



Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington DC 20515

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October 30, 2020

The Honorable Gene Dodaro
Comptroller General
U.S. Government Accountability Office
441 G St., NW
Washington, D.C. 20548

Dear Mr. Dodaro:

Since 1999, the Federal Communication Commission (FCC) has reserved a portion of the 5.9 gigahertz (GHz) spectrum band for connected vehicle technologies. The vehicle fleet today includes some limited applications of these technologies and more are expected to emerge in the near future. Advanced technologies hold tremendous potential to improve transportation safety, reduce congestion, and decrease pollution, among other prospective uses. Some of these technologies rely on wireless communication between vehicles, between vehicles and infrastructure (such as traffic signals), or vehicles and other users (such as pedestrians).

The Department of Transportation (DOT) conducted research, provided grants to cities, and otherwise encouraged the development and deployment of vehicle safety technologies that use the Dedicated Short-Range Communications (DSRC) standard on 5.9 GHz spectrum. For example, DOT has supported municipal efforts to install “smart” streetlight and traffic signal prioritization equipment that wirelessly communicates with vehicles on the road.¹ DOT continues to support reserving this band for the exclusive use of connected vehicle technologies in anticipation of future applications and deployment.² However, other standards such as cellular vehicle-to-anything (C-V2X) offer an alternative to DSRC.

In December 2019, the FCC announced a proceeding that could reallocate or reduce the availability of 5.9 GHz spectrum for the exclusive use by vehicles and other transportation infrastructure.³ As wireless applications increase broadly in society, spectrum is increasingly scarce

¹ Connected Vehicle Pilot Deployment Program Overview, *available at* https://www.its.dot.gov/pilots/pilots_overview.htm.

² Letter from Hon. Elaine Chao, Secretary, DOT, to Hon. Ajit Pai, Chairman, FCC (Nov. 20, 2019), *available at* <https://www.highways.org/wp-content/uploads/2019/12/sec-chao-letter-5.9-11-20-19.pdf>.

³ In the Matter of Use of the 5.850-5.925 GHz Band, FCC 19-129, ET-Docket 19-138 (proposed Dec. 17, 2019), *available at* <https://docs.fcc.gov/public/attachments/FCC-19-129A1.pdf>.

and the efficiency of its use ever more important. Transportation stakeholders have concerns that an insufficient amount of available spectrum, such as the amount proposed in the FCC's proceeding, may significantly affect the efficacy of current and future applications of vehicle safety technologies.⁴

Accordingly, we request GAO review the following:

1. What is the current status of 5.9 GHz wireless transportation technologies, both domestically and internationally?
2. What are the views of industry and other stakeholders on the potential uses of these technologies, including scenarios where the 5.9 GHz spectrum is shared among different applications?
3. In a scenario in which the 5.9 GHz spectrum band is shared among different applications, what effect would this have on the efficacy, including safety, of current wireless transportation technology deployments?
4. What options exist for automakers and highway management agencies to ensure the safe deployment of connected vehicle technologies in a scenario in which the 5.9 GHz spectrum band is shared among different applications?
5. How, if at all, have DOT and FCC assessed current and future needs for 5.9 GHz spectrum in transportation applications?
6. How, if at all, have DOT and FCC coordinated to develop a federal spectrum policy for connected vehicles?

Thank you for your timely attention to this critical matter. We are happy to discuss the scope of this inquiry further. If you have any questions about this request, please contact [REDACTED] with the Majority staff at [REDACTED] or [REDACTED] with the Minority staff at [REDACTED].



PETER A. DeFAZIO
Chair

Sincerely,



SAM GRAVES
Ranking Member

⁴ Letter from a broad coalition representing highway safety, to Hon. Ajit Pai, Chairman, FCC (Oct. 28, 2019), *available at* <https://advocacy.consumerreports.org/wp-content/uploads/2019/12/Safety-Groups-Letter-to-FCC-on-5.9-GHz-Band.pdf>. This statement was signed by AAA, Advocates for Highway and Auto Safety, American Association of Motor Vehicle Administrators, American Association of State Highway and Transportation Officials, Center for Auto Safety, Consumer Reports, Governors Highway Safety Association, Insurance Institute for Highway Safety, International Association of Fire Chiefs, Institute of Transportation Engineers, MADD, National Association of State EMS Officials, National Safety Council, National Sheriffs' Association, and Safe Kids Worldwide. Comments from the Intelligent Transportation Society of America, In the Matter of Use of the 5.850-5.925 GHz Band, ET Docket No. 19-138, (submitted Mar. 9, 2020), *available at* <https://ecfsapi.fcc.gov/file/1030972668521/Comments%20of%20Intelligent%20Transportation%20Society%20of%20America%20-%2020200309.pdf>.