



International Association of Fire Chiefs

4795 Meadow Wood Lane, Suite 100 • Chantilly, VA 20151
Tel: 703.273.0911 • Fax: 703.273.9363 • IAFC.org

April 2, 2020

The Honorable Elaine Chao
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, S.E.
Washington, DC 20590-0001

RE: Notice of Request for Comments: Ensuring American Leadership in Automated Vehicle Technologies: Automated Vehicles 4.0 (AV 4.0), Docket No. DOT-OST-2019-0179

The International Association of Fire Chiefs (IAFC) represents over 12,000 members of the nation's fire and emergency service leadership. Our members are a critical part of the American transportation system. Fire departments respond to the approximately 3.1 million vehicle crashes a year that cause injury or death and manage other traffic-related incidents, such as hazardous materials spills and vehicle fires.¹ Autonomous vehicles (AVs) will reduce the severity of crashes, which will save countless lives and reduce the risk to public safety responders. As the Department of Transportation develops its comprehensive approach toward AV technology and the integration of AVs in our transportation system in *Ensuring American Leadership in Automated Vehicle Technologies: Automated Vehicles 4.0* (AV 4.0), it is critical that the department creates programs to address the safety and operational requirements of the fire and emergency service as they relate to AVs.

The new capabilities of autonomous vehicles present new and unique challenge to first responders. America's responders must be involved in the creation of national autonomous vehicle policies to ensure that they will be equipped to respond to incidents involving AVs and will be safe doing their jobs with AVs on the road. For example, fire and EMS personnel must be sure that AVs will yield to emergency vehicles on the highways and recognize and follow direction at accident scenes. To ensure that our responders and vehicles are prepared for the unknown, AV 4.0 should include the U.S. Fire Administration as an entity that will support the safe integration of autonomous vehicles on American roadways.

The Department of Transportation should develop a pilot program to facilitate collaboration between AV companies and the fire and emergency service. A pilot program would enable proactive coordination between public safety and the AV industry at the national level – to the benefit of both parties. When entering a community, AV companies must coordinate with the local fire and EMS departments to develop response strategies and train firefighter and EMS personnel to work with AVs. As AV deployment increases, the public safety agencies will need to have developed working relationships with manufacturers to ensure that first responders are trained and equipped to respond to incidents involving AVs, regardless of the vehicle manufacturer. If coordination occurs early, the local first responders will

¹ NHTSA, "Police-Reported Motor Vehicle Traffic Crashes in 2016" (DOT HS 812 501) <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812501>

be familiar with AV technologies and understand the technological updates and increased staffing capacities needed to accommodate AV transportation.

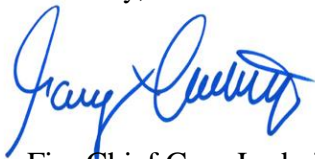
A pilot program would enable AV manufacturers to become aware of their public safety “blind spots.” Prior engagement between our members and manufacturers has led to design changes in vehicles, such that “cut loops” and system shutoffs are strategically located to facilitate firefighter intervention in the event of a car crash. Having an electrical cut loop that is accessible using traditional wire or bolt cutters is a good example of how fire and emergency service input via a Department of Transportation pilot program or working group would be beneficial ahead of time. Additionally, vehicle electrical fires involving new lithium ion batteries pose new hazards and challenges for firefighters and emerging power technologies in AVs will introduce even more unknown hazards (e.g. hydrogen cells, natural gas) that merit consideration in such a program.

The department’s creation of the First Responder Safety Technology Pilot Program in January merits inclusion in AV 4.0. This investment of \$38 million in first responder vehicle communications will prepare local fire apparatus and ambulances to communicate with connected and autonomous vehicles. The program will result in the inclusion of first responder vehicles in our nation’s increasingly intelligent transportation system. It should be noted that the IAFC is a vocal advocate for the preservation of spectrum for transportation safety purposes.

Finally, the agency should consider including the Pipeline and Hazardous Materials Safety Administration (PHMSA) as an ancillary entity involved in the integration of autonomous vehicles on the nation’s roadways. Approximately one million shipments of hazardous materials occur by land every day, with many of those shipments traveling on American roadways. Autonomous trucks will transport hazardous materials, and it is critical that PHMSA is engaged in the effort to improve transportation safety as these and other autonomous vehicles are on the road.

Thank you for your consideration of the above comments as you work to finalize AV 4.0.

Sincerely,



Fire Chief Gary Ludwig
President and Chairman of the Board

:bwa