April 12, 2017

Docket Management Facility, M-30
U.S. Department of Transportation
West Building, Ground Floor, Room W12-140
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: Docket No. NHTSA-2016-0126

Dear Mr. Gregory Powell:

The Institute of Transportation Engineers (ITE) is pleased to provide comments on the National Traffic Highway Safety Administration's (NHTSA) Vehicle-to-Vehicle Communications Notice of Proposed Rulemaking (NPRM) (FMVSS No. 150), published in the Federal Register on January 12, 2017.

ITE is an international membership association of transportation professionals who work to improve mobility and safety for all transportation system users and help build smart and livable communities. Through its products and services, ITE promotes professional development and career advancement for its members, supports and encourages education, identifies necessary research, develops technical resources including standards and recommended practices, develops public awareness programs, and serves as a conduit for the exchange of professional information. Founded in 1930, ITE is a community of more than 14,000 transportation professionals, including transportation engineers, transportation planners, consultants, educators, technologists, and researchers, who network through meetings, seminars, and publications. ITE believes strongly that technology such as connected and automated vehicles are an important element in achieving "Vision Zero" —an international movement to end fatalities on our roadways.

The Proposed V2V Rulemaking (FMVSS No. 150) will have a game-changing safety impact on our nation's transportation system, and as such we strongly support its immediate adoption. According to USDOT reports, connected vehicle technology will prevent between 421,901 and 594,569 crashes by 2051 and reduce the costs from motor vehicle crashes by $53 billion to $71 billion. Looking at the universe of currently known applications, your reports estimate we could eliminate or reduce the severity of up to 80 percent of non-impaired-driving crashes. Any opportunity to make that big of on impact should be considered as the highest priority within the administration and acted upon swiftly.

Institute of Transportation Engineers

1627 Eye Street, NW, Suite 600, Washington, DC 20006 USA
Tel 202-785-0060 | **Fax** 202-785-0609 | **Web** www.ite.org

Additional Comments:

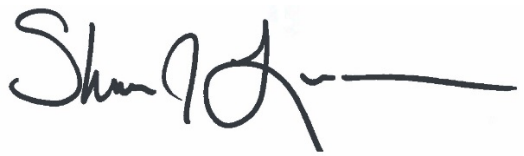
- It is important to consider Vehicle-to-Vehicle (V2V) communications requirements as a mandate in order to accelerate safety benefits as quickly as possible. An "if-equipped" model could create gaps in the safety environment and unnecessarily increase the timeline for achieving maximum benefits. How would the "if-equipped" option have performed for seat belts? ITE believes the NPRM has taken significant and reasonable considerations for ensuring privacy, so that this shouldn't be considered as an "opt-out" option for consumers concerned with protecting their privacy.
- We support having one open, interoperable, and nation-wide Connected Vehicle system to support intelligent transportation systems. One set of standards for all vehicles and all traffic control systems enables industry to focus on new application development with assured interoperability. We appreciate that technology development is often market driven,and in the end many applications will be. However, having NHTSA establish this regulation will help identify technology and standards issues as they arise, and resolve them before they become significant problems (e.g. network interoperability, security, privacy, etc.). This will reduce the risk for divergence in the industry to further invest in V2X applications and will bolster consumer confidence.
- We support the inclusion of Dedicated Short Range Communications (DSRC) as a key communication medium for safety applications, or as it is currently written offering DSRC standards as the performance level that other communication systems must meet and be interoperable with to be considered viable. More importantly, DSRC has undergone a decade of development and testing; it has proven itself in this environment. Waiting for the market to evolve with other communication services would needlessly delay the development of new vehicle and smart cities technology. We understand that there are new technologies under development that could meet all the performance and interoperability requirements mandated under the V2V communications rule, but we know that the 5.9 GHz DSRC technology is proven and field-ready. Any decision to delay this rulemaking in the hope of a more promising technology in the future is a lost opportunity to improving safety today. We believe that ultimately there will be a suite of communications technologies used to fulfill the promise of connecting vehicles and infrastructure and that this regulation should allow for future technologies while embracing DSCR today.
- We agree with the performance-based approach to transmission range and reliability. Statement of specific performance requirements, including range and reliability, allow the market to innovate technical specifications that can meet or exceed these requirements. We encourage NHTSA to include requirements for maximum time for message transmission and reception (e.g. latency) to ensure that safety critical data is communicated in a timely manner. The technical foundations for a timeliness performance requirement could be decided from the extensive research and standards developments for 5.9GHz DSRC.
- The Proposed V2V Regulation will enable a host of possible Vehicle-to-Infrastructure (V2I) applications that will save lives and have an impact on how we as infrastructure owners/operators support transportation needs. Applications such as Red Light Violation Warning and Reduced Speed Zone Warning/Lane Closure can have immediate impacts and have undergone rigorous testing in several locations around the nation. The key to realizing these benefits lies in having a connected vehicle infrastructure to create the environment, and vehicles equipped with DSRC to take advantage of that environment.
- A number of state and local public agencies around the country are deploying or in the process of deploying V2I roadside equipment, or are in the planning stages to do so. A surge in interest by agencies from coast-to-coast interested in broadcasting Signal Phase & Timing (SPaT) data using DSRC is evident by publicly available requests for proposals, workshops, and active contracts. Nationwide adoption of the SPaT challenge to enable at least 20 SPaT enabled intersections in each of the 50 states by 2020 with support from ITE, the American Association of State Highway and Transportation Officials, and the Intelligent Transportation Society of America (ITS America) is a

significant show of support from the infrastructure community. If this V2V regulation goes into practice, even more public agencies will feel confident investing public investment into V2I without the risk that the OEM industry or individual automaker may diverge from this approach later, leaving agencies stranded with incompatible equipment. Moreover, we encourage NHTSA to move forward expeditiously with finalization of the V2V rulemaking in order to end the uncertainty and doubt that has caused some agencies to act more deliberately.

- There are near and long-term technological and economic gains as V2V technologies become fully deployed. According to studies by ITS America, the V2V proposed standard will drive economies of scale and scope, and lower the cost of other intelligent transportation systems across the board—technology we rely on to manage today's transportation network.

Thank you for the opportunity to comment on this important proposed regulation. We look forward to a speedy conclusion to the process so that lives can be saved immediately.

Sincerely,



Shawn Leight, P.E. PTOE, PTP (F)
ITE International President
Institute of Transportation Engineers

Institute of Transportation Engineers

1627 Eye Street, NW, Suite 600, Washington, DC 20006 USA
Tel 202-785-0060 | **Fax** 202-785-0609 | **Web** www.ite.org