



THE SECRETARY OF TRANSPORTATION  
WASHINGTON, DC 20590

November 20, 2019

The Honorable Ajit Pai  
Chairman  
Federal Communications Commission  
445 12th Street, SW  
Washington, D.C. 20554

**Re: Draft of Notice of Proposed Rulemaking  
In the Matter of Use of the 5.850-5.925 GHz Band**

Dear Chairman Pai:

Thank you for your transmittal on Friday, November 8, 2019 of the Commission's draft of a Notice of Proposed Rulemaking (NPRM) relating to the use of the 5.850-5.925 GHz spectrum band (the Safety Band or the 5.9 GHz Band). The Department of Transportation (Department or DOT) is pleased to respond and to provide comments.

DOT appreciates FCC's continued consideration of the important issues raised in this proceeding. Nonetheless, DOT has significant concerns with the Commission's proposal, which represents a major shift in the FCC's regulation of the 5.9 GHz Band and jeopardizes the significant transportation safety benefits that the allocation of this Band was meant to foster.

During 2017, there were over 6 million police-reported vehicle crashes in the U.S. that resulted in 37,133 lives lost, as well as 2,746,000 injuries. These crashes also resulted in economic harm of approximately \$250 billion in direct costs and over \$800 billion when the loss of life, injuries, and other quality of life factors are put into dollars. Further, traffic congestion costs are estimated at over \$140 billion annually and continue to increase.

Due to the significant potential vehicle-to-everything (V2X) technologies have to reduce these societal crises, it is imperative to the Department that the full 75 MHz of the 5.9 GHz Band is preserved for its existing purposes, including transportation safety and other intelligent transportation purposes. To that end, the Department would support a proposed revision to the existing band plan from specifying Dedicated Short Range Communications (DSRC) to a technology-neutral approach that preserves the entire band for its existing purposes, but allows the market, and not the Federal government, to determine the specific communication technology that will best achieve these purposes. Further, if spectrum-sharing technology is proven feasible after completing Phases 2 and 3 of DOT's spectrum sharing research plan, the band plan could be further modified to allow

for such sharing—thereby maximizing the utilization of this valuable spectrum for all stakeholders.

Contrary to the FCC's proposal, this spectrum band is already being actively used by industry and by a variety of additional private and public sector stakeholders, and continues to hold even greater promise in the very near future. In addition, Canada and Mexico also have dedicated the same 75 MHz to transportation, which positions North America to have a single standard for vehicles produced in the United States and exported and, importantly, to keep connected vehicle capabilities from failing as vehicles move across our borders.

The Department would like to continue its dialogue with the Commission and with other interested agencies on these concerns before the proposal is issued. This would permit a more robust and meaningful public comment period, and would also reaffirm the agencies' interests in conducting testing on spectrum interference and the other complex issues raised by the proposal. However, to the extent that the FCC deems it necessary and appropriate to proceed with a proposal at this time, the Department is offering comments aimed at ensuring that the NPRM is accurate and balanced, and that it reflects the Administration's commitment to improving traffic safety and mobility for all Americans.

To assist the Commission in that endeavor, the Department is providing comments in a memorandum summarizing our concerns with the NPRM as well as notations to the draft NPRM. As explained in those comments, DOT agrees with FCC's decision to remove the "all unlicensed" option that it had previously considered in an earlier draft. Notwithstanding that change, there are a number of critical issues that should be more fully considered and discussed in the interest of protecting adequate spectrum for transportation safety and mobility use, including the following:

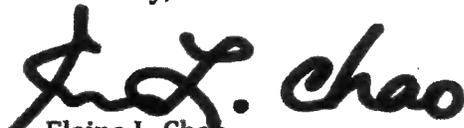
- The transfer of 45 MHz out of 75 MHz of transportation safety spectrum for unlicensed Wi-Fi;
- The apparent removal of the priority for safety messages in the remaining 30 MHz for transportation;
- The overreliance on particular forms of technology, rather than promoting a technology-neutral approach to address transportation safety;
- The lost potential of this spectrum to provide the well-identified public benefits of reduced traffic deaths and intelligent transportation systems, consistent with Congress's will, such as:
  - A substantial reduction of public safety benefits for the Nation, with thousands more deaths annually on the road and millions more injuries than would be the case otherwise;
  - A significant effect on current users of this spectrum and traveling citizens; and
  - A limitation on future transportation technology evolution and innovations for automation, putting the United States at a competitive disadvantage;

- The discontinuation of a thorough testing endeavor involving both laboratory and real-world scenarios, which the agencies have been conducting to ensure that the Commission's decisions are fully grounded in the best available science;
- An absence of cost-benefit analyses on which to base decision making for the Nation, including the omission of a novel approach to broadband Wi-Fi that recently emerged on the market—802.11ax—that has the potential to change the nature of the broadband industry's needs for this spectrum;
- Mistaken assumptions about deployment advances and current and expected use of the spectrum for transportation safety; including assumptions about technology evolution for DSRC, C-V2X and 5G related to backwards compatibility and interoperability;
- The rationale for dividing the 75 MHz allocation to produce faster Internet streaming for infotainment is not commensurate with the significant National transportation public safety benefits that are being realized in the real world;
- The recognition that all or some combination of the three communications media may not be able to operate properly in the same band.

In light of these concerns, the Department's view is that the NPRM, and the substantial shift in direction that it represents, is insufficiently grounded.

DOT looks forward to a more extended discussion with the FCC and other stakeholders on the path forward for the 5.9 GHz Band, including the opportunity to partner in testing, to produce a more rigorous and objective analysis for a new band plan, and to reformulate the Commission's proposal. In the meantime, it is DOT's view that the proposal should be withheld from public issuance, and that in all events, any proposal that the Commission issues be refined further to address these concerns.

Sincerely,

  
Elaine L. Chao