



ITE MEMBER CALL TO ACTION

SAFETY SPECTRUM REALLOCATION

SUMMARY

Vehicle-to-vehicle, vehicle-to-infrastructure, and vehicle-to-pedestrian technologies, collectively known as vehicle-to-everything (V2X) technologies, allow vehicles to communicate with users to prevent crashes and significantly improve mobility. V2X technologies need dedicated spectrum to ensure uninterrupted high-speed communication.

In 1999 the FCC set aside 75 MHz of bandwidth in the 5.9 GHz spectrum for connected vehicle technologies. The National Highway Traffic Safety Administration has gone on record saying this has the potential to save tens of thousands of lives each year -- but only if these technologies are given the certainty of a spectrum that is free from signal interference.

In December 2019, the FCC approved a draft proposal for a Notice of Proposed Rulemaking (NPRM) that would dramatically realign the current rules of the band. Those proposed new rules are as follows:

1. Utilize the lower 45 megahertz of the band for unlicensed operations to support high-throughput broadband applications.
2. Dedicate spectrum in the upper 30 megahertz of the 5.9 GHz band to support ITS needs for transportation and vehicle safety-related communications. Within this 30 MHz two-thirds would be dedicated to Cellular Vehicle-To-Everything (C-V2X), and the remainder "to be determined."

Link to NPRM: <https://www.federalregister.gov/d/2020-02086>

WHAT IS ITE DOING

A key tenet of the ITE Position on Connected and Automated Vehicles (CAVs) adopted by the International Board of Direction in 2018 is the ability to communicate among users:

"Cooperative systems achieved through communication between vehicles, infrastructure, and other users will provide an enhanced layer of safety and must be advanced. This ability to communicate will be essential for extending the range of vehicle-based sensing and achieving the full potential of safety benefits envisioned by CAVs."

This proposed change will undermine the foundation that has enabled almost two decades of V2X development. The US DOT has publicly stated its objections to this reallocation proposal, but the FCC has pressed forward.

ITE has joined a coalition of transportation organizations being led by ITS America to oppose this action by the FCC. We will be submitting comments during this open window, in accordance with previously submitted statements, supporting the protection of the entire spectrum. We also intend to address the false narrative that the spectrum has gone largely unused, and highlight the potential economic and social impacts that this NPRM could impart to our members and to the nation.

WHAT YOU CAN DO

It is important for the FCC to hear directly from individual jurisdictions and ITE members. We strongly encourage you to make your voice heard.

The NPRM was published officially in the Federal Register on February 6, 2020. This opens a 30-day public comment window on the matter.

ITE encourages all its members and/or their organizations to submit public comments on or before March 9, 2020

The primary request is to protect the whole 75 MHz of spectrum for life-saving connected vehicle technologies. 30 MHz is not enough for vehicle-to-everything (V2X) applications, and a lot of research remains unfulfilled in terms of spectrum sharing.

Instructions for Submitting Comments:

Identify by ET Docket No. 19-138

Can submit electronically: Federal Communications Commission's website: <https://www.fcc.gov/ecfs/>. Follow the instructions for submitting comments.

Can submit by Mail: Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although the Commission continues to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

Key points:

- **Reallocating this safety spectrum at a time when 36,000 people are dying annually on our nation's highways and CAV technology is just emerging in the marketplace is shortsighted.** Significant mobility benefits may also be lost due to this decision. The National Highway Traffic Safety Administration has gone on record saying that connected vehicle technologies have the potential to save tens of thousands of lives each year -- but only if these technologies are given the certainty of a spectrum that is free from signal interference.
- **Insufficient research has been conducted to determine if the division of spectrum can be done without interfering with critical safety services.** IA US DOT report published in Dec 2019, noted, "...it is clear that interference will occur, raising the question of the reliability of V2X communications in this configuration. Without a high level of reliability, transportation safety will be impacted. These draft results also suggest that the rules and the division of spectrum, as described in the draft NPRM, may result in significant adjacent channel interference between the different radio services and thus may need reconsideration."
- **The FCC has mistakenly concluded that this is a failed investment.** [insert your name or organization] believes in the life saving potential of connected vehicle technology and we have invested/will invest in preparing for and, ultimately, deploying connected vehicle technology. Describe your efforts that demonstrate this isn't a nice effort, but is a widespread movement among infrastructure owners/operators, technology vendors, and consultants alike.

RESOURCES

US DOT Safety Band Website: <https://www.transportation.gov/content/safety-band>

ITE Letter to US DOT: <https://www.ite.org/pub/?id=3A7D4229-C765-44C2-F8B5-02ECDFA790A5>

ITS America Connected Vehicle Page: <https://www.itsa.org/policy-connected-vehicles>