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AN	IENDMENT NO Calendar No
Pu	rpose: In the nature of a substitute.
IN	THE SENATE OF THE UNITED STATES—115th Cong., 1st Sess.
	S. 19
Т	o provide opportunities for broadband investment, and for other purposes.
R	deferred to the Committee on and ordered to be printed
	Ordered to lie on the table and to be printed
A	to be proposed by Mr. Thune and Mr. Nelson
Viz	::
1	Strike all after the enacting clause and insert the fol-
2	lowing:
3	SECTION 1. SHORT TITLE; TABLE OF CONTENTS.
4	(a) Short Title.—This Act may be cited as the
5	"Making Opportunities for Broadband Investment and
6	Limiting Excessive and Needless Obstacles to Wireless
7	Act" or the "MOBILE NOW Act".
8	(b) Table of Contents.—The table of contents of
9	this Act is as follows:
	 Sec. 1. Short title; table of contents. Sec. 2. Definitions. Sec. 3. Making 500 megahertz available. Sec. 4. Millimeter wave spectrum.

Sec. 5. 3 gigahertz spectrum.

Sec. 6. Communications facilities deployment on Federal property.

	Sec. 7. Broadband infrastructure deployment.
	Sec. 8. National broadband facilities asset database. Sec. 9. Reallocation incentives.
	Sec. 10. Bidirectional sharing study.
	Sec. 11. Unlicensed services in guard bands.
	Sec. 12. Pre-auction funding.
	Sec. 13. Immediate transfer of funds.
	Sec. 14. Amendments to the Spectrum Pipeline Act of 2015. Sec. 15. GAO assessment of unlicensed spectrum and Wi-Fi use in low-income
	neighborhoods.
	Sec. 16. Rulemaking related to partitioning or disaggregating licenses.
	Sec. 17. Unlicensed spectrum policy,
	Sec. 18. National plan for unlicensed spectrum. Sec. 19. Spectrum challenge prize.
	Sec. 20. Wireless telecommunications tax and fee collection fairness.
	Sec. 21. Rules of construction.
	See, 22. Relationship to Middle Class Tax Relief and Job Creation Act of 2012
1	SEC. 2. DEFINITIONS.
2	In this Act:
3	(1) Appropriate committees of con-
4	GRESS.—The term "appropriate committees of Con-
5	gress" means—
6	(A) the Committee on Commerce, Science
7	and Transportation of the Senate;
8	(B) the Committee on Energy and Com-
9	merce of the House of Representatives; and
10	(C) each committee of the Senate or of the
11	House of Representatives with jurisdiction over
12	a Federal entity affected by the applicable sec-
13	tion in which the term appears.
14	(2) Commission.—The term "Commission"
15	means the Federal Communications Commission.
16	(3) FEDERAL ENTITY.—The term "Federal en-

tity" has the meaning given the term in section

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1	113(l) of the National Telecommunications and In-
2	formation Administration Organization Act (47
3	U.S.C. 923(l)).
4	(4) NTIA.—The term "NTIA" means the Na-

- 4 (4) NTIA.—The term "NTIA" means the Na-5 tional Telecommunications and Information Admin-6 istration of the Department of Commerce.
- (5) OMB.—The term "OMB" means the Office
 of Management and Budget.
- 9 (6) SECRETARY.—The term "Secretary" means 10 the Secretary of Commerce.

11 SEC. 3. MAKING 500 MEGAHERTZ AVAILABLE.

12 (a) REQUIREMENTS.—

13 (1) IN GENERAL.—Consistent with the Presi-14 dential Memorandum of June 28, 2010, entitled 15 "Unleashing the Wireless Broadband Revolution" 16 and establishing a goal of making a total of 500 17 megahertz of Federal and non-Federal spectrum 18 available on a licensed or unlicensed basis for wire-19 less broadband use by 2020, not later than Decem-20 ber 31, 2020, the Secretary, working through the 21 NTIA, and the Commission shall make available a 22 total of at least 255 megahertz of Federal and non-23 Federal spectrum below the frequency of 6000 24 megahertz for mobile and fixed wireless broadband 25 use.

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1	(2) UNLICENSED AND LICENSED USE.—Of the
2	spectrum made available under paragraph (1), no
3	less than—
4	(A) 100 megahertz shall be made available
5	on an unlicensed basis; and
6	(B) 100 megahertz shall be made available
7	on an exclusive, licensed basis for commercia
8	mobile use, pursuant to the Commission's au-
9	thority to implement such licensing in a flexible
10	manner, and subject to potential continued use
11	of such spectrum by incumbent Federal entities
12	in designated geographic areas indefinitely or
13	for such length of time stipulated in transition
14	plans approved by the Technical Panel under
15	section 113(h) of the National Telecommuni-
16	cations and Information Administration Organi-
17	zation Act (47 U.S.C. 923(h)) for those incum-
18	bent entities to be relocated to alternate spec-
19	trum.
20	(3) Non-eligible spectrum.—For purposes
21	of satisfying the requirement under paragraph (1),
22	the following spectrum shall not be counted:
23	(A) The frequencies between 1695 and
24	1710 megahertz.

1	(B) The frequencies between 1755 and
2	1780 megahertz.
3	(C) The frequencies between 2155 and
4	2180 megahertz.
5	(D) The frequencies between 3550 and
6	3700 megahertz.
7	(E) Spectrum that the Commission deter-
8	mines had more than de minimis mobile or
9	fixed wireless broadband operations within the
10	band on the day before the date of enactment
11	of this Act.
12	(4) Relocation prioritized over shar-
13	ING.—This section shall be carried out in accordance
14	with section 113(j) of the National Telecommuni-
15	eations and Information Administration Organiza-
16	tion Act (47 U.S.C. 923(j)).
17	(5) Considerations.—In making spectrum
18	available under this section, the Secretary and Com-
19	mission shall consider—
20	(A) the need to preserve critical existing
21	and planned Federal Government capabilities;
22	(B) the impact on existing State, local, and
23	tribal government capabilities;
24	(C) the international implications;

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1	(D) the need for appropriate enforcement
2	mechanisms and authorities; and
3	(E) the importance of the deployment of
4	wireless broadband services in rural areas of the
5	United States.
6	(b) Rules of Construction.—Nothing in this sec-
7	tion shall be construed—
8	(1) to impair or otherwise affect the functions
9	of the Director of OMB relating to budgetary, ad-
10	ministrative, or legislative proposals;
11	(2) to require the disclosure of classified infor-
12	mation, law enforcement sensitive information, or
13	other information that must be protected in the in-
14	terest of national security; or
15	(3) to affect any requirement under section 156
16	of the National Telecommunications and Informa-
17	tion Administration Organization Act (47 U.S.C.
18	921 note), as added by section 1062(a) of the Na-
19	tional Defense Authorization Act for Fiscal Year
20	2000, or any other relevant statutory requirement
21	applicable to the reallocation of Federal spectrum.
22	SEC. 4. MILLIMETER WAVE SPECTRUM.
23	(a) Feasibility Assessment.—Not later than 18
24	months after the date of enactment of this Act, the NTIA,
25	in consultation with the Commission, shall conduct a feasi-

1	bility assessment regarding the impact, on Federal entities
2	and operations in any of the following bands, of author-
3	izing mobile or fixed terrestrial wireless operations, includ-
4	ing for advanced mobile service operations, in the fol-
5	lowing bands:
6	(1) The band between 31800 and 33400 mega-
7	hertz.
8	(2) The band between 71000 and 76000 mega-
9	hertz.
10	(3) The band between 81000 and 86000 mega-
11	hertz.
12	(b) REQUIREMENTS.—In conducting the feasibility
13	assessment under subsection (a), the NTIA shall—
14	(1) consult directly with Federal entities with
15	respect to frequencies allocated to Federal use by
16	such entities in the bands identified in that sub-
17	section;
18	(2) consider what, if any, impact authorizing
19	mobile or fixed terrestrial wireless operations, in-
20	cluding advanced mobile services operations, in any
21	of such frequencies would have on an affected Fed-
22	eral entity; and
23	(3) identify any such frequencies in the bands
24	described in that subsection that the NTIA assess-
25	ment determines are feasible for authorizing for mo-

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1	bile or fixed terrestrial wireless operations, including
2	any advanced mobile service operations.
3	(e) Report to Congress and the Commission.—
4	Not later than 30 days after the date the feasibility assess-
5	ment under subsection (a) is complete, the NTIA shall
6	submit to the appropriate committees of Congress a report
7	on the feasibility assessment and provide a copy to the
8	Commission.
9	(d) FCC PROCEEDING.—Not later than 2 years after
10	the date of enactment of this Λet or 90 days after the
11	date it receives the feasibility assessment under subsection
12	(c), whichever is earlier, the Commission, in consultation
13	with the NTIA, shall publish a notice of proposed rule-
14	making to consider service rules to authorize mobile or
15	fixed terrestrial wireless operations, including for ad-
16	vanced mobile service operations, in the following radio
17	frequency bands:
18	(1) The band between 24250 and 24450 mega-
19	hertz.
20	(2) The band between 25050 and 25250 mega-
21	hertz.
22	(3) The band between 31800 and 33400 mega-
23	hertz, except for any frequencies with Federal alloca-

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tions.

1	(4) The band between 42000 and 42500 mega-
2	hertz.
3	(5) The band between 71000 and 76000 mega-
4	hertz, except for any frequencies with Federal alloca-
5	tions.
6	(6) The band between 81000 and 86000 mega-
7	hertz, except for any frequencies with Federal alloca-
8	tions.
9	(7) Any frequencies with Federal allocations
10	identified as feasible under subsection (b)(3).
11	(e) Considerations.—In conducting a rulemaking
12	under subsection (d), the Commission shall—
13	(1) consult with Federal entities via the NTIA
14	regarding the frequencies described in subsection
15	(d)(7);
16	(2) consider how the bands described in sub-
17	section (d) may be used to provide commercial wire-
18	less broadband service, including whether—
19	(A) such spectrum may be best used for li-
20	censed or unlicensed services, or some combina-
21	tion thereof; and
22	(B) to permit additional licensed oper-
23	ations in such bands on a shared basis; and
24	(3) include technical characteristics under
25	which the bands described in subsection (d) may be

- 1 employed for mobile or fixed terrestrial wireless op-
- 2 erations, including any appropriate coexistence re-
- 3 quirements.

4 SEC. 5. 3 GIGAHERTZ SPECTRUM.

- 5 (a) Between 3100 Megahertz and 3550 Mega-
- 6 HERTZ.—Not later than 18 months after the date of en-
- 7 actment of this Act, and in consultation with the Commis-
- 8 sion and the head of each affected Federal agency (or a
- 9 designee thereof), the Secretary shall submit to the Com-
- 10 mission and the appropriate committees of Congress a re-
- 11 port evaluating the feasibility of allowing commercial wire-
- 12 less services, licensed or unlicensed, to share use of the
- 13 frequencies between 3100 megahertz and 3550 megahertz.
- 14 (b) Between 3700 Megahertz and 4200 Mega-
- 15 Hertz.—Not later than 18 months after the date of en-
- 16 actment of this Act, after notice and an opportunity for
- 17 public comment, and in consultation with the Secretary
- 18 and the head of each affected Federal agency (or a des-
- 19 ignee thereof), the Commission shall submit to the Sec-
- 20 retary and the appropriate committees of Congress a re-
- 21 port evaluating the feasibility of allowing commercial wire-
- 22 less services, licensed or unlicensed, to share use of the
- 23 frequencies between 3700 megahertz and 4200 megahertz.
- 24 (c) REQUIREMENTS.—A report under subsection (a)
- 25 or (b) shall include the following:

1	(1) An assessment of the operations of Federal
2	entities that operate Federal Government stations
3	authorized to use the frequencies described in that
4	subsection.
5	(2) An assessment of the possible impacts of
6	such sharing on Federal and non-Federal users al-
7	ready operating on the frequencies described in that
8	subsection.
9	(3) The criteria that may be necessary to en-
10	sure shared licensed or unlicensed services would not
1	cause harmful interference to Federal or non-Fed-
12	eral users already operating in the frequencies de-
13	scribed in that subsection.
14	(4) If such sharing is feasible, an identification
15	of which of the frequencies described in that sub-
6	section are most suitable for sharing with commer-
7	cial wireless services through the assignment of new
8	licenses by competitive bidding, for sharing with un-
9	licensed operations, or through a combination of li-
20	censing and unlicensed operations.
21	(d) COMMISSION ACTION.—The Commission, in con-
22	sultation with the NTLA, shall seek public comment on
23	the reports required under subsections (a) and (b), includ-
24	ing regarding the bands identified in such reports as fea-
25	sible pursuant to subsection $(e)(4)$.

1	SEC. 6. COMMUNICATIONS FACILITIES DEPLOYMENT ON
2	FEDERAL PROPERTY.
3	(a) In General.—Section 6409 of the Middle Class
4	Tax Relief and Job Creation Act of 2012 (47 U.S.C.
5	1455) is amended by striking subsections (b), (c), and (d)
6	and inserting the following:
7	"(b) Federal Easements, Rights-of-Way, and
8	Leases.—
9	"(1) Grant.—If an executive agency, a State,
10	a political subdivision or agency of a State, or a per-
11	son, firm, or organization applies for the grant of an
12	easement, right-of-way, or lease to, in, over, or on a
13	building or other property owned by the Federal
14	Government for the right to install, construct, mod-
15	ify, or maintain a communications facility installa-
16	tion, the executive agency having control of the
17	building or other property may grant to the appli-
18	cant, on behalf of the Federal Government, subject
19	to paragraph (5), an easement, right-of-way, or lease
20	to perform such installation, construction, modifica-
21	tion, or maintenance.
22	"(2) Application.—
23	"(A) IN GENERAL.—The Administrator of
24	General Services shall develop a common form
25	for applications for easements, rights-of-way,
26	and leases under paragraph (1) for all executive

1	agencies that, except as provided in subpara-
2	graph (B), shall be used by all executive agen-
3	cies and applicants with respect to the buildings
4	or other property of each such agency.
5	"(B) Exception.—The requirement under
6	subparagraph (A) for an executive agency to
7	use the common form developed by the Admin-
8	istrator of General Services shall not apply to
9	an executive agency if the head of an executive
10	agency notifies the Administrator that the exec-
11	utive agency uses a substantially similar appli-
12	cation.
13	"(3) Fee.—
14	"(A) In General.—Notwithstanding any
15	other provision of law, the Administrator of
16	General Services shall establish a fee for the
17	grant of an easement, right-of-way, or lease
18	pursuant to paragraph (1) that is based on di-
19	rect cost recovery.
20	"(B) Exceptions.—The Administrator of
21	General Services may establish exceptions to
22	the fee amount required under subparagraph
23	(A)—

1	"(i) in consideration of the public ben-
2	efit provided by a grant of an easement
3	right-of-way, or lease; and
4	"(ii) in the interest of expanding wire
5	less and broadband coverage.
6	"(4) USE OF FEES COLLECTED.—Any fee
7	amounts collected by an executive agency pursuant
8	to paragraph (3) may be made available, as provided
9	in appropriations Acts, to such agency to cover the
10	costs of granting the easement, right-of-way, or
11	lease.
12	"(5) TIMELY CONSIDERATION OF APPLICA-
13	TIONS.—
14	"(A) IN GENERAL.—Not later than 270
15	days after the date on which an executive agen-
16	cy receives a duly filed application for an ease-
17	ment, right-of-way, or lease under this sub-
18	section, the executive agency shall—
19	"(i) grant or deny, on behalf of the
20	Federal Government, the application; and
21	"(ii) notify the applicant of the grant
22	or denial.
23	"(B) EXPLANATION OF DENIAL.—If an ex-
24	ecutive agency denies an application under sub-
25	paragraph (A), the executive agency shall notify

1	the applicant in writing, including a clear state
2	ment of the reasons for the denial.
3	"(C) APPLICABILITY OF ENVIRONMENTAL
4	LAWS.—Nothing in this paragraph shall be con-
5	strued to relieve an executive agency of the re-
6	quirements of division Λ of subtitle III of title
7	54, United States Code, or the National Envi
8	ronmental Policy Act of 1969 (42 U.S.C. 4321
9	et seq.).
10	"(D) POINT OF CONTACT.—Upon receiving
11	an application under subparagraph (A), an ex-
12	ecutive agency shall designate one or more ap-
13	propriate individuals within the executive agen-
14	cy to act as a point of contact with the appli-
15	cant.
16	"(e) Master Contracts for Communications
17	FACILITY INSTALLATION SITINGS.—
18	"(1) IN GENERAL.—Notwithstanding section
19	704 of the Telecommunications Act of 1996 (Public
20	Law 104–104; 110 Stat. 151) or any other provision
21	of law, the Δ dministrator of General Services shall—
22	$``(\Lambda)$ develop one or more master contracts
23	that shall govern the placement of communica-
24	tions facility installations on buildings and

other property owned by the Federal Government; and

"(B) in developing the master contract or contracts, standardize the treatment of the placement of communications facility installations on building rooftops or facades, the placement of communications facility installations on rooftops or inside buildings, the technology used in connection with communications facility installations placed on Federal buildings and other property, and any other key issues the Administrator of General Services considers appropriate.

"(2) APPLICABILITY.—The master contract or contracts developed by the Administrator of General Services under paragraph (1) shall apply to all publicly accessible buildings and other property owned by the Federal Government, unless the Administrator of General Services decides that issues with respect to the siting of a communications facility installation on a specific building or other property warrant nonstandard treatment of such building or other property.

"(3) Application.—

1	"(A) IN GENERAL.—The Administrator of
2	General Services shall develop a common form
3	or set of forms for communications facility in-
4	stallation siting applications that, except as pro-
5	vided in subparagraph (B), shall be used by all
6	executive agencies and applicants with respect
7	to the buildings and other property of each such
8	agency,
9	"(B) Exception.—The requirement under
10	subparagraph (A) for an executive agency to
11	use the common form or set of forms developed
12	by the Administrator of General Services shall
13	not apply to an executive agency if the head of
14	the executive agency notifies the Administrator
15	that the executive agency uses a substantially
16	similar application.
17	"(d) Definitions.—In this section:
18	"(1) Communications facility installa-
19	TION.—The term 'communications facility installa-
20	tion' includes—
21	"(A) any infrastructure, including any
22	transmitting device, tower, or support structure,
23	and any equipment, switches, wiring, cabling,
24	power sources, shelters, or cabinets, associated
25	with the licensed or permitted unlicensed wire-

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1	less or wireline transmission of writings, signs,
2	signals, data, images, pictures, and sounds of
3	all kinds; and
4	"(B) any antenna or apparatus that—
5	"(i) is designed for the purpose of
6	emitting radio frequency;
7	"(ii) is designed to be operated, or is
8	operating, from a fixed location pursuant
9	to authorization by the Commission or is
10	using duly authorized devices that do not
11	require individual licenses; and
12	"(iii) is added to a tower, building, or
13	other structure.
14	"(2) Executive agency.—The term 'executive
15	agency' has the meaning given such term in section
16	102 of title 40, United States Code.".
17	(b) Savings Provision.—An application for an
18	easement, right-of-way, or lease that was made or granted
19	under section 6409 of the Middle Class Tax Relief and
20	Job Creation Act of 2012 (47 U.S.C. 1455) before the
21	date of enactment of this Act shall continue, subject to
22	that section as in effect on the day before such date of
23	enactment.
24	(e) STREAMLINING BROADBAND FACILITY APPLICA-
25	TIONS.—

1	(1) DEFINITION OF COMMUNICATIONS FACILITY
2	INSTALLATION.—In this subsection, the term "com-
3	munications facility installation" has the meaning
4	given the term in section 6409(d) of the Middle
5	Class Tax Relief and Job Creation Act of 2012 (47
6	U.S.C. 1455(d)), as amended by subsection (a).
7	(2) Recommendations.—
8	(A) In general.—Not later than 2 years
9	after the date of enactment of this Act, the
10	NTIA, in coordination with the Department of
11	the Interior, the Department of Agriculture, the
12	Department of Defense, the Department of
13	Transportation, OMB, and the General Services
14	Administration, shall develop recommendations
15	to streamline the process for considering appli-
16	cations by those agencies under section 6409(b)
17	of the Middle Class Tax Relief and Job Cre-
18	ation Act of 2012 (47 U.S.C. 1455(b)), as
19	amended by subsection (a).
20	(B) REQUIREMENTS FOR RECOMMENDA-
21	TIONS.—The recommendations developed under
22	subparagraph (Λ) shall include—
23	(i) procedures for the tracking of ap-
24	plications described in subparagraph (Λ) ;

1	(ii) methods by which to reduce the
2	amount of time between the receipt of an
3	application and the issuance of a final de-
4	cision on an application; and
5	(iii) policies to expedite renewals of an
6	easement, license, or other authorization to
7	locate communications facility installations
8	on land managed by the agencies described
9	in subparagraph (A).
10	(C) Report to congress.—Not later
11	than 2 years after the date on which the rec-
12	ommendations required under subparagraph
13	(A) are developed, the NTIA shall submit to the
14	Committee on Commerce, Science, and Trans-
15	portation of the Senate and the Committee on
16	Energy and Commerce of the House of Rep-
17	resentatives a report that describes—
18	(i) the status of the implementation of
19	the recommendations developed under sub-
20	paragraph (A); and
21	(ii) any improvements to the process
22	for considering applications described in
23	subparagraph (Λ) that have resulted from
24	those recommendations, including in par-
25	ticular the speed at which such applica-

1	tions are reviewed and a final determina-
2	tion is issued.
3	SEC. 7. BROADBAND INFRASTRUCTURE DEPLOYMENT.
4	(a) FINDING REGARDING FEDERAL AND STATE DE-
5	PARTMENTS OF TRANSPORTATION.—Congress finds that
6	it is the policy of the United States for the Department
7	of Transportation and State departments of transpor-
8	tation—
9	(1) to adjust or otherwise develop right-of-way
10	policies for Federal-aid highways to effectively ac-
11	commodate broadband infrastructure;
12	(2) to allow for the safe and efficient accommo-
13	dation of broadband infrastructure in the public
14	right-of-way; and
15	(3) to the extent applicable, to coordinate with
16	other statewide telecommunication and broadband
17	plans when developing a statewide transportation
18	improvement program.
19	(b) DEFINITIONS.—In this section:
20	(1) Appropriate state agency.—The term
21	"appropriate State agency" means a State govern-
22	mental agency that is recognized by the executive
23	branch of the State as having the experience nec-
24	essary to evaluate and carry out projects relating to

1	the proper and effective installation and operation of
2	broadband infrastructure.
3	(2) Broadband infrastructure.—The term
4	"broadband infrastructure" means any buried, un-
5	derground, or aerial facility, and any wireless or
6	wireline connection, that enables users to send and
7	receive voice, video, data, graphics, or any combina-
8	tion thereof.
9	(3) Broadband infrastructure entity.—
10	The term "broadband infrastructure entity" means
11	any entity that—
12	(A) installs, owns, or operates broadband
13	infrastructure; and
4	(B) provides broadband services in a man-
5	ner consistent with the public interest, conven-
16	ience, and necessity, as determined by the
17	State.
8	(4) State.—The term "State" means—
19	(A) a State;
20	(B) the District of Columbia; and
21	(C) the Commonwealth of Puerto Rico.
22	(e) Broadband Infrastructure Deployment.—
23	To facilitate the installation of broadband infrastructure
24	and achieve the policy described in subsection (a), the Sec-
25	retary of Transportation shall ensure that each State that

1	receives funds under chapter 1 of title 23, United States
2	Code, meets the following requirements:
3	(1) Broadband consultation.—The State
4	department of transportation, in consultation with
5	appropriate State agencies, shall—
6	(A) identify a broadband utility coordi-
7	nator, that may have additional responsibilities,
8	whether in the State department of transpor-
9	tation or in another State agency, that is re-
10	sponsible for facilitating the broadband infra-
11	structure right-of-way efforts within the State;
12	(B) establish a process for the registration
13	of broadband infrastructure entities that seek
14	to be included in those broadband infrastruc-
15	ture right-of-way facilitation efforts within the
16	State;
17	(C) establish a process to electronically no-
18	tify broadband infrastructure entities identified
19	under subparagraph (B) of the State transpor-
20	tation improvement program on an annual basis
21	and provide additional notifications as nec-
22	essary to achieve the goals of this section; and
23	(D) coordinate initiatives carried out under
24	this section with other statewide telecommuni-
25	cation and broadband plans and State and local

1	transportation and land use plans, including
2	strategies to minimize repeated excavations that
3	involve the installation of broadband infrastruc-
4	ture in a right-of-way.
5	(2) Priority.—If a State chooses to provide
6	for the installation of broadband infrastructure in
7	the right-of-way of an applicable Federal-aid high-
8	way project under this subsection, the State depart-
9	ment of transportation shall carry out any appro-
10	priate measures to ensure that any existing
11	broadband infrastructure entities are not disadvan-
12	taged, as compared to other broadband infrastruc-
13	ture entities, with respect to the program under this
14	subsection.
15	(d) Effect of Section.—This section applies only
16	to activities for which obligations or expenditures are ini-
17	tially approved on or after the date of enactment of this
18	Act. Nothing in this section establishes a mandate or re-
19	quirement that a State install broadband infrastructure
20	in a highway right-of-way.
21	SEC. 8. NATIONAL BROADBAND FACILITIES ASSET DATA-
22	BASE.
23	(a) DEFINITIONS.—In this section:

I	(1) COMMUNICATIONS FACILITY INSTALLA-
2	TION.—The term "communications facility installa-
3	tion" includes—
4	(A) any infrastructure, including any
5	transmitting device, tower, or support structure,
6	and any equipment, switches, wiring, cabling,
7	power sources, shelters, or cabinets, associated
8	with the licensed or permitted unlicensed wire-
9	less or wireline transmission of writings, signs,
10	signals, data, images, pictures, and sounds of
11	all kinds; and
12	(B) any antenna or apparatus that—
13	(i) is designed for the purpose of
14	emitting radio frequency;
15	(ii) is designed to be operated, or is
16	operating, from a fixed location pursuant
17	to authorization by the Commission or is
18	using duly authorized devices that do not
19	require individual licenses; and
20	(iii) is added to a tower, building, or
21	other structure.
22	(2) Covered property.—The term "covered
23	property"—

1	(A) means any real property capable of
2	supporting a communications facility installa-
3	tion; and
4	(B) includes any interest in real property
5	described in subparagraph (A).
6	(3) Database.—The term "database" means
7	the database established under subsection (b).
8	(4) Executive agency.—The term "Executive
9	agency" has the meaning given the term in section
10	105 of title 5, United States Code.
11	(b) Database Established.—Not later than June
12	30, 2018, the Director of the Office of Science and Tech-
13	nology Policy, in consultation with the Chairman of the
14	Commission, Assistant Secretary of Commerce for Com-
15	munications and Information, Under Secretary of Com-
16	merce for Standards and Technology, Administrator of
17	General Services, and Director of OMB, shall—
18	(1) establish and operate a single database of
19	any covered property that is owned, leased, or other-
20	wise managed by an Executive agency;
21	(2) make the database available to—
22	(Λ) any entity that—
23	(i) constructs or operates communica-
24	tions facility installations; or

1	(ii) provides communications service;
2	and
3	(B) any other entity that the Director of
4	the Office of Science and Technology Policy de-
5	termines is appropriate; and
6	(3) establish a process for withholding data
7	from the database for national security, public safe-
8	ty, or other national strategic concerns in accord-
9	ance with existing statutory authority and Executive
10	order mandates with respect to handling and protec-
11	tion of such information.
12	(c) PUBLIC COMMENT.—
13	(1) In general.—Not later than 30 days after
4	the date of enactment of this Act, the Director of
15	the Office of Science and Technology Policy shall
16	seek public comment to inform the establishment
7	and operation of the database.
8	(2) Contents.—In seeking public comment
9	under paragraph (1), the Director shall include a re-
20	quest for recommendations on—
21	(Λ) criteria that make real property capa-
22	ble of supporting communications facility instal-
23	lations;

1	(B) types of information related to covered
2	property that should be included in the data-
3	base;
4	(C) an interface by which accessibility to
5	the database for all users will be appropriately
6	efficient and secure; and
7	(D) other information the Director deter-
8	mines necessary to establish and operate the
9	database.
10	(d) FEDERAL AGENCIES.—
11	(1) Initial provision of information.—Not
12	later than 90 days after the date on which the data-
13	base is established under subsection (b), the head of
14	an Executive agency shall provide to the Director of
15	the Office of Science and Technology Policy, in a
16	manner and format to be determined by the Direc-
17	tor, such information as the Director determines ap-
18	propriate with respect to covered property owned,
19	leased, or otherwise managed by the Executive agen-
20	ey.
21	(2) Change to information previously
22	PROVIDED.—In the case of any change to informa-
23	tion provided to the Director of the Office of Science
24	and Technology Policy by the head of an Executive
25	agency under paragraph (1), the head of the Execu-

1	tive agency shall provide updated information to the
2	Director not later than 30 days after the date of the
3	change.

(3) Subsequently acquires covered property after the date on which the database is established under subsection (b), the head of the Executive agency shall provide to the Director of the Office of Science and Technology Policy the information required under paragraph (1) with respect to the covered property not later than 30 days after the date of the acquisition.

(e) STATE AND LOCAL GOVERNMENTS.—

(1) IN GENERAL.—The Director of the Office of Science and Technology Policy (referred to in this subsection as the "Director") shall make the database available to State and local governments so that such governments may provide to the Director for inclusion in the database similar information to the information required under subsection (d)(1) regarding covered property owned, leased, or otherwise managed by such governments.

(2) REPORT ON INCENTIVIZING PARTICIPATION
BY STATE AND LOCAL GOVERNMENTS.—

1	(A) IN GENERAL.—Not later than 1 year
2	after the date of enactment of this Λ ct, the Di-
3	rector, in consultation with the Chairman of the
4	Commission, the Assistant Secretary of Com-
5	merce for Communications and Information,
6	the Under Secretary of Commerce for Stand-
7	ards and Technology, the Administrator of Gen-
8	eral Services, and the Director of OMB, shall
9	submit to the Committee on Commerce,
10	Science, and Transportation of the Senate and
11	the Committee on Energy and Commerce of the
12	House of Representatives a report on potential
13	ways to incentivize State and local governments
14	to provide to the Director for inclusion in the
15	database similar information to the information
16	required under subsection (d)(1) regarding cov-
17	ered property owned, leased, or otherwise man-
18	aged by such governments pursuant to para-
19	graph (1) of this subsection or through other
20	means.
21	(B) Considerations.—The Director, in
22	preparing the report under subparagraph (Λ) ,
23	shall—
24	(i) consult with State and local gov-
25	ernments, or their representatives, to iden-

1	tify for inclusion in the report the mos
2	cost-effective options for State and loca
3	governments to collect and provide the in
4	formation described in subparagraph (A)
5	including utilizing and leveraging State
6	broadband initiatives and programs; and
7	(ii) make recommendations on ways
8	the Federal Government can assist State
9	and local governments in collecting and
10	providing the information described in sub
11	paragraph (A).
12	(C) REPORT UPDATE.—Not later than 2
13	years after the date on which the database is
14	established under this section, the Director
15	shall submit to the Committee on Commerce
16	Science, and Transportation of the Senate and
17	the Committee on Energy and Commerce of the
18	House of Representatives an update to the re-
19	port required under subparagraph (A) that
20	identifies State and local governments that have
21	contributed to the database and recommends
22	ways to further incentivize participation by
23	State and local governments pursuant to para-
24	graph (1) of this subsection or through other
25	means.

(f) Database Updates.—

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2 (1) Timely inclusion.—After the establishment of the database, the Director of the Office of
4 Science and Technology Policy shall ensure that in5 formation provided under subsection (d) or (e) is in6 cluded in the database not later than 7 days after
7 the date on which the Director receives the informa8 tion.

- (2) Date of addition or update.—Information in the database relating to covered property shall include the date on which the information was added or most recently updated.
- 13 (g) Report.—Not later than 180 days after the date the Director of the Office of Science and Technology Pol-14 15 icy seeks public comment under subsection (c)(1), the Di-16 rector shall submit to the Committee on Commerce, 17 Science, and Transportation of the Senate and the Com-18 mittee on Energy and Commerce of the House of Rep-19 resentatives a report on the progress in establishing the 20 database under this section. The Director shall update the 21 report annually until the date that the database is fully 22 operational. After the database is fully operational and for 23 the next 5 years thereafter, the Director shall provide an-24 nual reports regarding the use of the database, rec-25 ommendations of how the database may provide additional

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1	utility to the entities described in subsection (b)(2), if any
2	recommendations are warranted, and how previous rec
3	ommendations have been implemented.
4	SEC. 9. REALLOCATION INCENTIVES.
5	(a) In General.—Not later than 18 months after
6	the date of enactment of this Act, the Secretary, in con-
7	sultation with the Commission, the Director of OMB, and
8	the head of each affected Federal agency (or a designed
9	thereof), after notice and an opportunity for public com-
10	ment, shall submit to the appropriate committees of Con-
11	gress a report that includes legislative or regulatory rec-
12	ommendations to incentivize a Federal entity to relinquish
13	or share with Federal or non-Federal users, Federal spec-
14	trum for the purpose of allowing commercial wireless
15	broadband services to operate on that Federal spectrum.
16	(b) Post-Auction Payments.—
17	(1) Report.—In preparing the report under
18	subsection (a), the Secretary shall—
19	(Λ) consider whether permitting eligible
20	Federal entities that are implementing a transi-
21	tion plan submitted under section 113(h) of the
22	National Telecommunications and Information
23	Administration Organization Act (47 U.S.C.
24	923(h)) to accept payments could result in ac-

cess to the eligible frequencies that are being

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1	reallocated for exclusive non-Federal use or
2	shared use sooner than would otherwise occur
3	without such payments; and
4	(B) include the findings under subpara-
5	graph (Λ) , including the analysis under para-
6	graph (2) and any recommendations for legisla-
7	tion, in the report.
8	(2) Analysis.—In considering payments under
9	paragraph $(1)(\Lambda)$, the Secretary shall conduct an
10	analysis of whether and how such payments would
11	affect—
12	(A) bidding in auctions conducted under
13	section 309(j) of the Communications Act of
14	1934 (47 U.S.C. 309(j)) of such eligible fre-
15	quencies; and
16	(B) receipts collected from the auctions de-
17	scribed in subparagraph (A).
18	(3) Definitions.—In this subsection:
19	(A) PAYMENT.—The term "payment"
20	means a payment in cash or in-kind by any
21	auction winner, or any person affiliated with an
22	auction winner, of eligible frequencies during
23	the period after eligible frequencies have been
24	reallocated by competitive bidding under section
25	309(i) of the Communications Act of 1934 (47)

1	U.S.C. 309(j)) but prior to the completion of
2	relocation or sharing transition of such eligible
3	frequencies per transition plans approved by the
4	Technical Panel.
5	(B) ELIGIBLE FREQUENCIES.—The term
6	"eligible frequencies" has the meaning given
7	the term in section 113(g)(2) of the National
8	Telecommunications and Information Adminis-
9	tration Organization Act (47 U.S.C. 923(g)(2)).
10	SEC. 10. BIDIRECTIONAL SHARING STUDY.
11	(a) In General.—Not later than 1 year after the
12	date of enactment of this Act, including an opportunity
13	for public comment, the Commission, in collaboration with
[4	the NTIA, shall—
15	(1) conduct a bidirectional sharing study to de-
16	termine the best means of providing Federal entities
17	flexible access to non-Federal spectrum on a shared
18	basis across a range of short-, mid-, and long-range
19	timeframes, including for intermittent purposes like
20	emergency use; and
21	(2) submit to Congress a report on the study
22	under paragraph (1), including any recommenda-
23	tions for legislation or proposed regulations.
24	(b) Considerations.—In conducting the study
25	under subsection (a), the Commission shall—

1	(1) consider the regulatory certainty that com-
2	mercial spectrum users and Federal entities need to
3	make longer-term investment decisions for shared
4	access to be viable; and
5	(2) evaluate any barriers to voluntary commer-
6	cial arrangements in which non-Federal users could
7	provide access to Federal entities.
8	SEC. 11. UNLICENSED SERVICES IN GUARD BANDS.
9	(a) IN GENERAL.—After public notice and comment,
10	and in consultation with the Secretary and the head of
11	each affected Federal agency (or a designee thereof), with
12	respect to frequencies allocated for Federal use, the Com-
13	mission shall adopt rules that permit unlicensed services
14	where feasible to use any frequencies that are designated
15	as guard bands to protect frequencies allocated after the
16	date of enactment of this Λct by competitive bidding under
17	section 309(j) of the Communications Act of 1934 (47
18	U.S.C. 309(j)), including spectrum that acts as a duplex
19	gap between transmit and receive frequencies.
20	(b) LIMITATION.—The Commission may not permit
21	any use of a guard band under this section that would
22	cause harmful interference to a licensed service or a Fed-
23	eral service operating in the guard band or in an adjacent
24	band.

1	(e) Rule of Construction.—Nothing in this sec-
2	tion shall be construed as limiting the Commission or the
3	Secretary from otherwise making spectrum available for
4	licensed or unlicensed use in any frequency band in addi-
5	tion to guard bands, including under section 3, consistent
6	with their statutory jurisdictions.
7	SEC. 12. PRE-AUCTION FUNDING.
8	Section 118(d)(3)(B)(i)(II) of the National Tele-
9	communications and Information Administration Organi-
10	zation Act (47 U.S.C. 928(d)(3)(B)(i)(II)) is amended by
11	striking "5 years" and inserting "8 years".
12	SEC. 13. IMMEDIATE TRANSFER OF FUNDS.
13	Section 118(e)(1) of the National Telecommuni-
14	cations and Information Administration Organization Act
15	(47 U.S.C. 928(e)(1)) is amended by adding at the end
16	the following:
17	"(D) At the request of an eligible Federal
18	entity, the Director of the Office of Manage-
19	ment and Budget (in this subsection referred to
20	as 'OMB') may transfer the amount under sub-
21	paragraph (A) immediately—
22	"(i) after the frequencies are reallo-
23	cated by competitive bidding under section
24	309(j) of the Communications Act of 1934
25	(47 U.S.C. 309(j)); or

1	"(ii) in the case of an incumbent Fed-
2	eral entity that is incurring relocation or
3	sharing costs to accommodate sharing
4	spectrum frequencies with another Federal
5	entity, after the frequencies from which the
6	other eligible Federal entity is relocating
7	are reallocated by competitive bidding
8	under section 309(j) of the Communica-
9	tions Act of 1934 (47 U.S.C. 309(j)), with-
10	out regard to the availability of such sums
11	in the Fund.
12	"(E) Prior to the deposit of proceeds into
13	the Fund from an auction, the Director of
14	OMB may borrow from the Treasury the
15	amount under subparagraph (A) for a transfer
16	under subparagraph (D). The Treasury shall
17	immediately be reimbursed, without interest,
18	from funds deposited into the Fund.".
19	SEC. 14. AMENDMENTS TO THE SPECTRUM PIPELINE ACT
20	OF 2015.
21	Section 1008 of the Spectrum Pipeline Act of 2015
22	(Public Law 114-74; 129 Stat. 584) is amended in the
23	matter preceding paragraph (1) by inserting ", after no-
24	tice and an opportunity for public comment," after "the
25	Commission".

1	SEC. 15. GAO ASSESSMENT OF UNLICENSED SPECTRUM
2	AND WI-FI USE IN LOW-INCOME NEIGHBOR-
3	HOODS.
4	(a) Study.—
5	(1) In General.—The Comptroller General of
6	the United States shall conduct a study to evaluate
7	the availability of broadband Internet access using
8	unlicensed spectrum and wireless networks in low-in-
9	come neighborhoods.
10	(2) Requirements.—In conducting the study
11	under paragraph (1), the Comptroller General shall
12	consider and evaluate—
13	(A) the availability of wireless Internet hot
14	spots and access to unlicensed spectrum in low-
15	income neighborhoods, particularly for elemen-
16	tary and secondary school-aged children in such
17	neighborhoods;
18	(B) any barriers preventing or limiting the
19	deployment and use of wireless networks in low-
20	income neighborhoods;
21	(C) how to overcome any barriers described
22	in subparagraph (B), including through incen-
23	tives, policies, or requirements that would in-
24	crease the availability of unlicensed spectrum
25	and related technologies in low-income neigh-
26	borhoods; and

1	(D) how to encourage home broadband
2	adoption by households with elementary and
3	secondary school-age children that are in low-
4	income neighborhoods.
5	(b) REPORT.—Not later than 1 year after the date
6	of enactment of this Act, the Comptroller General shall
7	submit to the Committee on Commerce, Science, and
8	Transportation of the Senate and the Committee on En-
9	ergy and Commerce of the House of Representatives a re-
10	port that—
1	(1) summarizes the findings of the study con-
12	ducted under subsection (a); and
13	(2) makes recommendations with respect to po-
14	tential incentives, policies, and requirements that
15	could help achieve the goals described in subpara-
16	graphs (C) and (D) of subsection (a)(2).
17	SEC. 16. RULEMAKING RELATED TO PARTITIONING OR
8	DISAGGREGATING LICENSES.
9	(a) DEFINITIONS.—In this section—
20	(1) COVERED SMALL CARRIER.—The term
21	"covered small carrier" means a carrier (as defined
22	in section 3 of the Communications Λ ct of 1934 (47)
23	U.S.C. 153)) that—
24	(Λ) has not more than 1,500 employees (as
25	determined under section 121.106 of title 13,

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1	Code of Federal Regulations, or any successor
2	thereto); and
3	(B) offers services using the facilities of
4	the carrier.
5	(2) RURAL AREA.—The term "rural area"
6	means any area other than—
7	(A) a city, town, or incorporated area that
8	has a population of more than 20,000 inhab-
9	itants; or
10	(B) an urbanized area contiguous and ad-
11	jacent to a city or town that has a population
12	of more than 50,000 inhabitants.
13	(b) Rulemaking.—
14	(1) In general.—Not later than 1 year after
15	the date of enactment of this Act, the Commission
16	shall initiate a rulemaking proceeding to assess
17	whether to establish a program, or modify existing
18	programs, under which a licensee that receives a li-
19	cense for the exclusive use of spectrum in a specific
20	geographic area under section 301 of the Commu-
21	nications Δ et of 1934 (47 U.S.C. 301) may partition
22	or disaggregate the license by sale or long-term
23	lease—
24	(A) in order to—

1 (i) provide services consistent with	the
2 license; and	
3 (ii) make unused spectrum availa	able
4 to—	
5 (I) an unaffiliated covered sn	nall
6 carrier; or	
7 (II) an unaffiliated carrier	to
8 serve a rural area; and	
9 (B) if the Commission finds that such	lı a
0 program would promote—	
(i) the availability of advanced t	ele-
2 communications services in rural areas;	or
3 (ii) spectrum availability for cover	red
4 small carriers.	
5 (2) Considerations.—In conducting the re	ale-
6 making proceeding under paragraph (1), the Co	m-
7 mission shall consider, with respect to the progr	am
8 proposed to be established under that paragraph	1 —
9 (A) whether reduced performance requ	ire-
ments with respect to spectrum obtain	ned
through the program would facilitate depl	loy-
ment of advanced telecommunications servi	ices
in the areas covered by the program;	
(B) what conditions may be needed	on
transfers of spectrum under the program	to

1	allow covered small carriers that obtain spec-
2	trum under the program to build out the spec-
3	trum in a reasonable period of time;
4	(C) what incentives may be appropriate to
5	encourage licensees to lease or sell spectrum, in-
6	cluding
7	(i) extending the term of a license
8	granted under section 301 of the Commu-
9	nications Act of 1934 (47 U.S.C. 301); or
10	(ii) modifying performance require-
11	ments of the license relating to the leased
12	or sold spectrum; and
13	(D) the administrative feasibility of—
14	(i) the incentives described in sub-
15	paragraph (C); and
16	(ii) other incentives considered by the
17	Commission that further the goals of this
18	section.
19	(3) Forfeiture of spectrum.—If a party
20	fails to meet any build out requirements set by the
21	Commission for any spectrum sold or leased under
22	this section, the right to the spectrum shall be for-
23	feited to the Commission unless the Commission
24	finds that there is good cause for the failure of the
25	party.

1	(4) Requirement.—The Commission may
2	offer a licensee incentives or reduced performance
3	requirements under this section only if the Commis-
4	sion finds that doing so would likely result in in-
5	creased availability of advanced telecommunications
6	services in a rural area.
7	SEC. 17. UNLICENSED SPECTRUM POLICY.
8	(a) STATEMENT OF POLICY.—It is the policy of the
9	United States—
10	(1) to maximize the benefit to the people of the
11	United States of the spectrum resources of the
12	United States;
13	(2) to advance innovation and investment in
14	wireless broadband services; and
15	(3) to promote spectrum policy that makes
16	available on an unlicensed basis radio frequency
17	bands sufficient to meet consumer demand for unli-
18	censed wireless broadband operations.
19	(b) Commission Responsibilities.—The Commis-
20	sion shall ensure that the efforts of the Commission re-
21	lated to spectrum allocation and assignment make avail-
22	able on an unlicensed basis radio frequency bands suffi-
23	cient to meet demand for unlicensed wireless broadband
24	operations if doing so is, after taking into account the fu-
25	ture needs of other spectrum users—

1	(1) reasonable; and
2	(2) in the public interest.
3	(c) Commission Action.—Not later than 18 months
4	after the date of enactment of this Act, the Commission
5	shall take action to implement subsection (b).
6	SEC. 18. NATIONAL PLAN FOR UNLICENSED SPECTRUM.
7	(a) DEFINITIONS.—In this section:
8	(1) Spectrum relocation fund.—The term
9	"Spectrum Relocation Fund" means the Fund es-
10	tablished under section 118 of the National Tele-
11	communications and Information Administration Or-
12	ganization Act (47 U.S.C. 928).
13	(2) Unlicensed operations.—The term "un-
14	licensed operations" means the use of spectrum on
15	a non-exclusive basis under—
16	(A) part 15 of title 47, Code of Federal
17	Regulations; or
18	(B) licensing by rule under part 96 of title
19	47, Code of Federal Regulations.
20	(b) NATIONAL PLAN.—Not later than 1 year after
21	the date of enactment of this Act, the Commission, in con-
22	sultation with the NTIA, shall develop a national plan for
23	making additional radio frequency bands available for un-
24	licensed operations.

1	(c) REQUIREMENTS.—The plan developed under this
2	section shall—
3	(1) identify an approach that ensures that con-
4	sumers have access to additional spectrum to con-
5	duct unlicensed operations in a range of radio fre-
6	quencies to meet consumer demand;
7	(2) recommend specific actions by the Commis-
8	sion and the NTLA to permit unlicensed operations
9	in additional radio frequency ranges that the Com-
10	mission finds—
11	(A) are consistent with the statement of
12	policy under section 18(a);
13	(B) will—
14	(i) expand opportunities for unli-
15	censed operations in a spectrum band; or
16	(ii) otherwise improve spectrum utili-
17	zation and intensity of use of bands where
8	unlicensed operations are already per-
9	mitted;
20	(C) will not cause harmful interference to
21	Federal or non-Federal users of such bands;
22	and
23	(D) will not significantly impact homeland
24	security or national security communications
25	systems; and

ł	(3) examine additional ways, with respect to ex-
2	isting and planned databases or spectrum access sys-
3	tems designed to promote spectrum sharing and ac-
4	cess to spectrum for unlicensed operations—
5	(Λ) to improve accuracy and efficacy;
6	(B) to reduce burdens on consumers, man-
7	ufacturers, and service providers; and
8	(C) to protect sensitive Government infor-
9	mation.
10	(d) Spectrum Relocation Fund.—To be included
11	as part of the plan developed under this section, the NTIA
12	shall share with the Commission recommendations about
13	how to reform the Spectrum Relocation Fund—
14	(1) to address costs incurred by Federal entities
15	related to sharing radio frequency bands with radio
16	technologies conducting unlicensed operations; and
17	(2) to ensure the Spectrum Relocation Fund
18	has sufficient funds to cover—
19	(A) the costs described in paragraph (1);
20	and
21	(B) other expenditures allowed of the
22	Spectrum Relocation Fund under section 118 of
23	the National Telecommunications and Informa-
24	tion Administration Organization Act (47
25	U.S.C. 928).

1	(e) REPORT REQUIRED.—
2	(1) IN GENERAL.—Not later than 1 year after
3	the date of enactment of this Act, the Commission
4	shall submit to the appropriate committees of Con-
5	gress a report that describes the plan developed
6	under this section, including any recommendations
7	for legislative change.
8	(2) Publication on commission website.—
9	Not later than the date on which the Commission
10	submits the report under paragraph (1), the Com-
11	mission shall make the report publicly available on
12	the website of the Commission.
1.7	SEC. 19. SPECTRUM CHALLENGE PRIZE,
13	
13	(a) Short Title.—This section may be cited as the
14	(a) Short Title.—This section may be cited as the
14 15	(a) Short Title.—This section may be cited as the "Spectrum Challenge Prize Act".
14 15 16	(a) Short Title.—This section may be cited as the "Spectrum Challenge Prize Λet".(b) Definition of Prize Competition.—In this
14 15 16 17 18	 (a) Short Title.—This section may be cited as the "Spectrum Challenge Prize Λet". (b) Definition of Prize Competition.—In this section, the term "prize competition" means a prize com-
14 15 16 17 18	 (a) Short Title.—This section may be cited as the "Spectrum Challenge Prize Λet". (b) Definition of Prize Competition.—In this section, the term "prize competition" means a prize competition conducted by the Secretary under subsection
14 15 16 17 18 19	 (a) Short Title.—This section may be cited as the "Spectrum Challenge Prize Act". (b) Definition of Prize Competition.—In this section, the term "prize competition" means a prize competition conducted by the Secretary under subsection (c)(1).
14 15 16 17 18 19 20	 (a) Short Title.—This section may be cited as the "Spectrum Challenge Prize Act". (b) Definition of Prize Competition.—In this section, the term "prize competition" means a prize competition conducted by the Secretary under subsection (c)(1). (c) Spectrum Challenge Prize.—
14 15 16 17 18 19 20 21	 (a) Short Title.—This section may be cited as the "Spectrum Challenge Prize Act". (b) Definition of Prize Competition.—In this section, the term "prize competition" means a prize competition conducted by the Secretary under subsection (c)(1). (c) Spectrum Challenge Prize.— (1) In General.—The Secretary, in consulta-

1	nology, shall, subject to the availability of funds for
2	prize competitions under this section—
3	(A) conduct prize competitions to dramati-
4	cally accelerate the development and commer-
5	cialization of technology that improves spectrum
6	efficiency and is capable of cost-effective deploy-
7	ment; and
8	(B) define a measurable set of perform-
9	ance goals for participants in the prize competi-
10	tions to demonstrate their solutions on a level
11	playing field while making a significant ad-
12	vancement over the current state of the art.
13	(2) Authority of Secretary.—In carrying
14	out paragraph (1), the Secretary may—
15	(A) enter into a grant, contract, coopera-
16	tive agreement, or other agreement with a pri-
17	vate sector for-profit or nonprofit entity to ad-
18	minister the prize competitions;
19	(B) invite the Defense Advanced Research
20	Projects Agency, the Commission, the National
21	Aeronautics and Space Administration, the Na-
22	tional Science Foundation, or any other Federal
23	agency to provide advice and assistance in the
24	design or administration of the prize competi-
25	tions; and

1	(C) award not more than \$5,000,000, in
2	the aggregate, to the winner or winners of the
3	prize competitions.
4	(d) Criteria.—Not later than 180 days after the
5	date on which funds for prize competitions are made avail-
6	able pursuant to this section, the Commission shall publish
7	a technical paper on spectrum efficiency providing criteria
8	that may be used for the design of the prize competitions.
9	(e) Authorization of Appropriations.—There
10	are authorized to be appropriated such sums as may be
11	necessary to carry out this section.
12	SEC. 20. WIRELESS TELECOMMUNICATIONS TAX AND FEE
13	COLLECTION FAIRNESS.
13 14	(a) SHORT TITLE.—This section may be cited as the
14	(a) Short Title.—This section may be cited as the
14 15	(a) Short Title.—This section may be cited as the "Wireless Telecommunications Tax and Fee Collection
14 15 16	(a) Short Title.—This section may be cited as the "Wireless Telecommunications Tax and Fee Collection Fairness Act".
14 15 16 17	(a) Short Title.—This section may be cited as the "Wireless Telecommunications Tax and Fee Collection Fairness Act".(b) Definitions.—In this section:
14 15 16 17 18	 (a) Short Title.—This section may be cited as the "Wireless Telecommunications Tax and Fee Collection Fairness Act". (b) Definitions.—In this section: (1) Financial transaction.—The term "fi-
14 15 16 17 18 19	 (a) Short Title.—This section may be cited as the "Wireless Telecommunications Tax and Fee Collection Fairness Act". (b) Definitions.—In this section: (1) Financial transaction.—The term "financial transaction" means a transaction in which
14 15 16 17 18 19 20	 (a) Short Title.—This section may be cited as the "Wireless Telecommunications Tax and Fee Collection Fairness Act". (b) Definitions.—In this section: (1) Financial transaction.—The term "financial transaction" means a transaction in which the purchaser or user of a wireless telecommunication.
14 15 16 17 18 19 20 21	 (a) Short Title.—This section may be cited as the "Wireless Telecommunications Tax and Fee Collection Fairness Act". (b) Definitions.—In this section: (1) Financial transaction" means a transaction in which the purchaser or user of a wireless telecommunications service upon whom a tax, fee, or surcharge
14 15 16 17 18 19 20 21 22	 (a) Short Title.—This section may be cited as the "Wireless Telecommunications Tax and Fee Collection Fairness Act". (b) Definitions.—In this section: (1) Financial transaction.—The term "financial transaction" means a transaction in which the purchaser or user of a wireless telecommunications service upon whom a tax, fee, or surcharge is imposed gives cash, credit, or any other exchange

I	(2) LOCAL JURISDICTION.—The term "local ju-
2	risdiction" means a political subdivision of a State.
3	(3) State.—The term "State" means any of
4	the several States, the District of Columbia, and any
5	territory or possession of the United States.
6	(4) STATE OR LOCAL JURISDICTION.—The term
7	"State or local jurisdiction" includes any govern-
8	mental entity or person acting on behalf of a State
9	or local jurisdiction that has the authority to assess,
10	impose, levy, or collect taxes or fees.
11	(5) Wireless telecommunications serv-
12	ICE.—The term "wireless telecommunications serv-
13	ice" means a commercial mobile radio service, as de-
14	fined in section 20.3 of title 47, Code of Federal
15	Regulations, or any successor thereto.
16	(e) FINANCIAL TRANSACTION REQUIREMENT.—
17	(1) In general.—A State, or a local jurisdic-
18	tion of a State, may not require a person to collect
19	from, or remit on behalf of, any other person a State
20	or local tax, fee, or surcharge imposed on a pur-
21	chaser or user with respect to the purchase or use
22	of any wireless telecommunications service within
23	the State unless the collection or remittance is in
24	connection with a financial transaction.

1	(2) Rule of Construction.—Nothing in this
2	subsection shall be construed to affect the right of
3	a State or local jurisdiction to require the collection
4	of any tax, fee, or surcharge in connection with a fi-
5	nancial transaction.
6	(d) Enforcement.—
7	(1) Private right of action.—Any person
8	aggrieved by a violation of subsection (c) may bring
9	a civil action in an appropriate district court of the
10	United States for equitable relief in accordance with
11	paragraph (2) of this subsection.
12	(2) Jurisdiction of district courts.—Not-
13	withstanding section 1341 of title 28, United States
14	Code, or the constitution or laws of any State, the
15	district courts of the United States shall have juris-
16	diction, without regard to the amount in controversy
17	or citizenship of the parties, to grant such manda-
18	tory or prohibitive injunctive relief, interim equitable
19	relief, and declaratory judgments as may be nec-
20	essary to prevent, restrain, or terminate any acts in
21	violation of subsection (e).
22	SEC. 21. RULES OF CONSTRUCTION.
23	(a) Ranges of Frequencies.—Each range of fre-
24	quencies described in this Act shall be construed to be in-

25 clusive of the upper and lower frequencies in the range.

- 1 (b) Assessment of Electromagnetic Spectrum
- 2 Reallocation.—Nothing in this Act shall be construed
- 3 to affect any requirement under section 156 of the Na-
- 4 tional Telecommunications and Information Administra-
- 5 tion Organization Act (47 U.S.C. 921 note), as added by
- 6 section 1062(a) of the National Defense Authorization Act
- 7 for Fiscal Year 2000.
- 8 SEC. 22. RELATIONSHIP TO MIDDLE CLASS TAX RELIEF
- 9 AND JOB CREATION ACT OF 2012.
- Nothing in this Act shall be construed to limit, re-
- 11 strict, or circumvent in any way the implementation of the
- 12 nationwide public safety broadband network defined in
- 13 section 6001 of title VI of the Middle Class Tax Relief
- 14 and Job Creation Act of 2012 (47 U.S.C. 1401) or any
- 15 rules implementing that network under title VI of that Act
- 16 (47 U.S.C. 1401 et seq.).