ITE Statement on Connected and Automated Vehicles

The Institute of Transportation Engineers (ITE) supports the advancement of technology in all areas of transportation and particularly in the development of Connected and Automated Vehicles (CV/AV). We are optimistic about the innovation and entrepreneurship that the private sector is bringing to our industry. These new technologies have the potential to revolutionize transportation and save thousands of lives.

A strong government role will be critical to ensure that the deployment of CV/AV improves the quality of life for all citizens. Governments must provide the regulatory oversight to give the public confidence that CV/AV testing and deployment is being done in a transparent manner and that public safety is not compromised. Governments can also play a key role in working with the private sector to facilitate deployment and remove regulatory barriers to the widespread deployment of **proven** technologies. We believe the private sector has the responsibility to fully test these new technologies in off-the-road environments **before** they are placed on public roads.

As a community of transportation professionals, whose members are active in the development, deployment, and oversight of these new technologies, ITE is recommending the following key tenets for the development of CV/AV. We recognize that ITE's position and these tenets must evolve as these technologies and the industry mature.

Key Tenets:

1. More than 40,000 people die each year on America's highways and 1.25 million people die worldwide. *This is unacceptable.* Vision Zero must be our goal. **We will only get to zero fatalities and serious injuries through CV/AV technology.**

2. **Loosely regulated deployment of CV/AV risks innocent lives.** *This is unacceptable.* New technologies must be evaluated in real-world conditions, but only after they have been fully tested in off-the-road environments. The guidance and regulations must balance between stifling innovation and protecting public safety, but lives should not be sacrificed to advance private sector interests.

3. Technology can save lives today. **We support the rapid adoption of safety assist (SAE Levels 0 and 1) technologies**—lane keeping, blind spot warning, adaptive cruise control, automatic braking—on all new vehicles.

4. **At this time, SAE Level 2 systems requiring driver monitoring have not been proven safe for use on the open road, in all intended environments.** Additional research and testing is needed concerning the driver's ability to remain vigilant and take over the driving task when required.

5. **SAE Level 4 systems are the most appropriate as an objective for "driverless vehicles."** These systems fully automate the driving task under most conditions, but do not preclude the vehicle being operated by a human driver in unusual or emergency situations. Currently, there is insufficient evidence that SAE Level 3 systems with partial automation can be safely implemented.

6. **Cooperative systems achieved through communication between vehicles, infrastructure, and other users will provide an enhanced layer of safety and must be pursued.** This ability to communicate will be essential for extending the range of vehicle-based sensing and delivering maximum safety benefits.

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