AMENDMENT NO._______ Calendar No._____

Purpose: In the nature of a substitute.


S. 19

To provide opportunities for broadband investment, and for other purposes.

Referred to the Committee on _______________ and
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended
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.
2

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. 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.
Sec. 22. Relationship to Middle Class Tax Relief and Job Creation Act of 2012.

1 SEC. 2. DEFINITIONS.

In this Act:

(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term "appropriate committees of Congress" means—

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

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

(C) each committee of the Senate or of the House of Representatives with jurisdiction over a Federal entity affected by the applicable section in which the term appears.

(2) COMMISSION.—The term "Commission" means the Federal Communications Commission.

(3) FEDERAL ENTITY.—The term "Federal entity" has the meaning given the term in section
113(l) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 923(l)).

(4) NTIA.—The term “NTIA” means the National Telecommunications and Information Administration of the Department of Commerce.

(5) OMB.—The term “OMB” means the Office of Management and Budget.

(6) SECRETARY.—The term “Secretary” means the Secretary of Commerce.

SEC. 3. MAKING 500 MEGAHERTZ AVAILABLE.

(a) REQUIREMENTS.—

(1) IN GENERAL.—Consistent with the Presidential Memorandum of June 28, 2010, entitled “Unleashing the Wireless Broadband Revolution” and establishing a goal of making a total of 500 megahertz of Federal and non-Federal spectrum available on a licensed or unlicensed basis for wireless broadband use by 2020, not later than December 31, 2020, the Secretary, working through the NTIA, and the Commission shall make available a total of at least 255 megahertz of Federal and non-Federal spectrum below the frequency of 6000 megahertz for mobile and fixed wireless broadband use.
(2) UNLICENSED AND LICENSED USE.—Of the spectrum made available under paragraph (1), not less than—

   (A) 100 megahertz shall be made available on an unlicensed basis; and

   (B) 100 megahertz shall be made available on an exclusive, licensed basis for commercial mobile use, pursuant to the Commission’s authority to implement such licensing in a flexible manner, and subject to potential continued use of such spectrum by incumbent Federal entities in designated geographic areas indefinitely or for such length of time stipulated in transition plans approved by the Technical Panel under section 113(h) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 923(h)) for those incumbent entities to be relocated to alternate spectrum.

(3) NON-ELIGIBLE SPECTRUM.—For purposes of satisfying the requirement under paragraph (1), the following spectrum shall not be counted:

   (A) The frequencies between 1695 and 1710 megahertz.
(B) The frequencies between 1755 and 1780 megahertz.

(C) The frequencies between 2155 and 2180 megahertz.

(D) The frequencies between 3550 and 3700 megahertz.

(E) Spectrum that the Commission determines had more than de minimis mobile or fixed wireless broadband operations within the band on the day before the date of enactment of this Act.

(4) Relocation Prioritized over Sharing.—This section shall be carried out in accordance with section 113(j) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 923(j)).

(5) Considerations.—In making spectrum available under this section, the Secretary and Commission shall consider—

(A) the need to preserve critical existing and planned Federal Government capabilities;

(B) the impact on existing State, local, and tribal government capabilities;

(C) the international implications;
(D) the need for appropriate enforcement
mechanisms and authorities; and

(E) the importance of the deployment of
wireless broadband services in rural areas of the
United States.

(b) RULES OF CONSTRUCTION.—Nothing in this sec-
tion shall be construed—

(1) to impair or otherwise affect the functions
of the Director of OMB relating to budgetary, ad-
ministrative, or legislative proposals;

(2) to require the disclosure of classified infor-
mation, law enforcement sensitive information, or
other information that must be protected in the in-
terest of national security; or

(3) to affect any requirement under section 156
of the National Telecommunications and Informa-
tion Administration Organization Act (47 U.S.C.
921 note), as added by section 1062(a) of the Na-
tional Defense Authorization Act for Fiscal Year
2000, or any other relevant statutory requirement
applicable to the reallocation of Federal spectrum.

SEC. 4. MILLIMETER WAVE SPECTRUM.

(a) FEASIBILITY ASSESSMENT.—Not later than 18
months after the date of enactment of this Act, the NTIA,
in consultation with the Commission, shall conduct a feasi-
bility assessment regarding the impact, on Federal entities and operations in any of the following bands, of authorizing mobile or fixed terrestrial wireless operations, including advanced mobile service operations, in the following bands:

(1) The band between 31800 and 33400 megahertz.

(2) The band between 71000 and 76000 megahertz.

(3) The band between 81000 and 86000 megahertz.

(b) REQUIREMENTS.—In conducting the feasibility assessment under subsection (a), the NTIA shall—

(1) consult directly with Federal entities with respect to frequencies allocated to Federal use by such entities in the bands identified in that subsection;

(2) consider what, if any, impact authorizing mobile or fixed terrestrial wireless operations, including advanced mobile services operations, in any of such frequencies would have on an affected Federal entity; and

(3) identify any such frequencies in the bands described in that subsection that the NTIA assessment determines are feasible for authorizing for mo-
bile or fixed terrestrial wireless operations, including
any advanced mobile service operations.

(c) REPORT TO CONGRESS AND THE COMMISSION.—
Not later than 30 days after the date the feasibility assess-
ment under subsection (a) is complete, the NTIA shall
submit to the appropriate committees of Congress a report
on the feasibility assessment and provide a copy to the
Commission.

(d) FCC PROCEEDING.—Not later than 2 years after
the date of enactment of this Act or 90 days after the
date it receives the feasibility assessment under subsection
(c), whichever is earlier, the Commission, in consultation
with the NTIA, shall publish a notice of proposed rule-
making to consider service rules to authorize mobile or
fixed terrestrial wireless operations, including for adv-
anced mobile service operations, in the following radio
frequency bands:

(1) The band between 24250 and 24450 mega-
hertz.

(2) The band between 25050 and 25250 mega-
hertz.

(3) The band between 31800 and 33400 mega-
hertz, except for any frequencies with Federal alloca-
tions.
(4) The band between 42000 and 42500 megahertz.

(5) The band between 71000 and 76000 megahertz, except for any frequencies with Federal allocations.

(6) The band between 81000 and 86000 megahertz, except for any frequencies with Federal allocations.

(7) Any frequencies with Federal allocations identified as feasible under subsection (b)(3).

(c) CONSIDERATIONS.—In conducting a rulemaking under subsection (d), the Commission shall—

(1) consult with Federal entities via the NTIA regarding the frequencies described in subsection (d)(7);

(2) consider how the bands described in subsection (d) may be used to provide commercial wireless broadband service, including whether—

(A) such spectrum may be best used for licensed or unlicensed services, or some combination thereof; and

(B) to permit additional licensed operations in such bands on a shared basis; and

(3) include technical characteristics under which the bands described in subsection (d) may be
employed for mobile or fixed terrestrial wireless op-
erations, including any appropriate coexistence re-
quirements.

SEC. 5. 3 GIGAHertz SPECTRUM.

(a) BETWEEN 3100 MEGahertz AND 3550 MEGa-
hertz.—Not later than 18 months after the date of en-
actment of this Act, and in consultation with the Commis-
sion and the head of each affected Federal agency (or a
designee thereof), the Secretary shall submit to the Com-
mission and the appropriate committees of Congress a re-
port evaluating the feasibility of allowing commercial wire-
less services, licensed or unlicensed, to share use of the
frequencies between 3100 megahertz and 3550 megahertz.

(b) BETWEEN 3700 MEGahertz AND 4200 MEGa-
hertz.—Not later than 18 months after the date of en-
actment of this Act, after notice and an opportunity for
public comment, and in consultation with the Secretary
and the head of each affected Federal agency (or a des-
ignee thereof), the Commission shall submit to the Sec-
retary and the appropriate committees of Congress a re-
port evaluating the feasibility of allowing commercial wire-
less services, licensed or unlicensed, to share use of the
frequencies between 3700 megahertz and 4200 megahertz.

(c) REQUIREMENTS.—A report under subsection (a)
or (b) shall include the following:
(1) An assessment of the operations of Federal entities that operate Federal Government stations authorized to use the frequencies described in that subsection.

(2) An assessment of the possible impacts of such sharing on Federal and non-Federal users already operating on the frequencies described in that subsection.

(3) The criteria that may be necessary to ensure shared licensed or unlicensed services would not cause harmful interference to Federal or non-Federal users already operating in the frequencies described in that subsection.

(4) If such sharing is feasible, an identification of which of the frequencies described in that subsection are most suitable for sharing with commercial wireless services through the assignment of new licenses by competitive bidding, for sharing with unlicensed operations, or through a combination of licensing and unlicensed operations.

(d) COMMISSION ACTION.—The Commission, in consultation with the NTIA, shall seek public comment on the reports required under subsections (a) and (b), including regarding the bands identified in such reports as feasible pursuant to subsection (e)(4).
SEC. 6. COMMUNICATIONS FACILITIES DEPLOYMENT ON FEDERAL PROPERTY.

(a) IN GENERAL.—Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 (47 U.S.C. 1455) is amended by striking subsections (b), (c), and (d) and inserting the following:

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

"(1) GRANT.—If an executive agency, a State, a political subdivision or agency of a State, or a person, firm, or organization applies for the grant of an easement, right-of-way, or lease to, in, over, or on a building or other property owned by the Federal Government for the right to install, construct, modify, or maintain a communications facility installation, the executive agency having control of the building or other property may grant to the applicant, on behalf of the Federal Government, subject to paragraph (5), an easement, right-of-way, or lease to perform such installation, construction, modification, or maintenance.

"(2) APPLICATION.—"

"(A) IN GENERAL.—The Administrator of General Services shall develop a common form for applications for easements, rights-of-way, and leases under paragraph (1) for all executive
agencies that, except as provided in subpara-
graph (B), shall be used by all executive agen-
cies and applicants with respect to the buildings
or other property of each such agency.

"(B) EXCEPTION.—The requirement under
subparagraph (A) for an executive agency to
use the common form developed by the Admin-
istrator of General Services shall not apply to
an executive agency if the head of an executive
agency notifies the Administrator that the exec-
utive agency uses a substantially similar appli-
cation.

"(3) FEE.—

"(A) IN GENERAL.—Notwithstanding any
other provision of law, the Administrator of
General Services shall establish a fee for the
grant of an easement, right-of-way, or lease
pursuant to paragraph (1) that is based on di-
rect cost recovery.

"(B) EXCEPTIONS.—The Administrator of
General Services may establish exceptions to
the fee amount required under subparagraph
(A)—
“(i) in consideration of the public benefit provided by a grant of an easement, right-of-way, or lease; and

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

“(4) Use of fees collected.—Any fees amounts collected by an executive agency pursuant to paragraph (3) may be made available, as provided in appropriations Acts, to such agency to cover the costs of granting the easement, right-of-way, or lease.

“(5) Timely consideration of applications.—

“(A) In general.—Not later than 270 days after the date on which an executive agency receives a duly filed application for an easement, right-of-way, or lease under this subsection, the executive agency shall—

“(i) grant or deny, on behalf of the Federal Government, the application; and

“(ii) notify the applicant of the grant or denial.

“(B) Explanation of denial.—If an executive agency denies an application under subparagraph (A), the executive agency shall notify
the applicant in writing, including a clear statement of the reasons for the denial.

"(C) APPLICABILITY OF ENVIRONMENTAL LAWS.—Nothing in this paragraph shall be construed to relieve an executive agency of the requirements of division A of subtitle III of title 54, United States Code, or the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

"(D) POINT OF CONTACT.—Upon receiving an application under subparagraph (A), an executive agency shall designate one or more appropriate individuals within the executive agency to act as a point of contact with the applicant.

"(e) MASTER CONTRACTS FOR COMMUNICATIONS FACILITY INSTALLATION SITINGS.—

“(1) IN GENERAL.—Notwithstanding section 704 of the Telecommunications Act of 1996 (Public Law 104–104; 110 Stat. 151) or any other provision of law, the Administrator of General Services shall—

“(A) develop one or more master contracts that shall govern the placement of communications 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.—
"(A) IN GENERAL.—The Administrator of General Services shall develop a common form or set of forms for communications facility installation siting applications that, except as provided in subparagraph (B), shall be used by all executive agencies and applicants with respect to the buildings and other property of each such agency.

"(B) EXCEPTION.—The requirement under subparagraph (A) for an executive agency to use the common form or set of forms developed by the Administrator of General Services shall not apply to an executive agency if the head of the executive agency notifies the Administrator that the executive agency uses a substantially similar application.

"(d) DEFINITIONS.—In this section:

"(1) COMMUNICATIONS FACILITY INSTALLATION.—The term ‘communications facility installation’ includes—

"(A) any infrastructure, including any transmitting device, tower, or support structure, and any equipment, switches, wiring, cabling, power sources, shelters, or cabinets, associated with the licensed or permitted unlicensed wire-
less or wireline transmission of writings, signs, signals, data, images, pictures, and sounds of all kinds; and

"(B) any antenna or apparatus that—

"(i) is designed for the purpose of emitting radio frequency;

"(ii) is designed to be operated, or is operating, from a fixed location pursuant to authorization by the Commission or is using duly authorized devices that do not require individual licenses; and

"(iii) is added to a tower, building, or other structure.

"(2) EXECUTIVE AGENCY.—The term ‘executive agency’ has the meaning given such term in section 102 of title 40, United States Code.”.

(b) SAVINGS PROVISION.—An application for an easement, right-of-way, or lease that was made or granted under section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 (47 U.S.C. 1455) before the date of enactment of this Act shall continue, subject to that section as in effect on the day before such date of enactment.

(c) STREAMLINING BROADBAND FACILITY APPLICATIONS.—
(1) Definition of communications facility installation.—In this subsection, the term "communications facility installation" has the meaning given the term in section 6409(d) of the Middle Class Tax Relief and Job Creation Act of 2012 (47 U.S.C. 1455(d)), as amended by subsection (a).

(2) Recommendations.—

(A) In general.—Not later than 2 years after the date of enactment of this Act, the NTIA, in coordination with the Department of the Interior, the Department of Agriculture, the Department of Defense, the Department of Transportation, OMB, and the General Services Administration, shall develop recommendations to streamline the process for considering applications by those agencies under section 6409(b) of the Middle Class Tax Relief and Job Creation Act of 2012 (47 U.S.C. 1455(b)), as amended by subsection (a).

(B) Requirements for recommendations.—The recommendations developed under subparagraph (A) shall include—

(i) procedures for the tracking of applications described in subparagraph (A);
(ii) methods by which to reduce the amount of time between the receipt of an application and the issuance of a final decision on an application; and

(iii) policies to expedite renewals of an easement, license, or other authorization to locate communications facility installations on land managed by the agencies described in subparagraph (A).

(C) REPORT TO CONGRESS.—Not later than 2 years after the date on which the recommendations required under subparagraph (A) are developed, the NTIA shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that describes—

(i) the status of the implementation of the recommendations developed under subparagraph (A); and

(ii) any improvements to the process for considering applications described in subparagraph (A) that have resulted from those recommendations, including in particular the speed at which such applica-
tions are reviewed and a final determina-

tion is issued.

SEC. 7. BROADBAND INFRASTRUCTURE DEPLOYMENT.

(a) FINDING REGARDING FEDERAL AND STATE DE-
PARTMENTS OF TRANSPORTATION.—Congress finds that
it is the policy of the United States for the Department
of Transportation and State departments of transpor-
tation—

(1) to adjust or otherwise develop right-of-way
policies for Federal-aid highways to effectively ac-
commodate broadband infrastructure;

(2) to allow for the safe and efficient accommo-
dation of broadband infrastructure in the public
right-of-way; and

(3) to the extent applicable, to coordinate with
other statewide telecommunication and broadband
plans when developing a statewide transportation
improvement program.

(b) DEFINITIONS.—In this section:

(1) APPROPRIATE STATE AGENCY.—The term
“appropriate State agency” means a State govern-
mental agency that is recognized by the executive
branch of the State as having the experience nec-
essary to evaluate and carry out projects relating to
the proper and effective installation and operation of broadband infrastructure.

(2) BROADBAND INFRASTRUCTURE.—The term “broadband infrastructure” means any buried, underground, or aerial facility, and any wireless or wireline connection, that enables users to send and receive voice, video, data, graphics, or any combination thereof.

(3) BROADBAND INFRASTRUCTURE ENTITY.—The term “broadband infrastructure entity” means any entity that—

(A) installs, owns, or operates broadband infrastructure; and

(B) provides broadband services in a manner consistent with the public interest, convenience, and necessity, as determined by the State.

(4) STATE.—The term “State” means—

(A) a State;

(B) the District of Columbia; and

(C) the Commonwealth of Puerto Rico.

e) BROADBAND INFRASTRUCTURE DEPLOYMENT.—To facilitate the installation of broadband infrastructure and achieve the policy described in subsection (a), the Secretary of Transportation shall ensure that each State that
receives funds under chapter 1 of title 23, United States Code, meets the following requirements:

(1) BROADBAND CONSULTATION.—The State department of transportation, in consultation with appropriate State agencies, shall—

(A) identify a broadband utility coordinator, that may have additional responsibilities, whether in the State department of transportation or in another State agency, that is responsible for facilitating the broadband infrastructure right-of-way efforts within the State;

(B) establish a process for the registration of broadband infrastructure entities that seek to be included in those broadband infrastructure right-of-way facilitation efforts within the State;

(C) establish a process to electronically notify broadband infrastructure entities identified under subparagraph (B) of the State transportation improvement program on an annual basis and provide additional notifications as necessary to achieve the goals of this section; and

(D) coordinate initiatives carried out under this section with other statewide telecommunication and broadband plans and State and local
transportation and land use plans, including strategies to minimize repeated excavations that involve the installation of broadband infrastructure in a right-of-way.

(2) **Priority.**—If a State chooses to provide for the installation of broadband infrastructure in the right-of-way of an applicable Federal-aid highway project under this subsection, the State department of transportation shall carry out any appropriate measures to ensure that any existing broadband infrastructure entities are not disadvantaged, as compared to other broadband infrastructure entities, with respect to the program under this subsection.

(d) **Effect of Section.**—This section applies only to activities for which obligations or expenditures are initially approved on or after the date of enactment of this Act. Nothing in this section establishes a mandate or requirement that a State install broadband infrastructure in a highway right-of-way.

**Sec. 8. NATIONAL BROADBAND FACILITIES ASSET DATABASE.**

(a) **Definitions.**—In this section:
(1) **Communications Facility Installation.**—The term "communications facility installation" includes—

(A) any infrastructure, including any transmitting device, tower, or support structure, and any equipment, switches, wiring, cabling, power sources, shelters, or cabinets, associated with the licensed or permitted unlicensed wireless or wireline transmission of writings, signs, signals, data, images, pictures, and sounds of all kinds; and

(B) any antenna or apparatus that—

(i) is designed for the purpose of emitting radio frequency;

(ii) is designed to be operated, or is operating, from a fixed location pursuant to authorization by the Commission or is using duly authorized devices that do not require individual licenses; and

(iii) is added to a tower, building, or other structure.

(2) **Covered Property.**—The term "covered property"—
(A) means any real property capable of supporting a communications facility installation; and

(B) includes any interest in real property described in subparagraph (A).

(3) DATABASE.—The term "database" means the database established under subsection (b).

(4) EXECUTIVE AGENCY.—The term "Executive agency" has the meaning given the term in section 105 of title 5, United States Code.

(b) DATABASE ESTABLISHED.—Not later than June 30, 2018, the Director of the Office of Science and Technology Policy, in consultation with the Chairman of the Commission, Assistant Secretary of Commerce for Communications and Information, Under Secretary of Commerce for Standards and Technology, Administrator of General Services, and Director of OMB, shall—

(1) establish and operate a single database of any covered property that is owned, leased, or otherwise managed by an Executive agency;

(2) make the database available to—

(A) any entity that—

(i) constructs or operates communications facility installations; or
(ii) provides communications service;

and

(B) any other entity that the Director of
the Office of Science and Technology Policy de-
termines is appropriate; and

(3) establish a process for withholding data
from the database for national security, public safe-
ty, or other national strategic concerns in accord-
ance with existing statutory authority and Executive
order mandates with respect to handling and protec-
tion of such information.

(c) PUBLIC COMMENT.—

(1) In general.—Not later than 30 days after
the date of enactment of this Act, the Director of
the Office of Science and Technology Policy shall
seek public comment to inform the establishment
and operation of the database.

(2) Contents.—In seeking public comment
under paragraph (1), the Director shall include a re-
quest for recommendations on—

(A) criteria that make real property capa-
ble of supporting communications facility instal-
lations;
(B) types of information related to covered property that should be included in the database;

(C) an interface by which accessibility to the database for all users will be appropriately efficient and secure; and

(D) other information the Director determines necessary to establish and operate the database.

(d) Federal Agencies.—

(1) Initial Provision of Information.—Not later than 90 days after the date on which the database is established under subsection (b), the head of an Executive agency shall provide to the Director of the Office of Science and Technology Policy, in a manner and format to be determined by the Director, such information as the Director determines appropriate with respect to covered property owned, leased, or otherwise managed by the Executive agency.

(2) Change to Information Previously Provided.—In the case of any change to information provided to the Director of the Office of Science and Technology Policy by the head of an Executive agency under paragraph (1), the head of the Execu-
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tive agency shall provide updated information to the
Director not later than 30 days after the date of the
change.

(3) Subsequently Acquired Property.—If
an Executive agency 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 data-
base 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) re-
garding covered property owned, leased, or otherwise
managed by such governments.

(2) Report on Incentivizing Participation
by State and Local Governments.—
(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Director, in consultation with the Chairman of the Commission, the Assistant Secretary of Commerce for Communications and Information, the Under Secretary of Commerce for Standards and Technology, the Administrator of General Services, and the Director of OMB, shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on potential ways to incentivize State and local governments to 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 pursuant to paragraph (1) of this subsection or through other means.

(B) CONSIDERATIONS.—The Director, in preparing the report under subparagraph (A), shall—

(i) consult with State and local governments, or their representatives, to iden-
tify for inclusion in the report the most
cost-effective options for State and local
governments to collect and provide the in-
formation described in subparagraph (A),
including utilizing and leveraging State
broadband initiatives and programs; and

(ii) make recommendations on ways
the Federal Government can assist State
and local governments in collecting and
providing the information described in sub-
paragraph (A).

(C) REPORT UPDATE.—Not later than 2
years after the date on which the database is
established under this section, the Director
shall submit to the Committee on Commerce,
Science, and Transportation of the Senate and
the Committee on Energy and Commerce of the
House of Representatives an update to the re-
port required under subparagraph (A) that
identifies State and local governments that have
contributed to the database and recommends
ways to further incentivize participation by
State and local governments pursuant to para-
graph (1) of this subsection or through other
means.
(f) DATABASE UPDATES.—

(1) TIMELY INCLUSION.—After the establishment of the database, the Director of the Office of Science and Technology Policy shall ensure that information provided under subsection (d) or (e) is included in the database not later than 7 days after the date on which the Director receives the information.

(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.

(g) REPORT.—Not later than 180 days after the date the Director of the Office of Science and Technology Policy seeks public comment under subsection (c)(1), the Director shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on the progress in establishing the database under this section. The Director shall update the report annually until the date that the database is fully operational. After the database is fully operational and for the next 5 years thereafter, the Director shall provide annual reports regarding the use of the database, recommendations of how the database may provide additional
utility to the entities described in subsection (b)(2), if any recommendations are warranted, and how previous recommendations have been implemented.

SEC. 9. REALLOCATION INCENTIVES.

(a) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the Secretary, in consultation with the Commission, the Director of OMB, and the head of each affected Federal agency (or a designee thereof), after notice and an opportunity for public comment, shall submit to the appropriate committees of Congress a report that includes legislative or regulatory recommendations to incentivize a Federal entity to relinquish, or share with Federal or non-Federal users, Federal spectrum for the purpose of allowing commercial wireless broadband services to operate on that Federal spectrum.

(b) POST-AUCTION PAYMENTS.—

(1) REPORT.—In preparing the report under subsection (a), the Secretary shall—

(A) consider whether permitting eligible Federal entities that are implementing a transition plan submitted under section 113(h) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 923(h)) to accept payments could result in access to the eligible frequencies that are being
reallocated for exclusive non-Federal use or
shared use sooner than would otherwise occur
without such payments; and

(B) include the findings under subparagraph (A), including the analysis under paragraph (2) and any recommendations for legisla-
tion, in the report.

(2) ANALYSIS.—In considering payments under
paragraph (1)(A), the Secretary shall conduct an
analysis of whether and how such payments would
affect—

(A) bidding in auctions conducted under
section 309(j) of the Communications Act of
1934 (47 U.S.C. 309(j)) of such eligible fre-
cuencies; and

(B) receipts collected from the auctions de-
scribed in subparagraph (A).

(3) DEFINITIONS.—In this subsection:

(A) PAYMENT.—The term "payment"
means a payment in cash or in-kind by any
auction winner, or any person affiliated with an
auction winner, of eligible frequencies during
the period after eligible frequencies have been
reallocated by competitive bidding under section
309(j) of the Communications Act of 1934 (47
U.S.C. 309(j)) but prior to the completion of
relocation or sharing transition of such eligible
frequencies per transition plans approved by the
Technical Panel.

(B) ELIGIBLE FREQUENCIES.—The term
"eligible frequencies" has the meaning given
the term in section 113(g)(2) of the National
Telecommunications and Information Adminis-
tration Organization Act (47 U.S.C. 923(g)(2)).

SEC. 10. BIDIRECTIONAL SHARING STUDY.

(a) IN GENERAL.—Not later than 1 year after the
date of enactment of this Act, including an opportunity
for public comment, the Commission, in collaboration with
the NTIA, shall—

(1) conduct a bidirectional sharing study to de-
determine the best means of providing Federal entities
flexible access to non-Federal spectrum on a shared
basis across a range of short-, mid-, and long-range
timeframes, including for intermittent purposes like
emergency use; and

(2) submit to Congress a report on the study
under paragraph (1), including any recommenda-
tions for legislation or proposed regulations.

(b) CONSIDERATIONS.—In conducting the study
under subsection (a), the Commission shall—
(1) consider the regulatory certainty that commercial spectrum users and Federal entities need to make longer-term investment decisions for shared access to be viable; and

(2) evaluate any barriers to voluntary commercial arrangements in which non-Federal users could provide access to Federal entities.

SEC. 11. UNLICENSED SERVICES IN GUARD BANDS.

(a) IN GENERAL.—After public notice and comment, and in consultation with the Secretary and the head of each affected Federal agency (or a designee thereof), with respect to frequencies allocated for Federal use, the Commission shall adopt rules that permit unlicensed services where feasible to use any frequencies that are designated as guard bands to protect frequencies allocated after the date of enactment of this Act by competitive bidding under section 309(j) of the Communications Act of 1934 (47 U.S.C. 309(j)), including spectrum that acts as a duplex gap between transmit and receive frequencies.

(b) LIMITATION.—The Commission may not permit any use of a guard band under this section that would cause harmful interference to a licensed service or a Federal service operating in the guard band or in an adjacent band.
(c) **Rule of Construction**.—Nothing in this section shall be construed as limiting the Commission or the Secretary from otherwise making spectrum available for licensed or unlicensed use in any frequency band in addition to guard bands, including under section 3, consistent with their statutory jurisdictions.

**Sec. 12. Pre-Auction Funding.**

Section 118(d)(3)(B)(i)(II) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 928(d)(3)(B)(i)(II)) is amended by striking "5 years" and inserting "8 years".

**Sec. 13. Immediate Transfer of Funds.**

Section 118(e)(1) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 928(e)(1)) is amended by adding at the end the following:

"(D) At the request of an eligible Federal entity, the Director of the Office of Management and Budget (in this subsection referred to as ‘OMB’) may transfer the amount under subparagraph (A) immediately—

"(i) after the frequencies are reallocated by competitive bidding under section 309(j) of the Communications Act of 1934 (47 U.S.C. 309(j)); or"
“(ii) in the case of an incumbent Federal entity that is incurring relocation or sharing costs to accommodate sharing spectrum frequencies with another Federal entity, after the frequencies from which the other eligible Federal entity is relocating are reallocated by competitive bidding under section 309(j) of the Communications Act of 1934 (47 U.S.C. 309(j)), without regard to the availability of such sums in the Fund.

“(E) Prior to the deposit of proceeds into the Fund from an auction, the Director of OMB may borrow from the Treasury the amount under subparagraph (A) for a transfer under subparagraph (D). The Treasury shall immediately be reimbursed, without interest, from funds deposited into the Fund.”.

SEC. 14. AMENDMENTS TO THE SPECTRUM PIPELINE ACT OF 2015.

Section 1008 of the Spectrum Pipeline Act of 2015 (Public Law 114–74; 129 Stat. 584) is amended in the matter preceding paragraph (1) by inserting “, after notice and an opportunity for public comment,” after “the Commission.”
SEC. 15. GAO ASSESSMENT OF UNLICENSED SPECTRUM
AND WI-FI USE IN LOW-INCOME NEIGHBORHOODS.

(a) Study.—

(1) In general.—The Comptroller General of the United States shall conduct a study to evaluate the availability of broadband Internet access using unlicensed spectrum and wireless networks in low-income neighborhoods.

(2) Requirements.—In conducting the study under paragraph (1), the Comptroller General shall consider and evaluate—

(A) the availability of wireless Internet hot spots and access to unlicensed spectrum in low-income neighborhoods, particularly for elementary and secondary school-aged children in such neighborhoods;

(B) any barriers preventing or limiting the deployment and use of wireless networks in low-income neighborhoods;

(C) how to overcome any barriers described in subparagraph (B), including through incentives, policies, or requirements that would increase the availability of unlicensed spectrum and related technologies in low-income neighborhoods; and
(D) how to encourage home broadband adoption by households with elementary and secondary school-age children that are in low-income neighborhoods.

(b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Comptroller General shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that—

(1) summarizes the findings of the study conducted under subsection (a); and

(2) makes recommendations with respect to potential incentives, policies, and requirements that could help achieve the goals described in subparagraphs (C) and (D) of subsection (a)(2).

SEC. 16. RULEMAKING RELATED TO PARTITIONING OR DISAGGREGATING LICENSES.

(a) DEFINITIONS.—In this section—

(1) COVERED SMALL CARRIER.—The term "covered small carrier" means a carrier (as defined in section 3 of the Communications Act of 1934 (47 U.S.C. 153)) that—

(A) has not more than 1,500 employees (as determined under section 121.106 of title 13,
Code of Federal Regulations, or any successor thereto); and

(B) offers services using the facilities of the carrier.

(2) **RURAL AREA.**—The term "rural area" means any area other than—

(A) a city, town, or incorporated area that has a population of more than 20,000 inhabitants; or

(B) an urbanized area contiguous and adjacent to a city or town that has a population of more than 50,000 inhabitants.

(b) **RULEMAKING.**—

(1) **IN GENERAL.**—Not later than 1 year after the date of enactment of this Act, the Commission shall initiate a rulemaking proceeding to assess whether to establish a program, or modify existing programs, under which a licensee that receives a license for the exclusive use of spectrum in a specific geographic area under section 301 of the Communications Act of 1934 (47 U.S.C. 301) may partition or disaggregate the license by sale or long-term lease—

(A) in order to—
(i) provide services consistent with the 
license; and 

(ii) make unused spectrum available 
to—

(I) an unaffiliated covered small 
carrier; or

(II) an unaffiliated carrier to 
serve a rural area; and

(B) if the Commission finds that such a 
program would promote—

(i) the availability of advanced tele-
communications services in rural areas; or

(ii) spectrum availability for covered 
small carriers.

(2) CONSIDERATIONS.—In conducting the rule-
making proceeding under paragraph (1), the Com-
misson shall consider, with respect to the program 
proposed to be established under that paragraph—

(A) whether reduced performance require-
ments with respect to spectrum obtained 
through the program would facilitate deploy-
ment of advanced telecommunications services 
in the areas covered by the program;

(B) what conditions may be needed on 
transfers of spectrum under the program to
allow covered small carriers that obtain spectrum under the program to build out the spectrum in a reasonable period of time;

(C) what incentives may be appropriate to encourage licensees to lease or sell spectrum, including—

(i) extending the term of a license granted under section 301 of the Communications Act of 1934 (47 U.S.C. 301); or

(ii) modifying performance requirements of the license relating to the leased or sold spectrum; and

(D) the administrative feasibility of—

(i) the incentives described in subparagraph (C); and

(ii) other incentives considered by the Commission that further the goals of this section.

(3) FORFEITURE OF SPECTRUM.—If a party fails to meet any build out requirements set by the Commission for any spectrum sold or leased under this section, the right to the spectrum shall be forfeited to the Commission unless the Commission finds that there is good cause for the failure of the party.
(4) REQUIREMENT.—The Commission may offer a licensee incentives or reduced performance requirements under this section only if the Commission finds that doing so would likely result in increased availability of advanced telecommunications services in a rural area.

SEC. 17. UNLICENSED SPECTRUM POLICY.

(a) STATEMENT OF POLICY.—It is the policy of the United States—

(1) to maximize the benefit to the people of the United States of the spectrum resources of the United States;

(2) to advance innovation and investment in wireless broadband services; and

(3) to promote spectrum policy that makes available on an unlicensed basis radio frequency bands sufficient to meet consumer demand for unlicensed wireless broadband operations.

(b) COMMISSION RESPONSIBILITIES.—The Commission shall ensure that the efforts of the Commission related to spectrum allocation and assignment make available on an unlicensed basis radio frequency bands sufficient to meet demand for unlicensed wireless broadband operations if doing so is, after taking into account the future needs of other spectrum users—
(1) reasonable; and

(2) in the public interest.

(c) COMMISSION ACTION.—Not later than 18 months
after the date of enactment of this Act, the Commission
shall take action to implement subsection (b).

SEC. 18. NATIONAL PLAN FOR UNLICENSED SPECTRUM.

(a) DEFINITIONS.—In this section:

(1) SPECTRUM RELOCATION FUND.—The term
“Spectrum Relocation Fund” means the Fund es-
established under section 118 of the National Tele-
communications and Information Administration Or-

(2) UNLICENSED OPERATIONS.—The term “un-
licensed operations” means the use of spectrum on
a non-exclusive basis under—

(A) part 15 of title 47, Code of Federal
Regulations; or

(B) licensing by rule under part 96 of title

(b) NATIONAL PLAN.—Not later than 1 year after
the date of enactment of this Act, the Commission, in con-
sultation with the NTIA, shall develop a national plan for
making additional radio frequency bands available for un-
licensed operations.
(c) REQUIREMENTS.—The plan developed under this section shall—

(1) identify an approach that ensures that consumers have access to additional spectrum to conduct unlicensed operations in a range of radio frequencies to meet consumer demand;

(2) recommend specific actions by the Commission and the NTIA to permit unlicensed operations in additional radio frequency ranges that the Commission finds—

(A) are consistent with the statement of policy under section 18(a);

(B) will—

(i) expand opportunities for unlicensed operations in a spectrum band; or

(ii) otherwise improve spectrum utilization and intensity of use of bands where unlicensed operations are already permitted;

(C) will not cause harmful interference to Federal or non-Federal users of such bands; and

(D) will not significantly impact homeland security or national security communications systems; and
(3) examine additional ways, with respect to ex-
isting and planned databases or spectrum access sys-
tems designed to promote spectrum sharing and ac-
cess to spectrum for unlicensed operations—
   (A) to improve accuracy and efficacy;
   (B) to reduce burdens on consumers, manu-
ufacturers, and service providers; and
   (C) to protect sensitive Government infor-
mation.

(d) SPECTRUM RELOCATION FUND.—To be included
as part of the plan developed under this section, the NTIA
shall share with the Commission recommendations about
how to reform the Spectrum Relocation Fund—
   (1) to address costs incurred by Federal entities
related to sharing radio frequency bands with radio
technologies conducting unlicensed operations; and
   (2) to ensure the Spectrum Relocation Fund
has sufficient funds to cover—
   (A) the costs described in paragraph (1); and
and
   (B) other expenditures allowed of the
Spectrum Relocation Fund under section 118 of
the National Telecommunications and Informa-
tion Administration Organization Act (47
(c) Report Required.—

(1) In General.—Not later than 1 year after the date of enactment of this Act, the Commission shall submit to the appropriate committees of Congress a report that describes the plan developed under this section, including any recommendations for legislative change.

(2) Publication on Commission Website.—Not later than the date on which the Commission submits the report under paragraph (1), the Commission shall make the report publicly available on the website of the Commission.

Sec. 19. Spectrum Challenge Prize.

(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 (e)(1).

(c) Spectrum Challenge Prize.—

(1) In General.—The Secretary, in consultation with the Assistant Secretary of Commerce for Communications and Information and the Under Secretary of Commerce for Standards and Tech-
nology, shall, subject to the availability of funds for
prize competitions under this section—

(A) conduct prize competitions to dramati-
cally accelerate the development and commer-
cialization of technology that improves spectrum
efficiency and is capable of cost-effective deploy-
ment; and

(B) define a measurable set of perform-
ance goals for participants in the prize competi-
tions to demonstrate their solutions on a level
playing field while making a significant ad-
vancement over the current state of the art.

(2) AUTHORITY OF SECRETARY.—In carrying
out paragraph (1), the Secretary may—

(A) enter into a grant, contract, coopera-
tive agreement, or other agreement with a pri-
ivate sector for-profit or nonprofit entity to ad-
minister the prize competitions;

(B) invite the Defense Advanced Research
Projects Agency, the Commission, the National
Aeronautics and Space Administration, the Na-
tional Science Foundation, or any other Federal
agency to provide advice and assistance in the
design or administration of the prize competi-
tions; and
(C) award not more than $5,000,000, in
the aggregate, to the winner or winners of the
prize competitions.

(d) CRITERIA.—Not later than 180 days after the
date on which funds for prize competitions are made avail-
able pursuant to this section, the Commission shall publish
a technical paper on spectrum efficiency providing criteria
that may be used for the design of the prize competitions.

(e) AUTHORIZATION OF APPROPRIATIONS.—There
are authorized to be appropriated such sums as may be
necessary to carry out this section.

SEC. 20. WIRELESS TELECOMMUNICATIONS TAX AND FEE
COLLECTION FAIRNESS.

(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-
nancial transaction" means a transaction in which
the purchaser or user of a wireless telecommuni-
cations service upon whom a tax, fee, or surcharge
is imposed gives cash, credit, or any other exchange
of monetary value or consideration to the person
who is required to collect or remit the tax, fee, or
surcharge.
(2) LOCAL JURISDICTION.—The term "local jurisdiction" means a political subdivision of a State.

(3) STATE.—The term "State" means any of the several States, the District of Columbia, and any territory or possession of the United States.

(4) STATE OR LOCAL JURISDICTION.—The term "State or local jurisdiction" includes any governmental entity or person acting on behalf of a State or local jurisdiction that has the authority to assess, impose, levy, or collect taxes or fees.

(5) WIRELESS TELECOMMUNICATIONS SERVICE.—The term "wireless telecommunications service" means a commercial mobile radio service, as defined in section 20.3 of title 47, Code of Federal Regulations, or any successor thereto.

(e) FINANCIAL TRANSACTION REQUIREMENT.—

(1) IN GENERAL.—A State, or a local jurisdiction of a State, may not require a person to collect from, or remit on behalf of, any other person a State or local tax, fee, or surcharge imposed on a purchaser or user with respect to the purchase or use of any wireless telecommunications service within the State unless the collection or remittance is in connection with a financial transaction.
(2) Rule of construction.—Nothing in this subsection shall be construed to affect the right of a State or local jurisdiction to require the collection of any tax, fee, or surcharge in connection with a financial transaction.

(d) Enforcement.—

(1) Private right of action.—Any person aggrieved by a violation of subsection (e) may bring a civil action in an appropriate district court of the United States for equitable relief in accordance with paragraph (2) of this subsection.

(2) Jurisdiction of district courts.—Notwithstanding section 1341 of title 28, United States Code, or the constitution or laws of any State, the district courts of the United States shall have jurisdiction, without regard to the amount in controversy or citizenship of the parties, to grant such mandatory or prohibitive injunctive relief, interim equitable relief, and declaratory judgments as may be necessary to prevent, restrain, or terminate any acts in violation of subsection (e).

SEC. 21. RULES OF CONSTRUCTION.

(a) Ranges of frequencies.—Each range of frequencies described in this Act shall be construed to be inclusive of the upper and lower frequencies in the range.
(b) **Assessment of Electromagnetic Spectrum Reallocation.**—Nothing in this Act shall be construed to affect any requirement under section 156 of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 921 note), as added by section 1062(a) of the National Defense Authorization Act for Fiscal Year 2000.

**Sec. 22. Relationship to Middle Class Tax Relief and Job Creation Act of 2012.**

Nothing in this Act shall be construed to limit, restrict, or circumvent in any way the implementation of the nationwide public safety broadband network defined in section 6001 of title VI of the Middle Class Tax Relief and Job Creation Act of 2012 (47 U.S.C. 1401) or any rules implementing that network under title VI of that Act (47 U.S.C. 1401 et seq.).