existing wireless tower that
17	does not substantially change the physical dimensions
18	of such tower.
19	(2) Eligible facilities request.—For pur-
20	poses this subsection, the term "eligible facilities re-
21	quest" means any request for modification of an ex-
22	isting wireless tower that involves—
23	(A) collocation of new transmission equip-
24	ment;
25	(B) removal of transmission equipment;
26	and

1	(C) replacement of transmission equipment.
2	(b) Federal Easements and Rights-of-way.—
3	(1) Grant.—If an executive agency, a State, a
4	political subdivision or agency of a State, or a per-
5	son, firm, or organization applies for the grant of an
6	easement or rights-of-way to, in, over, or on a build-
7	ing owned by the Federal Government for the right to
8	install, construct, and maintain wireless service an-
9	tenna structures and equipment, and backhaul trans-
10	mission, the executive agency having control of the
11	building may grant to the applicant, on behalf of the
12	Federal Government, an easement or rights-of-way to
13	perform such installation, construction, and mainte-
14	nance.
15	(2) Application.—The Administrator of the
16	General Services Administration shall develop a com-
17	mon form for rights-of-way applications required
18	under paragraph (1) for all executive agencies that
19	shall be used by applicants with respect to the build-
20	ings or property of each such agency.
21	(3) Fee.—
22	(A) In General.—Notwithstanding any
23	other provision of law, in making a grant of an
24	easement or rights-of-way pursuant to para-
25	graph (1), the Administrator of the General

1	Services Administration shall establish a fee for
2	the award of such grant that is based on direct
3	cost recovery.
4	(B) Exceptions.—The Administrator of
5	the General Services Administration may estab-
6	lish exceptions to the fee amount required under
7	subparagraph (A)—
8	(i) in consideration of the public ben-
9	efit provided by a grant of an easement or
10	rights-of-way; and
11	(ii) in the interest of expanding wire-
12	less and broadband coverage.
13	(4) Use of fees collected.—Any fee amounts
14	collected by an executive agency pursuant to para-
15	graph (2) shall be made available, without further ap-
16	propriation, to such agency for purposes of the agen-
17	cy's telecommunications and information technology
18	needs and any excess funds shall then be deposited
19	into the Federal Building Fund.
20	(c) Master Contracts for Wireless Tower
21	SITINGS.—
22	(1) In General.—Notwithstanding section 704
23	of the Telecommunications Act of 1996 or any other
24	provision of law, and not later than 60 days after the

l	date of enactment of this Act, the Administrator of the
2	General Services Administration shall—
3	(A) develop 1 or more master contracts that
4	shall govern the placement of wireless service an-
5	tenna structures on buildings and property
6	owned by the Federal Government; and
7	(B) in developing the master contract, with
8	respect to the siting of wireless service antenna
9	structures, standardize the treatment of the
10	placement of wireless service antenna structures
11	on rooftop or building facades, the placement of
12	equipment on rooftops or inside buildings, and
13	technology, and any other key issues that the Ad-
14	$ministrator\ determines\ appropriate.$
15	(2) Applicability.—The master contract devel-
16	oped by the Administrator of the General Services Ad-
17	ministration under paragraph (1) shall apply to all
18	publicly accessible property owned by the Federal
19	Government, unless the Administrator decides that
20	issues with respect to the siting of a wireless service
21	antenna structure on a specific building or property
22	warrant nonstandard treatment of a specific prop-
23	erty.
24	(3) APPLICATION.—The Administrator of the
25	General Services Administration shall develop a com-

1	mon form or set of forms for wireless service antenna
2	structure siting applications required under this sec-
3	tion for all executive agencies that shall be used by
4	applicants with respect to the buildings of each such
5	agency.
6	TITLE VI—STUDIES ON NEXT
7	GENERATION 9-1-1 SERVICES
8	SEC. 601. DEFINITIONS.
9	As used in this title, the following definitions shall
10	apply:
11	(1) 9–1–1 SERVICES.—The term "9–1–1 serv-
12	ices" includes both E9-1-1 services and Next Genera-
13	tion 9-1-1 services.
14	(2) $E9-1-1$ SERVICES.—The term " $E9-1-1$ serv-
15	ices" means both phase I and phase II enhanced 9-
16	1-1 services, as described in section 20.18 of the Com-
17	mission's regulations (47 C.F.R. 20.18), as in effect
18	on the date of enactment of this title, or as subse-
19	quently revised by the Commission.
20	(3) NEXT GENERATION 9-1-1 SERVICES.—The
21	term "Next Generation 9-1-1 services" means an IP-
22	based system comprised of hardware, software, data,
23	and operational policies and procedures that—

1	(A) provides standardized interfaces from
2	emergency call and message services to support
3	emergency communications;
4	(B) processes all types of emergency calls,
5	including voice, data, and multimedia informa-
6	tion;
7	(C) acquires and integrates additional
8	emergency call data useful to call routing and
9	handling;
10	(D) delivers the emergency calls, messages,
11	and data to the appropriate public safety an-
12	swering point and other appropriate emergency
13	entities;
14	(E) supports data or video communications
15	needs for coordinated incident response and
16	$management;\ or$
17	(F) provides broadband service to public
18	safety answering points or other first responder
19	entities.
20	(4) Public safety answering point.—The
21	term "public safety answering point" has the mean-
22	ing given the term in section 222 of the Communica-
23	tions Act of 1934 (47 U.S.C. 222).

1	SEC. 602. NHTSA REPORT ON COSTS FOR REQUIREMENTS
2	AND SPECIFICATIONS OF NEXT GENERATION
3	9–1–1 SERVICES.
4	(a) In General.—Not later than 1 year after the date
5	of enactment of this title, the Administrator of the National
6	Highway Traffic Safety Administration, in consultation
7	with the Commission and the Secretary of Homeland Secu-
8	rity, shall prepare and submit a report to Congress that
9	analyzes and determines detailed costs for specific Next
10	Generation 9-1-1 service requirements and specifications.
11	(b) Purpose of Report.—The purpose of the report
12	required under subsection (a) is to serve as a resource for
13	Congress as it considers creating a coordinated, long-term
14	funding mechanism for the deployment and operation, ac-
15	cessibility, application development, equipment procure-
16	ment, and training of personnel for Next Generation 9-1-
17	1 services.
18	(c) Required Inclusions.—The report required
19	under subsection (a) shall include the following:
20	(1) How costs would be broken out geographi-
21	cally and/or allocated among public safety answering
22	points, broadband service providers, and third-party
23	providers of Next Generation 9-1-1 services.
24	(2) An assessment of the current state of Next
25	Generation 9-1-1 service readiness among public
26	safety answering points.

1	(3) How differences in public safety answering
2	points' access to broadband across the country may
3	affect costs.
4	(4) A technical analysis and cost study of dif-
5	ferent delivery platforms such as wireline, wireless,
6	and satellite.
7	(5) An assessment of the architectural character-
8	istics, feasibility, and limitations of Next Generation
9	9-1-1 service delivery.
10	(6) An analysis of the needs for Next Generation
11	9-1-1 service of persons with disabilities.
12	(7) Standards and protocols for Next Generation
13	9-1-1 service and for incorporating Voice over Inter-
14	net Protocol and "Real-Time Text" standards.
15	SEC. 603. FCC RECOMMENDATIONS FOR LEGAL AND STATU-
16	TORY FRAMEWORK FOR NEXT GENERATION 9-
17	1–1 SERVICES.
18	Not later than 1 year after the date of enactment of
19	this title, the Commission, in coordination with the Sec-
20	retary of Homeland Security and the Administrator of the
21	National Highway Traffic Safety Administration, shall
22	prepare and submit a report to Congress that contains rec-
23	ommendations for the legal and statutory framework for
24	Next Generation 9-1-1 services, consistent with rec-
25	ommendations in the National Broadband Plan developed

1	by the Commission pursuant to Public Law 111-5, includ-
2	ing the following:
3	(1) A legal and regulatory framework for the de-
4	velopment of Next Generation 9-1-1 services and the
5	transition from legacy 9-1-1 to Next Generation 9-
6	1–1 networks.
7	(2) Legal mechanisms to ensure efficient and ac-
8	curate transmission of 9-1-1 caller information to
9	emergency response agencies.
10	(3) Recommendations for removing jurisdictional
11	barriers and inconsistent legacy regulations includ-
12	ing—
13	(A) proposals that would require States to
14	remove regulatory roadblocks to Next Generation
15	9-1-1 services development, while recognizing ex-
16	isting State authority over 9-1-1 services;
17	(B) eliminating outdated 9-1-1 regulations
18	at the Federal level; and
19	(C) preempting inconsistent State regula-
20	tions.
21	TITLE VII—MISCELLANEOUS
22	SEC. 701. SEVERABILITY.
23	If any provision of this Act or an amendment made
24	by this Act, or the application of the provision to any per-
25	son or circumstance, is held to be unconstitutional, the re-

- 1 mainder of this Act and the amendments made by this Act,
- 2 and the application of the provisions of this Act and the
- 3 amendments made by this Act to any other person or cir-
- 4 cumstance, shall not be affected thereby.
- 5 SEC. 702. RULE OF CONSTRUCTION.
- 6 Nothing in this Act shall be construed as adding or
- 7 subtracting from the authority the Commission may or may
- 8 not have to regulate broadband Internet access service.

9 TITLE VIII—COMPLIANCE WITH

10 STATUTORY PAY-AS-YOU-GO ACT

- 11 SEC. 801. BUDGET COMPLIANCE.
- 12 The budgetary effects of this Act, for the purpose of
- 13 complying with the Statutory Pay-As-You-Go-Act of 2010,
- 14 shall be determined by reference to the latest statement titled
- 15 "Budgetary Effects of PAYGO Legislation" for this Act,
- 16 submitted for printing in the Congressional Record by the
- 17 Chairman of the Senate Budget Committee, provided that
- 18 such statement has been submitted prior to the vote on pas-
- 19 *sage*.