To promote unlicensed spectrum use in the 5 GHz band, to maximize the use of the band for shared purposes in order to bolster innovation and economic development, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. Rubio (for himself and Mr. Booker) introduced the following bill; which was read twice and referred to the Committee on

A BILL

To promote unlicensed spectrum use in the 5 GHz band, to maximize the use of the band for shared purposes in order to bolster innovation and economic development, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Wi-Fi Innovation Act”.

SEC. 2. PROMOTING UNLICENSED SPECTRUM.

(a) DEFINITIONS.—In this section:

(1) COMMISSION.—The term “Commission” means the Federal Communications Commission.
(2) Dedicated short-range communications services.—The term “Dedicated Short-Range Communications Services” has the meaning given the term in section 90.7 of title 47, Code of Federal Regulations.

(3) Dynamic frequency selection.—The term “Dynamic Frequency Selection” has the meaning given the term in section 15.403 of title 47, Code of Federal Regulations.

(4) 5850-5925 MHz band.—The term “5850-5925 MHz band” has the meaning given the term in section 6406(c) of the Middle Class Tax Relief and Job Creation Act of 2012 (47 U.S.C. 1453(c)).

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

(6) Technical rules suitable for the widespread commercial development of unlicensed operations.—The term “technical rules suitable for the widespread commercial development of unlicensed operations” means technical rules that, to the maximum extent feasible—

(A) permit outdoor unlicensed operations;
(B) permit unlicensed operations at a maximum conducted transmitter output power limit of not less than 1 watt; and

(C) do not require unlicensed devices to employ Dynamic Frequency Selection.

(b) MODIFICATION OF REGULATIONS TO PROMOTE UNLICENSED USE IN THE 5 GHz BAND.—

(1) IN GENERAL.—

(A) Provision of Additional Unlicensed Spectrum.—The Commission shall modify title 47, Code of Federal Regulations, to provide additional unlicensed spectrum in the 5850–5925 MHz band under technical rules suitable for the widespread commercial development of unlicensed operations in the band, as specified under paragraph (2).

(B) NTIA Cooperation.—The NTIA shall facilitate the modification described in subparagraph (A) by cooperating with the Commission to identify the spectrum management actions necessary to accommodate the regulatory changes specified under paragraph (2).

(2) REQUIRED ACTIONS AND MODIFICATIONS.—

(A) In general.—
(i) Office of Engineering and Technology Public Notice.—Not later than 3 months after the date of enactment of this Act, the Office of Engineering and Technology of the Commission shall issue a public notice seeking comment on proposals for—

(I) interference-mitigation techniques and technologies, and potential rechannelization, that would accommodate both incumbent licensees, including Dedicated Short Range Communications Services licensees, and widespread commercial unlicensed operations in the 5850–5925 MHz band; and

(II) deployment timelines for the technologies described in subparagraph (I).

(ii) NTIA Response.—The NTIA, in response to the public notice issued under clause (i), shall publicly submit to the Office of Engineering and Technology a description of any current and anticipated
further Federal uses of the 5850–5925 MHz band.

(B) Test plan.—

(i) In general.—Not later than 6 months after the date of enactment of this Act, the Commission shall, in consultation with the Department of Transportation and the NTIA, develop and publish a test plan, including a timeline, for the use of unlicensed devices in the 5850–5925 MHz band.

(ii) Requirement.—The test plan developed and published under clause (i) shall be designed to allow the Commission to evaluate technologies for allowing unlicensed devices to utilize the 5850–5925 MHz band without causing harmful interference to incumbent licensees, including Dedicated Short Range Communications Services licensees.

(iii) Testing multiple methods.—The Commission may choose to test multiple methods of sharing the 5850–5925 MHz band.
(iv) CONSIDERATIONS.—In developing the test plan under clause (i), the Commission shall consider—

(I) the comments filed in response to the public notice issued under subparagraph (A)(i);

(II) the comments filed in response to ET Docket No. 13–49;

(III) the functions currently authorized under exclusive allocation that could be performed by unlicensed or shared spectrum;

(IV) whether a system of priority access could substitute for exclusive licensing and, if so, whether the system of priority access should be confined to—

(aa) particular portions of the 5850-5925 MHz band; and

(bb) functions critical for dedicated short-range communications crash avoidance;

(V) whether non-exclusive licensing or other forms of shared spectrum
access could substitute for exclusive li-
censing;

(VI) whether the Commission
could promulgate rules to migrate ex-
sting licensees to an alternative band;

(VII) whether, to protect critical
public safety communications, the
Commission could allow sharing in
only a portion of the 5850–5925 MHz
spectrum; and

(VIII) whether shared use or a
system of priority access—

(aa) causes harmful inter-
ference to incumbent licensees; or

(bb) compromises safety-of-
life uses by incumbent licensees
that are necessary for advancing
motor vehicle safety.

(C) TESTING; RESULTS.—Not later than
15 months after the date of enactment of this
Act, the Commission, in consultation with the
Department of Transportation and the NTIA,
shall—
(i) conduct testing in accordance with
the test plan developed under subpara-
graph (B);

(ii) publish a summary of the results
of the testing to the docket relating to the
5850–5925 MHz band; and

(iii) reference the results of the test-
ing and the comments filed under subpara-
graph (A) in determining unlicensed device
use of the 5850–5925 MHz band.

(D) REGULATIONS.—

(i) IN GENERAL.—Not later than 18
months after the date of enactment of this
Act—

(I) if the Commission determines
that a mitigation technology, re-
channelization, or other approach
would allow unlicensed operations in
the 5850–5925 MHz band that will
not cause harmful interference to ex-
isting licensees of that band, the Com-
mission shall modify part 15 of title
47, Code of Federal Regulations, to
adopt technical rules suitable for the
widespread commercial deployment of
unlicensed operations for the 5850–5925 MHz band; or

(II) if the Commission determines that no mitigation technology, rechannelization, or other sharing approach would prevent unlicensed operations in the 5850–5925 MHz band from causing harmful interference to existing licensees of that band, the Commission—

(aa) shall provide notification of the determination to—

(AA) Congress;

(BB) the Department of Transportation; and

(CC) the NTIA; and

(bb) may not modify part 15 of title 47, Code of Federal Regulations, to adopt technical rules suitable for the widespread commercial deployment of unlicensed operations for the 5850–5925 MHz band until the Commission can ensure that such operations will not cause harmful inter-
ference to existing licensees of that band.

(ii) INTELLIGENT TRANSPORTATION SYSTEMS.—The Commission shall modify subpart M of part 90 of title 47, Code of Federal Regulations (relating to the Intelligent Transportation Systems radio service), and subpart L of part 95 of title 47, Code of Federal regulations (relating to dedicated short-range communications service on-board units), if the Commission determines that such a modification would maximize the utility of the 5850–5925 MHz band while protecting existing licensees from harmful interference.

SEC. 3. ASSESSING UNLICENSED SPECTRUM AND WI-FI USE IN LOW-INCOME NEIGHBORHOODS.

(a) Study.—

(1) IN GENERAL.—The Commission 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 Commission shall consider and evaluate—

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

(B) how to overcome the barriers described in subparagraph (A) through incentives, policies, or requirements that would increase the availability of unlicensed spectrum and related technologies in low-income neighborhoods to increase broadband adoption by, by elementary and secondary school-age children in schools and at home in these communities;

(C) proposals that would encourage the home broadband adoption by not less than 50 percent of households with elementary and secondary school-age children that are in low-income neighborhoods; and

(D) the availability of wireless Internet hot spots and access to unlicensed spectrum for children described in clause subparagraph (B).

(b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Commission 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 the potential incentives, policies, and requirements described in subsection (a)(2)(B).