Congress of the United States
Washington, DC 20515

December 9, 2013

1246

The Honorable Tom Wheeler
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Dear Chairman Wheeler,

As you know, the Middle Class Tax Relief and Job Creation Act called for the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA) to examine the possible expansion of unlicensed Wi-Fi access at 5 GHz – a significant driver of economic and technological growth. We strongly support prompt action on this examination in order to maximize the benefits of our nation's finite spectrum resource and meeting US spectrum demands in a timely manner.

We note positive steps to date by both NTIA and the FCC to examine the possible expansion of unlicensed access at 5 GHz. In January 2013, NTIA released a report reviewing potential interference concerns, including interference concerns to Intelligent Transportation spectrum at 5.85-5.925 GHz. NTIA's report concluded that further analysis will be required to resolve potential conflicts between incumbent systems and Wi-Fi users, and stating that it will conduct detailed quantitative studies which will include additional analysis and measurements to evaluate the feasibility of existing, modified, proposed and new spectrum-sharing technologies and approaches.

The NTIA report stated: "These studies will be supported by and involve direct interaction between federal and non-federal stakeholders, including representatives of the wireless industry and the intelligent transportation community." The report targets July-December 2014 for completion of these spectrum sharing studies and final recommendations.

In February 2013, the FCC opened a rulemaking proceeding proposing to facilitate additional unlicensed use of 5.15-5.925 GHz. Comments and reply comments have been received by the FCC. These are all positive steps and we commend your efforts in this regard.

Based on testimony from the recent House Communications and Technology Subcommittee hearing on 5 GHz, we learned that there is now more than one proposal to resolve interference concerns between ITS and Wi-Fi uses. Industry groups have been meeting to discuss the proposals and develop them further. As Members of Congress, we have no particular view at this early date about which proposal, or combination of proposals, might be the best path forward to protect incumbent systems while expanding access for Wi-Fi. We are concerned, however, that industry conversations about sharing the transportation spectrum, while helpful

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and necessary, are insufficient to resolve potential conflicts. The federal government is equally a stakeholder – as a matter of spectrum policy and as a matter of public safety.

It is imperative and our expectation that both federal and non-federal parties promptly engage in the collaboration and information-sharing necessary to maximize our nation's limited spectrum resource, consistent with the June 2013 Presidential Memorandum: Expanding America's Leadership in Wireless Innovation. We seek the leadership of your agencies in ensuring that these critical engineering discussions on spectrum sharing among the Wi-Fi and ITS industries are completed as expeditiously as possible.

In our view, the FCC, NTIA, and other relevant agencies must continue to work together collaboratively with all relevant industry stakeholders to meet the spectrum needs of this nation. We urge all interested parties to continue to engage in this process in a timely manner and allow those with technical expertise to engage in developing sharing techniques that protect all primary licensed users, while enabling expanded unlicensed access in the 5 GHz band. Please provide us with a progress report on your collaborative testing efforts, especially with respect to the 5.85-5.925 GHz band, and when you expect it to be completed.

Sincerely,

Ben Ray Luján
Member of Congress

Doris Matsui
Member of Congress

Anna G. Eshoo
Member of Congress

cc: Lawrence Strickling, Assistant Secretary U.S. Department of Commerce
Anthony Foxx, Secretary U.S. Department of Transportation

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

February 28, 2014

The Honorable Ben Ray Luján
U.S. House of Representatives
2446 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Luján:

Thank you for your letter encouraging the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA) to promptly examine the possible expansion of unlicensed Wi-Fi access in the 5 GHz band. I share your recognition of the importance of making available more unlicensed spectrum, and I agree that we need to continue our collaborative efforts with government agencies and private stakeholders to resolve technical issues related to this band.

The FCC is committed to realizing the tremendous promise the 5 GHz band offers for unlicensed use, but we also remain obligated to protect incumbent users from harmful interference, pursuant to the FCC's rules. Our staff has been working with all of the stakeholders to resolve the technical challenges associated with increasing the utility of this spectrum, while also protecting incumbent, licensed users.

Following the release of NTIA's January 2013 initial study evaluating the 5350-5470 MHz and 5850-5925 MHz bands, on February 20, 2013, the FCC adopted a *Notice of Proposed Rulemaking* (*NPRM*) seeking comment on how to increase the utility of the existing Unlicensed National Information Infrastructure (U-NII) 5 GHz bands, as well as the technical feasibility of allowing operation of U-NII devices in the 5350-5470 MHz and 5850-5925 MHz bands.

Based on the comments received in response to the *NPRM* and the continuing collaborative efforts of the various stakeholders, we are considering acting in the near-term to enhance the utility of the spectrum that is already available for unlicensed U-NII use, while deferring final consideration of the 5350-5470 MHz and 5850-5925 MHz bands, pending ongoing technical analyses.

With respect to the 5850-5925 MHz band in particular, the Institute of Electrical and Electronics Engineers (IEEE) has established the 802.11 DSRC Coexistence Tiger Team, which is comprised of an international group of distinguished technical experts who were responsible for developing the initial Wi-Fi and Dedicated Short Range Communications (DSRC) standards used for Intelligent Transportation Systems (ITS). Because the IEEE initially designed this family of standards, we believe that the Tiger Team is well-suited for finding technical solutions to the spectrum sharing issues in this band. On February 7, 2014, the Tiger Team filed a letter with the FCC noting positive collaboration with the participants, and anticipating initial results

from simulations by mid-2014. Prototype tests are slated to begin later in the year, and the Tiger Team plans to explore additional coexistence techniques throughout the year.

We believe that it is important to allow all stakeholders the opportunity to develop and test technical solutions prior to adopting final rules. The FCC is coordinating closely with NTIA to monitor and evaluate the Tiger Team's work, and the FCC will include the resulting analyses as part of the record in our proceeding. Our goal is to reach an expeditious resolution to these complex matters that best provides for effective utilization of the spectrum.

I appreciate your interest in this matter. Your letter will be included in the record of the *5 GHz Notice of Proposed Rulemaking* and considered during the FCC's review. Please let me know if I can be of any further assistance.

Sincerely,

Tom Wheeler

cc: The Honorable Anthony Foxx, Secretary
U.S. Department of Transportation

The Honorable Lawrence E. Strickling
Assistant Secretary for Communications and Information
National Telecommunications and Information Administration
U.S. Department of Commerce

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

February 28, 2014

The Honorable Anna Eshoo
Ranking Member
Subcommittee on Communications and Technology
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Congresswoman Eshoo:

Thank you for your letter encouraging the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA) to promptly examine the possible expansion of unlicensed Wi-Fi access in the 5 GHz band. I share your recognition of the importance of making available more unlicensed spectrum, and I agree that we need to continue our collaborative efforts with government agencies and private stakeholders to resolve technical issues related to this band.

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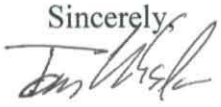

Tom Wheeler

cc: The Honorable Anthony Foxx, Secretary
U.S. Department of Transportation

The Honorable Lawrence E. Strickling
Assistant Secretary for Communications and Information
National Telecommunications and Information Administration
U.S. Department of Commerce

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

February 28, 2014

The Honorable Doris Matsui
U.S. House of Representatives
2434 Rayburn House Office Building
Washington, D.C. 20515

Dear Congresswoman Matsui:

Thank you for your letter encouraging the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA) to promptly examine the possible expansion of unlicensed Wi-Fi access in the 5 GHz band. I share your recognition of the importance of making available more unlicensed spectrum, and I agree that we need to continue our collaborative efforts with government agencies and private stakeholders to resolve technical issues related to this band.

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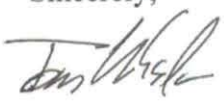

Tom Wheeler

cc: The Honorable Anthony Foxx, Secretary
U.S. Department of Transportation

The Honorable Lawrence E. Strickling
Assistant Secretary for Communications and Information
National Telecommunications and Information Administration
U.S. Department of Commerce