

114TH CONGRESS  
1ST SESSION

**S.** \_\_\_\_\_

To reallocate Federal Government-held spectrum for commercial use, to promote wireless innovation and enhance wireless communications, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

Mr. RUBIO (for himself, Ms. AYOTTE, Mr. WICKER, and Mr. GARDNER) introduced the following bill; which was read twice and referred to the Committee on \_\_\_\_\_

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**A BILL**

To reallocate Federal Government-held spectrum for commercial use, to promote wireless innovation and enhance wireless communications, and for other purposes.

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

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) IN GENERAL.—This Act may be cited as the  
5 “Wireless Innovation Act of 2015”.

6 (b) TABLE OF CONTENTS.—The table of contents for  
7 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings; statement of policy.
- Sec. 3. Definitions.

- Sec. 4. Reallocation of Federal Government spectrum.
- Sec. 5. Spectrum pipeline.
- Sec. 6. Reallocation incentive.
- Sec. 7. Expediting routine secondary market transactions.
- Sec. 8. Analysis of spectrum requirements.
- Sec. 9. Federal spectrum transparency and value.
- Sec. 10. Wireless facilities deployment.

1 **SEC. 2. FINDINGS; STATEMENT OF POLICY.**

2 (a) FINDINGS.—Congress finds the following:

3 (1) The United States is the global leader in  
4 wireless communications and broadband tech-  
5 nologies, both of which are vital parts of daily life  
6 in the United States, key components of the national  
7 infrastructure of the United States, and a signifi-  
8 cant driver of the United States economy.

9 (2) Wireless communications and broadband  
10 services have become critical for individuals to im-  
11 prove their economic well-being, businesses to com-  
12 pete in the 21st century, first responders to protect  
13 individuals in emergencies, and Federal agencies to  
14 service their missions, such as national defense.

15 (3) Because of the proliferation of broadband  
16 connected wireless devices and consumer applica-  
17 tions, the volume of data traffic traveling over wire-  
18 less networks has been growing substantially, and  
19 with the pace of innovation accelerating, the demand  
20 for wireless data services will continue to increase  
21 exponentially.

1           (4) The Council of Economic Advisors has con-  
2           cluded that the only feasible way to realize the full  
3           potential of wireless broadband is to make new spec-  
4           trum available for wireless services, and considerable  
5           spectrum is underused or used in less economically  
6           valuable ways, and could be repurposed and reallo-  
7           cated for wireless broadband use.

8           (5) If the United States does not make more  
9           spectrum available, scarcity of spectrum could lead  
10          to higher prices for wireless services, poor service  
11          quality, the inability of the United States to compete  
12          internationally, constrained mobile broadband  
13          growth, and ultimately, a drag on innovation and in-  
14          dividual economic mobility.

15          (6) The National Broadband Plan, created by  
16          the Federal Communications Commission, set a goal  
17          of making 500 megahertz of spectrum newly avail-  
18          able for commercial mobile broadband use by 2020,  
19          including making 300 megahertz between 225 mega-  
20          hertz and 3.7 gigahertz newly available for mobile  
21          use within 5 years, and stated that reallocating this  
22          spectrum where possible for mobile broadband use  
23          should be a priority.

24          (7) Reallocating and auctioning spectrum pro-  
25          duces multiple benefits. A Federal licensee can up-

1 grade to comparable or superior communications  
2 technology, an auction raises money for the United  
3 States Treasury, and taxpayers benefit from in-  
4 creased access to, and better use of, spectrum.

5 (8) In addition to reallocating spectrum, the  
6 United States should pursue a comprehensive ap-  
7 proach to spectrum policy that includes expanding  
8 the capacity of wireless networks, promoting sec-  
9 ondary spectrum markets, expanding unlicensed net-  
10 works and Wi-Fi systems, and increasing efficiency  
11 and transparency among Federal users.

12 (9) The Federal Government, as the largest  
13 user of spectrum, must also promote the efficient  
14 use of spectrum resources, and the National Tele-  
15 communications and Information Administration  
16 must ensure that Federal agencies use this valuable  
17 public resource in the most efficient and effective  
18 manner possible.

19 (10) The National Broadband Plan states that  
20 Federal spectrum users can be more efficient with  
21 the airwaves allocated to them by the National Tele-  
22 communications and Information Administration, es-  
23 pecially as wireless needs and technology evolve over  
24 time.

25 (b) PURPOSE.—The purpose of this Act is—

1           (1) to pursue comprehensive solutions to ex-  
2           pand mobile broadband and utilize wireless services  
3           and technologies to create jobs, grow the economy,  
4           and improve individual economic mobility; and

5           (2) to ensure that the Federal Government—

6                 (A) utilizes its spectrum in the most effi-  
7                 cient and effective way; and

8                 (B) repurposes spectrum for commercial  
9                 use wherever possible.

10 **SEC. 3. DEFINITIONS.**

11         In this Act:

12           (1) COMMISSION.—The term “Commission”  
13           means the Federal Communications Commission.

14           (2) NIST.—The term “NIST” means the Na-  
15           tional Institute of Standards and Technology.

16           (3) NTIA.—The term “NTIA” means the Na-  
17           tional Telecommunications and Information Admin-  
18           istration.

19 **SEC. 4. REALLOCATION OF FEDERAL GOVERNMENT SPEC-**  
20 **TRUM.**

21         Section 113 of the National Telecommunications and  
22         Information Administration Organization Act (47 U.S.C.  
23         923) is amended by adding at the end the following:

24           “(m) FURTHER REALLOCATION REPORT.—

25                 “(1) REPORT REQUIRED.—

1           “(A) IN GENERAL.—Not later than 1 year  
2 after the date of enactment of this subsection,  
3 the Secretary shall prepare and submit to the  
4 President and Congress a report (referred to in  
5 this subsection as the ‘reallocation report’) that  
6 identifies and recommends for reallocation  
7 bands of frequencies—

8                   “(i) that, in the aggregate, span not  
9 less than 200 megahertz;

10                   “(ii) that are located below 5  
11 gigahertz;

12                   “(iii) that are not covered by the pro-  
13 ceeding of the Commission in GN Docket  
14 No. 12–354;

15                   “(iv) that, as of the date of submis-  
16 sion of the reallocation report, are allo-  
17 cated on an exclusive or primary basis for  
18 Federal Government use;

19                   “(v) from which Federal Government  
20 stations may be relocated pursuant to sub-  
21 section (g) or for which Federal Govern-  
22 ment stations may be replaced by commer-  
23 cially available substitutes;

24                   “(vi) that, as of the date of submis-  
25 sion of the reallocation report or at any

1 time during the 10-year period beginning  
2 on that date, may feasibly be made avail-  
3 able for the uses described in subpara-  
4 graph (B);

5 “(vii) the transfer of which from, or  
6 the sharing of which with, Federal Govern-  
7 ment use will not result in costs to the  
8 Federal Government, or losses of services  
9 or benefits to the public, that are excessive  
10 in relation to the benefits to the public  
11 that may be provided by non-Federal li-  
12 censes; and

13 “(viii) that are most likely to have the  
14 greatest potential economic benefit to the  
15 United States if reallocated and licensed  
16 for non-Federal use.

17 “(B) ALLOCATION OF SPECTRUM.—Of the  
18 spectrum described in subparagraph (A)—

19 “(i) 140 megahertz shall—

20 “(I) be allocated for commercial  
21 mobile use on an exclusive, licensed  
22 basis; and

23 “(II) be located below 3.7  
24 gigahertz;

1                   “(ii) not more than 20 megahertz may  
2 be allocated for unlicensed use if—

3                   “(I) such use protects licensed  
4 services from harmful interference;  
5 and

6                   “(II) the spectrum allocated for  
7 such use is located—

8                   “(aa) in guard bands below  
9 3.7 gigahertz—

10                   “(AA) that are no larg-  
11 er than technically necessary  
12 to prevent harmful inter-  
13 ference between licensed  
14 services outside the guard  
15 bands; and

16                   “(BB) the unlicensed  
17 use of which does not cause  
18 harmful interference to li-  
19 censed services; or

20                   “(bb) between 3.7 gigahertz  
21 and 5 gigahertz; and

22                   “(iii) not more than 40 megahertz  
23 may be shared with Federal Government  
24 stations if—



1                   “(I) the President limits the as-  
2                   signment of the Federal Government  
3                   stations so that the use of the spec-  
4                   trum by those stations is restricted by  
5                   geographic area, by time, or by other  
6                   means so as to guarantee that the  
7                   continued use by those stations is sub-  
8                   stantially less than the use made by  
9                   non-Federal stations; and

10                   “(II) the operational sharing au-  
11                   thorized under this clause is subject  
12                   to—

13                   “(aa) interference regula-  
14                   tions prescribed by the Commis-  
15                   sion under section 305(a) of the  
16                   1934 Act;

17                   “(bb) coordination proce-  
18                   dures that the Commission and  
19                   the Secretary shall jointly estab-  
20                   lish and implement to ensure  
21                   against harmful interference; and

22                   “(cc) the sharing arrange-  
23                   ments in a transition plan appli-  
24                   cable to the spectrum that the

1 Technical Panel finds sufficient  
2 under subsection (h)(4).

3 “(C) RELOCATION OF FEDERAL GOVERN-  
4 MENT STATIONS; COSTS.—The Secretary shall  
5 include in the reallocation report—

6 “(i) recommendations for spectrum  
7 bands to which Federal Government sta-  
8 tions may be relocated; and

9 “(ii) the costs, as determined by the  
10 Secretary in consultation with the Office of  
11 Management and Budget, of the relocation  
12 described in clause (i).

13 “(2) DIRECT DISCUSSIONS.—

14 “(A) IN GENERAL.—The Secretary shall  
15 consult with the Federal Government users of  
16 the spectrum and work through established  
17 processes of the NTIA to encourage and pro-  
18 vide opportunity for direct discussions among  
19 commercial representatives and Federal Govern-  
20 ment users of the spectrum to aid the Secretary  
21 in determining which frequencies to recommend  
22 for reallocation under this subsection.

23 “(B) NOTICE.—The Secretary shall pro-  
24 vide notice to the public and the Commission of  
25 any discussion held under subparagraph (A),

1 including the name of each business or other  
2 person represented in the discussion.

3 “(C) REPRESENTATIVE OF COMMISSION.—  
4 A representative of the Commission (and of the  
5 Secretary, at the election of the Secretary) may  
6 attend any discussion held under subparagraph  
7 (A).

8 “(D) OPPORTUNITY FOR COMMENT.—Be-  
9 fore the Secretary submits the reallocation re-  
10 port, the Secretary shall provide the public and  
11 the Commission with an opportunity to com-  
12 ment on the results of any discussion held  
13 under subparagraph (A).

14 “(3) TIMETABLE FOR WITHDRAWAL OR LIMITA-  
15 TION OF ASSIGNMENTS.—

16 “(A) RECOMMENDED DEADLINES.—The  
17 Secretary shall include in the reallocation report  
18 a timetable that recommends effective dates by  
19 which the President shall—

20 “(i) withdraw the assignment to Fed-  
21 eral Government stations of the fre-  
22 quencies specified in the reallocation report  
23 (other than the frequencies identified  
24 under paragraph (1)(B)(iii)); and

1           “(ii) in the case of the spectrum iden-  
2           tified under paragraph (1)(B)(iii), limit the  
3           assignment of that spectrum to Federal  
4           Government stations as required under  
5           subclause (I) of that paragraph.

6           “(B) ABSOLUTE DEADLINES.—

7           “(i) IN GENERAL.—Notwithstanding  
8           the effective dates recommended by the  
9           Secretary under subparagraph (A), not  
10          later than the date described in clause (ii)  
11          of this subparagraph, the President shall—

12                  “(I) withdraw the assignment to  
13                  Federal Government stations of the  
14                  frequencies specified in the realloca-  
15                  tion report (other than the frequencies  
16                  identified under paragraph  
17                  (1)(B)(iii)); and

18                  “(II) in the case of the spectrum  
19                  identified under paragraph (1)(B)(iii),  
20                  limit the assignment to Federal Gov-  
21                  ernment stations as required under  
22                  subclause (I) of that paragraph.

23                  “(ii) DATE.—The date described in  
24                  this clause is the earlier of—

1                   “(I) the date that is 3 years after  
2                   the beginning of the auction of the  
3                   frequencies specified in the realloca-  
4                   tion report pursuant to section  
5                   309(j)(15)(C)(vii) of the 1934 Act; or

6                   “(II) the date as of which—

7                   “(aa) each Federal Govern-  
8                   ment station has been relocated  
9                   from the frequencies specified in  
10                  the reallocation report (other  
11                  than the frequencies identified  
12                  under paragraph (1)(B)(iii)); and

13                  “(bb) the assignment of the  
14                  frequencies identified under para-  
15                  graph (1)(B)(iii) to each Federal  
16                  Government station has been lim-  
17                  ited as required under subclause  
18                  (I) of that paragraph.

19                  “(4) DEPARTMENT OF DEFENSE STATIONS.—  
20                  Section 1062(b) of the National Defense Authoriza-  
21                  tion Act for Fiscal Year 2000 (Public Law 106–65;  
22                  113 Stat. 768) shall apply to the relocation of sta-  
23                  tions operated by the Department of Defense in the  
24                  spectrum described in paragraph (1)(A) of this sub-  
25                  section.”.

1 **SEC. 5. SPECTRUM PIPELINE.**

2 (a) DEADLINE.—Section 309(j)(15)(C) of the Com-  
3 munications Act of 1934 (47 U.S.C. 309(j)(15)(C)) is  
4 amended by adding at the end the following:

5 “(vii) DEADLINES FOR THE AUCTION  
6 OF FREQUENCY BANDS UNDER THE WIRE-  
7 LESS INNOVATION ACT OF 2015.—The  
8 Commission shall conduct an auction of—

9 “(I) 80 megahertz of the spec-  
10 trum recommended for reallocation in  
11 the reallocation report under section  
12 113(m) of the National Telecommuni-  
13 cations and Information Administra-  
14 tion Organization Act not later than  
15 December 31, 2018;

16 “(II) an additional 60 megahertz  
17 of the spectrum recommended for re-  
18 allocation in the reallocation report  
19 described in subclause (I) not later  
20 than 18 months after the completion  
21 of the auction required under sub-  
22 clause (I); and

23 “(III) an additional 40 mega-  
24 hertz of the spectrum recommended  
25 for reallocation in the reallocation re-  
26 port described in subclause (I) not

1 later than 18 months after the com-  
2 pletion of the auction required under  
3 subclause (II).”.

4 (b) REGULATIONS.—Not later than 6 months before  
5 the Commission commences each auction required under  
6 section 309(j)(15)(C)(vii) of the Communications Act of  
7 1934, as added by subsection (a), the Commission shall  
8 promulgate regulations necessary to conduct the auction.

9 (c) TECHNICAL AND CONFORMING AMENDMENT.—  
10 Section 6401(b)(2) of the Middle Class Tax Relief and Job  
11 Creation Act of 2012 (47 U.S.C. 1451(b)(2)) is amend-  
12 ed—

13 (1) by striking subparagraph (C); and  
14 (2) by redesignating subparagraphs (D) and  
15 (E) as subparagraphs (C) and (D), respectively.

16 **SEC. 6. REALLOCATION INCENTIVE.**

17 (a) DEFINITIONS.—In this section—

18 (1) the term “Director” means the Director of  
19 the Office of Management and Budget; and

20 (2) the term “Federal entity” has the meaning  
21 given the term in section 113(l) of the National  
22 Telecommunications and Information Administration  
23 Organization Act (47 U.S.C. 923(l)).

24 (b) DEPOSIT OF PROCEEDS.—Notwithstanding sec-  
25 tion 309(j)(8)(D) of the Communications Act of 1934 (47

1 U.S.C. 309(j)(8)(D)), if the first auction of any eligible  
2 frequencies described in section 113(g)(2) of the National  
3 Telecommunications and Information Administration Or-  
4 ganization Act (47 U.S.C. 923(g)(2)) that takes place  
5 after the date of enactment of this Act meets the require-  
6 ments established under section 309(j)(16) of the Commu-  
7 nications Act of 1934 (47 U.S.C. 309(j)(16)), an amount  
8 equal to 1 percent of the proceeds attributable to the auc-  
9 tion shall be deposited in the Spectrum Relocation Fund  
10 established under section 118 of the National Tele-  
11 communications and Information Administration Organi-  
12 zation Act (47 U.S.C. 928) for use in accordance with sub-  
13 section (c) of this section.

14 (c) PAYMENTS FOR ADVANCE PLANNING AND EN-  
15 HANCED SPECTRUM EFFICIENCY.—

16 (1) IN GENERAL.—The Director, in consulta-  
17 tion with the NTIA, may use the amount made  
18 available under subsection (b) to make payments to  
19 any Federal entity—

20 (A) to conduct research and development,  
21 and operational, technical, cost, and schedule-  
22 feasibility analyses, regarding the potential fu-  
23 ture reallocation of additional spectrum from  
24 Federal use to exclusive non-Federal use or to  
25 shared use; and



1 (B) to develop and incorporate spectrum  
2 efficiency guidelines and spectrally efficient ad-  
3 vanced or unique technology or techniques into  
4 the budget and procurement processes of the  
5 Federal entity to facilitate the design and pro-  
6 curement of Federal spectrum-dependent sys-  
7 tems that increase flexibility through means  
8 such as multiple-band tuning capabilities and  
9 the use of commercial systems as appropriate,  
10 including through public-private partnerships.

11 (2) CONDITIONS.—

12 (A) USE OF PAYMENT TO ESTIMATE  
13 COSTS.—A Federal entity that receives a pay-  
14 ment under subparagraph (A) of paragraph (1)  
15 to conduct the analyses described in that pa-  
16 ragraph shall use the payment to estimate the  
17 costs specified in clauses (i) through (v) of sec-  
18 tion 113(g)(3)(A) of the National Tele-  
19 communications and Information Administra-  
20 tion Organization Act (47 U.S.C. 923(g)(3)(A))  
21 with respect to frequencies identified by the  
22 Federal entity for potential reallocation.

23 (B) RELOCATION OR SHARING COSTS.—  
24 The Director may not make a payment under  
25 paragraph (1) if the amount made available

1 under subsection (b) is otherwise necessary to  
2 cover relocation or sharing costs (as defined in  
3 section 113(g)(3)) of the National Tele-  
4 communications and Information Administra-  
5 tion Organization Act (47 U.S.C. 923(g)(3)).

6 (C) NOTIFICATION REQUIRED.—The Di-  
7 rector may not make a payment under para-  
8 graph (1) until 30 days after the date as of  
9 which the Director has notified the Committee  
10 on Commerce, Science, and Transportation of  
11 the Senate and the Committee on Energy and  
12 Commerce of the House of Representatives of  
13 the intent of the Director to make the payment.

14 (D) EMISSION LEVELS.—A Federal entity  
15 that receives a payment under paragraph (1)  
16 shall, to the extent possible, procure systems  
17 described in subparagraph (B) of that para-  
18 graph such that emission levels resulting from  
19 reasonable use of adjacent spectrum will not  
20 impair the functioning of the systems, con-  
21 sistent with any applicable radio receiver per-  
22 formance criteria and international obligations.

23 (3) ANNUAL REPORT.—Each year, the Director  
24 shall submit to the Committee on Commerce,  
25 Science, and Transportation of the Senate and the

1 Committee on Energy and Commerce of the House  
2 of Representatives a report that—

3 (A) describes each payment that the Direc-  
4 tor made to a Federal entity under this sub-  
5 section during the preceding year; and

6 (B) details how each Federal entity used  
7 each payment described in subparagraph (A).

8 **SEC. 7. EXPEDITING ROUTINE SECONDARY MARKET**  
9 **TRANSACTIONS.**

10 Section 310 of the Communications Act of 1934 (47  
11 U.S.C. 310) is amended by striking subsection (d) and in-  
12 serting the following:

13 “(d) **ASSIGNMENT AND TRANSFER OF CONSTRU-**  
14 **CTION PERMIT OR STATION LICENSE.—**

15 “(1) **IN GENERAL.—**

16 “(A) **APPLICATION REQUIRED.—**No con-  
17 struction permit or station license, or any rights  
18 thereunder, shall be transferred, assigned, or  
19 disposed of in any manner, voluntarily or invol-  
20 untarily, directly or indirectly, or by transfer of  
21 control of any corporation holding such permit  
22 or license, to any person except upon applica-  
23 tion to the Commission and upon finding by the  
24 Commission that the public interest, conven-  
25 ience, and necessity will be served thereby.

1           “(B) ACTION UPON APPLICATION.—Any  
2 application under subparagraph (A) shall be  
3 disposed of as if the proposed transferee or as-  
4 signee were making application under section  
5 308 for the permit or license in question; but  
6 in acting thereon the Commission may not con-  
7 sider whether the public interest, convenience,  
8 and necessity might be served by the transfer,  
9 assignment, or disposal of the permit or license  
10 to a person other than the proposed transferee  
11 or assignee.

12           “(2) PRESUMPTION.—An application to the  
13 Commission under paragraph (1) shall be deemed to  
14 be in the public interest, convenient, and necessary,  
15 and shall be granted not later than 90 days after the  
16 date on which the Commission issues a public notice  
17 of the application, unless the Commission acts to  
18 deny the application, if the application—

19           “(A) does not involve an entity described  
20 in subsection (b);

21           “(B) does not require premerger notifica-  
22 tion and waiting period under section 7a of the  
23 Clayton Act (15 U.S.C. 18a); and

1                   “(C) is not a covered transaction under  
2                   section 721 of the Defense Production Act of  
3                   1950 (50 U.S.C. App. 2170).”.

4 **SEC. 8. ANALYSIS OF SPECTRUM REQUIREMENTS.**

5                   Section 104(d) of the National Telecommunications  
6 and Information Administration Organization Act (47  
7 U.S.C. 903(d)) is amended—

8                   (1) in paragraph (1)—

9                   (A) by striking “In assigning” and insert-  
10                  ing the following:

11                  “(A) IN GENERAL.—In assigning”; and

12                  (B) by adding at the end the following:

13                  “(B) REQUIRED ANALYSIS.—Before the  
14                  Secretary may assign frequencies for mobile  
15                  radio services and other radio services, and sub-  
16                  ject to subparagraph (C), each Federal agency  
17                  seeking a new or modified frequency assignment  
18                  for a mobile service or other radio service shall  
19                  submit to the Secretary and the Director of the  
20                  Office of Management and Budget (referred to  
21                  in this paragraph as the ‘Director’) a report  
22                  analyzing—

23                  “(i) whether the Federal agency may  
24                  use commercial services for the operation  
25                  of the service rather than obtain a new or

1 modified frequency assignment consistent  
2 with national security, public safety and  
3 overall ability to reliably perform the Fed-  
4 eral mission, including an explicit consider-  
5 ation of the cost of contracting for the  
6 commercial service against the cost of the  
7 agency operating on the new or modified  
8 frequency assignment;

9 “(ii) whether the proposed spectrum  
10 requirements of the Federal agency  
11 could—

12 “(I) use an existing or planned  
13 service operated by the Federal agen-  
14 cy or another Federal agency; or

15 “(II) share a frequency allocation  
16 with an existing Federal agency, in-  
17 cluding the use of dynamic and oppor-  
18 tunistic spectrum sharing;

19 “(iii) whether the Federal agency  
20 could—

21 “(I) use unlicensed spectrum; or

22 “(II) lease capacity from com-  
23 mercial providers;

24 “(iv) if the Federal agency cannot use  
25 a commercial or other Federal service, how

1 much spectrum the Federal agency needs  
2 to operate the service;

3 “(v) whether the service requires a  
4 frequency assignment below 3 gigahertz;  
5 and

6 “(vi) whether, once the allocation is  
7 made, the Federal agency may share the  
8 spectrum with non-Federal users.

9 “(C) REVIEW OF ANALYSIS.—

10 “(i) IN GENERAL.—The Secretary, in  
11 consultation with the Director and any  
12 Federal agency that the Secretary may de-  
13 termine appropriate, shall determine  
14 whether to grant a request of a Federal  
15 agency for a new or modified frequency as-  
16 signment for a mobile service or other  
17 radio service.

18 “(ii) ALTERATION OF ALLOCATION.—  
19 If the Secretary determines that a request  
20 described in clause (i) is better met  
21 through sharing frequencies or systems  
22 with another Federal agency, the Sec-  
23 retary, in consultation with the Director,  
24 the requesting Federal agency, the Federal  
25 agency with whom the requesting Federal

1 agency will share systems or allocation,  
2 and any other Federal agency that the  
3 Secretary may determine appropriate, shall  
4 alter the previously granted allocation ac-  
5 cordingly.

6 “(D) BUDGET AND PROCUREMENT PROC-  
7 ESSES.—

8 “(i) IN GENERAL.—A Federal agency  
9 shall include spectrum efficiency when con-  
10 sidering procurement of spectrum-depend-  
11 ent systems and hardware, as a technical  
12 requirement, an evaluation criterion for  
13 award, or both.

14 “(ii) SPECTRUM EFFICIENCY GUIDE-  
15 LINES.—The NTIA and the Director shall  
16 develop and incorporate spectrum effi-  
17 ciency guidelines into budget and procure-  
18 ment processes.

19 “(iii) PURPOSE AND CONTENT OF  
20 GUIDELINES.—The guidelines developed  
21 under clause (ii) shall—

22 “(I) facilitate, as appropriate, the  
23 design and procurement of systems  
24 that increase flexibility through means  
25 such as multiple-band tuning capabili-



1 ties and the use of commercial sys-  
2 tems; and

3 “(II) require, to the extent pos-  
4 sible, procurement of Federal systems  
5 such that emission levels resulting  
6 from reasonable use of adjacent spec-  
7 trum will not impair the functioning  
8 of such systems, consistent with any  
9 applicable radio receiver performance  
10 criteria and international obligations.

11 “(E) TRANSPARENCY OF FEDERAL SPEC-  
12 TRUM ALLOCATIONS.—

13 “(i) PUBLIC AVAILABILITY.—All re-  
14 quests for allocation made under this Act  
15 shall be published in the Federal Register.

16 “(ii) DATABASE.—The NTIA shall  
17 maintain a database of all requests for al-  
18 location made under this Act that is  
19 searchable electronically and available to  
20 the public.

21 “(iii) PUBLIC COMMENT PERMIS-  
22 SIBLE.—At the discretion of the Secretary,  
23 the Secretary may seek public comment on  
24 any requested allocation.

1                   “(iv) NATIONAL SECURITY PRO-  
2                   TECTED.—Where necessary to protect the  
3                   interests of national security, the Assistant  
4                   Secretary shall redact a request for alloca-  
5                   tion made under this Act from the pub-  
6                   lic.”; and

7                   (2) in paragraph (2), by striking “The Sec-  
8                   retary” and inserting “In addition to the cir-  
9                   cumstances described in paragraph (1)(C), the Sec-  
10                  retary”.

11 **SEC. 9. FEDERAL SPECTRUM TRANSPARENCY AND VALUE.**

12                  (a) ANALYSIS OF ECONOMIC OPPORTUNITY COST.—

13                   (1) DEVELOPMENT OF FRAMEWORK.—Not later  
14                  than 1 year after the date of enactment of this Act,  
15                  the NTIA, in consultation with the Commission and  
16                  the Director of the Office of Management and Budg-  
17                  et, shall develop a framework for determining the  
18                  annual economic opportunity cost of each specific  
19                  Federal spectrum band assigned or otherwise allo-  
20                  cated for use by Federal entities.

21                   (2) SCOPE.—The framework developed under  
22                  paragraph (1) shall cover all federally allocated spec-  
23                  trum bands between 150 megahertz and 6000 mega-  
24                  hertz, inclusive.

1           (3) GOALS.—The goals of the framework devel-  
2           oped under paragraph (1) are—

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

7                   (B) to provide the public with increased  
8                   transparency about how Federal entities use a  
9                   scarce physical resource.

10          (4) REQUIREMENTS.—The framework devel-  
11          oped under paragraph (1) shall—

12                   (A) define the term “opportunity cost” as  
13                   the value of the spectrum, in dollar terms, as  
14                   if such spectrum were to be reallocated on a li-  
15                   censed basis to the highest commercial alter-  
16                   native use that currently does not have access  
17                   to that spectrum;

18                   (B) be updated, on an annual basis, to  
19                   take into account observed market valuations  
20                   from spectrum auctions, secondary spectrum  
21                   trading, and other market indicators of spec-  
22                   trum value;

23                   (C) determine the opportunity costs borne  
24                   by each Federal entity for each spectrum band

1           that is entirely under the control of a single  
2           agency; and

3                   (D) determine the opportunity costs for  
4           spectrum assigned or otherwise allocated to  
5           Federal entities for both primary use and sec-  
6           ondary use.

7           (b) REPORT ON OPPORTUNITY COSTS.—Each Fed-  
8           eral entity that has been assigned or otherwise allocated  
9           use of a Federal spectrum band shall report, as an off-  
10          budget item, the opportunity cost borne by the entity for  
11          each spectrum band the entity uses—

12                   (1) in the budget of the entity to be included  
13          in the budget of the United States Government sub-  
14          mitted by the President under section 1105 of title  
15          31, United States Code; and

16                   (2) in the annual financial statement of the  
17          Federal entity required to be filed under section  
18          3515 of title 31, United States Code.

19           (c) SPECTRUM VALUE ANALYSIS.—Not later than 5  
20          years after the date of enactment of this Act, and every  
21          5 years thereafter, each Federal entity that has been as-  
22          signed or otherwise allocated use of a Federal spectrum  
23          band, or otherwise utilizes such spectrum, shall engage in  
24          an analysis comparing the opportunity cost of that spec-  
25          trum, as such cost is determined by the framework devel-

1 oped by the NTIA under subsection (a), to the projected  
2 costs of the entity relocating to other government spec-  
3 trum holdings, co-locating with other government agen-  
4 cies, leasing other non-Federal spectrum, or contracting  
5 out for its spectrum activities.

6 (d) SPECTRUM TECHNOLOGY STUDY.—

7 (1) IN GENERAL.—Not later than 18 months  
8 after the date of enactment of this Act, and every  
9 5 years thereafter, the Chief Technology Officer, in  
10 consultation with the Assistant Secretary of Com-  
11 merce for Communications and Information and the  
12 Comptroller General of the United States, shall ex-  
13 amine the technologies and equipment used by Fed-  
14 eral entities operating on Federal spectrum alloca-  
15 tions and determine if such technologies and equip-  
16 ment are the most spectrum-efficient available.

17 (2) CERTAIN DETERMINATIONS MADE.—If the  
18 results of any study required under paragraph (1)  
19 determine that the technologies and equipment of  
20 Federal entities operating on Federal spectrum allo-  
21 cations are not the most spectrum-efficient available,  
22 the Comptroller General shall determine—

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

1 (B) what benefits would be gained from  
2 upgrading, particularly any cost savings or in-  
3 creases in spectrum utilization efficiency; and

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

6 (e) SPECTRUM OPPORTUNITY COST AND FRAME-  
7 WORK STUDY.—

8 (1) IN GENERAL.—The Comptroller General of  
9 the United States, in consultation with the NTIA,  
10 shall—

11 (A) conduct a review of the framework de-  
12 veloped under subsection (a);

13 (B) conduct a review of the reports re-  
14 quired under subsection (b) and the processes  
15 that Federal entities use to evaluate the oppor-  
16 tunity cost borne for each spectrum band the  
17 Federal entities use; and

18 (C) make recommendations on how to im-  
19 prove such framework and reporting.

20 (2) REPORT.—Not later than 2 years after the  
21 date of enactment of this Act, and every 2 years  
22 thereafter, the Comptroller General of the United  
23 States shall submit to the appropriate committees in  
24 Congress a report on the review and recommenda-  
25 tions required under paragraph (1).

1 **SEC. 10. WIRELESS FACILITIES DEPLOYMENT.**

2 (a) REPORT ON RELATIONSHIP BETWEEN WIRELESS  
3 FACILITIES DEPLOYMENT AND BROADBAND DEPLOY-  
4 MENT AND ADOPTION.—

5 (1) IN GENERAL.—Not later than 1 year after  
6 the date of enactment of this Act, the Commission  
7 shall—

8 (A) study the relationship between wireless  
9 facilities deployment and broadband deployment  
10 and adoption; and

11 (B) submit to the Committee on Com-  
12 merce, Science, and Transportation of the Sen-  
13 ate and the Committee on Energy and Com-  
14 merce of the House of Representatives a report  
15 that contains the findings of the study under  
16 subparagraph (A).

17 (2) CONTENTS.—In particular, the report sub-  
18 mitted under paragraph (1) shall analyze—

19 (A) with respect to zoning and tower siting  
20 permits for wireless infrastructure—

21 (i) whether the process for obtaining  
22 such permits impacts the pace of  
23 broadband deployment;

24 (ii) whether the process for obtaining  
25 such permits impacts the pace of  
26 broadband adoption;

1 (iii) whether the cost of obtaining  
 2 such permits impacts the pace of  
 3 broadband deployment; and

4 (iv) whether the cost of obtaining such  
 5 permits impacts the pace of broadband  
 6 adoption;

7 (B) the impact of wireless facilities deploy-  
 8 ment on the achievement of the National  
 9 Broadband Plan’s broadband deployment and  
 10 adoption goals; and

11 (C) the progress achieved with respect to  
 12 the National Broadband Plan’s rights-of-way  
 13 management goals.

14 (b) WIRELESS FACILITIES DEPLOYMENT ON FED-  
 15 ERAL PROPERTY.—Section 6409 of the Middle Class Tax  
 16 Relief and Job Creation Act of 2012 (47 U.S.C. 1455)  
 17 is amended by striking subsections (b) through (d) and  
 18 inserting the following:

19 “(b) FEDERAL LANDS.—

20 “(1) DEFINITIONS.—In this subsection—

21 “(A) the term ‘Administrator’ means the  
 22 Administrator of General Services;

23 “(B) the term ‘communications facility in-  
 24 stallation’ includes—



1           “(i) any wireless or wireline infra-  
2 structure for the transmission of writing,  
3 signs, signals, data, images, pictures, and  
4 sounds of all kinds;

5           “(ii) the transmitting device, tower, or  
6 support structure, and any equipment,  
7 switches, wiring, cabling, power sources,  
8 shelters, or cabinets, associated with the  
9 provision of communications services; and

10           “(iii) any antenna or apparatus  
11 that—

12                   “(I) is designed for the purpose  
13 of emitting radio frequency;

14                   “(II) is designed to be operated,  
15 or is operating, from a fixed location  
16 pursuant to authorization by the  
17 Commission; and

18                   “(III) is added to a tower, build-  
19 ing, or other structure;

20           “(C) the term ‘covered agency’ means—

21                   “(i) the Department of Defense;

22                   “(ii) the Department of the Interior;

23                   “(iii) the Department of Agriculture;

24                   “(iv) the Department of Commerce;

1                   “(v) the Department of Transpor-  
2                   tation;

3                   “(vi) the Department of Veterans Af-  
4                   fairs;

5                   “(vii) the United States Postal Serv-  
6                   ice;

7                   “(viii) the Federal Communications  
8                   Commission;

9                   “(ix) the Council on Environmental  
10                  Quality;

11                  “(x) the Advisory Council on Historic  
12                  Preservation;

13                  “(xi) the Department of Homeland  
14                  Security; and

15                  “(xii) the Executive Office of the  
16                  President;

17                  “(D) the term ‘executive agency’ has the  
18                  meaning given the term in section 102 of title  
19                  40, United States Code; and

20                  “(E) the term ‘placement’, with respect to  
21                  a communications facility installation, includes  
22                  the installation, construction, modification, or  
23                  maintenance of the communications facility in-  
24                  stallation.

25                  “(2) FEDERAL PROPERTY.—

1           “(A) GRANT.—If an executive agency, a  
2 State, a political subdivision or agency of a  
3 State, or a person, firm, or organization applies  
4 for the grant of a real property interest, includ-  
5 ing a lease, license, easement, or right-of-way,  
6 to, in, over, or on a building or other property  
7 owned by the Federal Government for the right  
8 to install, construct, modify, and maintain a  
9 communications facility installation, the execu-  
10 tive agency that owns the building or other  
11 property on behalf of the Federal Government  
12 shall grant to the applicant, if technically fea-  
13 sible, a real property interest to perform such  
14 installation, construction, modification, and  
15 maintenance.

16           “(B) APPLICATIONS.—

17           “(i) MULTIPLE TENANTS.—Competi-  
18 tive procurement requirements shall not  
19 apply to an application for a grant of a  
20 real property interest under subparagraph  
21 (A).

22           “(ii) MULTIPLE GRANTS.—An execu-  
23 tive agency that owns a building or other  
24 property and receives applications de-  
25 scribed in subparagraph (A) for multiple

1 grants of real property interests, either  
2 from the same applicant or different appli-  
3 cants, shall provide multiple grants if tech-  
4 nically feasible.

5 “(iii) TERM OF YEARS.—The standard  
6 term of the grant of a real property inter-  
7 est under subparagraph (A) shall be 25  
8 years with allowances for reexamination of  
9 the fee schedule at the end of each 5-year  
10 period within the 25-year period.

11 “(iv) RENEWAL.—The grant of a real  
12 property interest shall enjoy an expectancy  
13 of renewal of the real property interest  
14 upon the expiration of the term described  
15 in clause (iii).

16 “(C) FEES.—

17 “(i) STANDARD FEE.—

18 “(I) IN GENERAL.—Notwith-  
19 standing any other provision of law,  
20 the Administrator, in consultation  
21 with the head of each covered agency,  
22 shall establish a standard fee schedule  
23 for the grant of a real property inter-  
24 est under subparagraph (A) based on  
25 direct cost recovery.

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“(II) INITIAL FEE.—

“(aa) AMOUNT OF FEE.—

The initial amount of the standard fee established under subclause (I) shall be equal to the average fee charged by the Federal Government for the grant of a real property interest for the placement of a communications facility installation during the most recent 3-year period.

“(bb) PUBLICATION OF PROPOSED FEE.—Not later than 90 days after the date of enactment of the Wireless Innovation Act of 2015, the Administrator shall publish a notice in the Federal Register that—

“(AA) proposes an initial amount of the standard fee under subclause (I);

“(BB) describes the data on which the proposed initial amount is based; and

1                   “(CC) invites public  
2                   comment on the proposed  
3                   initial amount.

4                   “(cc) DEADLINE FOR FINAL-  
5                   IZED STANDARD FEE.—Not later  
6                   than 150 days after the date of  
7                   enactment of the Wireless Inno-  
8                   vation Act of 2015, the Adminis-  
9                   trator shall publish a decision in  
10                  the Federal Register that sets  
11                  the initial amount of the stand-  
12                  ard fee.

13                  “(III) LIMIT ON ANNUAL IN-  
14                  CREASES.—During any year, the Ad-  
15                  ministrator may not increase the  
16                  standard fee established under sub-  
17                  clause (I) or clause (ii) by a percent-  
18                  age that is greater than the lower  
19                  of—

20                  “(aa) the percentage in-  
21                  crease in the Consumer Price  
22                  Index for All Urban Consumers  
23                  (all items, United States city av-  
24                  erage) published by the Bureau

1 of Labor Statistics for the most  
2 recent 12-month period; or

3 “(bb) 3 percent.

4 “(ii) AGENCY-SPECIFIC FEE.—

5 “(I) IN GENERAL.—An executive  
6 agency shall charge the standard fee  
7 established by the Administrator  
8 under clause (i) for a grant of a real  
9 property interest unless, not later  
10 than 90 days after the date on which  
11 the Administrator publishes the  
12 amount of the finalized initial fee  
13 under clause (i)(II)(cc), the executive  
14 agency establishes an agency-specific  
15 fee in an amount that is equal to the  
16 average fee charged by the executive  
17 agency for the placement of a commu-  
18 nications facility installation during  
19 the most recent 3-year period.

20 “(II) PUBLIC COMMENT.—Dur-  
21 ing the process of establishing an  
22 agency-specific fee under subclause  
23 (I), an executive agency shall—

1                   “(aa) make a description of  
2                   the data on which the fee is  
3                   based publically available; and

4                   “(bb) allow opportunity for  
5                   public comment.

6                   “(iii) ENTIRETY OF FEES.—The Ad-  
7                   ministrators or an executive agency may not  
8                   charge any additional fee for the grant of  
9                   a real property interest for the placement  
10                  of a communications facility installation  
11                  other than what has been established in  
12                  the standard fee under clause (i) or an  
13                  agency-specific fee established under clause  
14                  (ii).

15                  “(iv) WAIVERS.—In consideration of  
16                  the public benefit provided by a grant of a  
17                  real property interest under subparagraph  
18                  (A), the Administrator or an executive  
19                  agency may grant a full or partial waiver  
20                  of the fee required under clause (i) or (ii).

21                  “(v) USE OF FEES COLLECTED.—Any  
22                  fee amount collected under this paragraph  
23                  for the grant of a real property interest by  
24                  an executive agency under subparagraph  
25                  (A) shall be made available, as provided in



1           appropriations Acts, to the executive agen-  
2           cy to cover the cost of granting the real  
3           property interest.

4           “(3) MASTER CONTRACTS FOR COMMUNICA-  
5           TIONS FACILITY INSTALLATIONS.—

6           “(A) IN GENERAL.—Notwithstanding sec-  
7           tion 704 of the Telecommunications Act of  
8           1996 or any other provision of law, the Admin-  
9           istrator, in consultation with the head of each  
10          covered agency, shall—

11           “(i) not later than 60 days after the  
12          date of enactment of the Wireless Innova-  
13          tion Act of 2015, develop and adopt 1 or  
14          more master application forms and stand-  
15          ard contracts, including lease and ease-  
16          ment contracts, for all executive agencies,  
17          that shall govern the placement of a com-  
18          munications facility installation to, in,  
19          over, or on a building or other property  
20          owned by the Federal Government;

21           “(ii) in developing the master applica-  
22          tion forms and standard contracts under  
23          subparagraph (A)—

24           “(I) include in each master appli-  
25          cation form or standard contract the

1 standard fee schedule and standard  
2 fee established under paragraph  
3 (2)(C)(i)(I); and

4 “(II) standardize the treatment  
5 of—

6 “(aa) the placement of a  
7 communications facility installa-  
8 tion to, in, over, or on the roof-  
9 top or facade of a building or in-  
10 side a building;

11 “(bb) the technology used in  
12 connection with a communica-  
13 tions facility installation placed  
14 on a Federal building or other  
15 property; and

16 “(cc) any other key issues  
17 the Administrator considers ap-  
18 propriate;

19 “(iii) not later than 30 days after the  
20 date on which the Administrator adopts  
21 the master application forms and standard  
22 contracts under clause (i), publish the  
23 master application forms and standard  
24 contracts in the Federal Register; and

1           “(iv) direct each executive agency to  
2 begin accepting the master application  
3 forms and standard contracts from appli-  
4 cants not later than 30 days after the date  
5 on which the Administrator adopts the  
6 master application forms and standard  
7 contracts under clause (i).

8           “(B) APPLICABILITY.—

9           “(i) IN GENERAL.—Except as pro-  
10 vided in clause (ii), the master application  
11 forms and standard contracts developed by  
12 the Administrator under subparagraph  
13 (A)(i) shall apply to each building or other  
14 property owned by the Federal Govern-  
15 ment.

16           “(ii) EXCEPTION.—If the Adminis-  
17 trator determines that the master applica-  
18 tion forms and standard contracts devel-  
19 oped under subparagraph (A)(i) are not  
20 adequate for a specific building or other  
21 property, the Administrator shall—

22           “(I) not later than 10 days after  
23 the date on which the Administrator  
24 makes the determination, provide  
25 written notification to the applicant,



1           ing application form or contract with the  
2           executive agency; and

3                   “(ii) the executive agency shall accept  
4           the existing application form or contract.

5                   “(D) ESCALATION AND REVIEW.—Not  
6           later than 60 days after the date of enactment  
7           of the Wireless Innovation Act of 2015, each  
8           executive agency shall establish a supervisory  
9           review process under which an executive work-  
10          ing group or established agency executive with  
11          negotiation and approval authority shall review  
12          any communications facility installation applica-  
13          tion, lease, or easement if an applicant requests  
14          such review.

15                   “(E) INCORPORATION OF SUBSECTION  
16          (a).—An executive agency may not deny, and  
17          shall approve, any eligible facilities request (as  
18          defined in subsection (a)(2)) for a modification  
19          of an existing wireless tower or base station  
20          that does not substantially change the physical  
21          dimensions of the tower or base station.

22                   “(4) PROGRESS REPORTS.—Not later than 90  
23          days after the date of enactment of the Wireless In-  
24          novation Act of 2015, and annually thereafter, the  
25          Administrator shall submit to the Committee on

1 Commerce, Science, and Transportation of the Sen-  
2 ate and the Committee on Energy and Commerce of  
3 the House of Representatives a report that de-  
4 scribes, with respect to each executive agency—

5 “(A) the number of sites sought in applica-  
6 tions for the placement of a communications fa-  
7 cility installation, including upgrades and col-  
8 locations;

9 “(B) the number of sites approved; and

10 “(C) the number of sites completed.”.