August 26, 2019

Federal Motor Carrier Safety Administration (FMCSA)
United States Department of Transportation
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Re: Comments in Response to FMCSA's Request for Public Comment Regarding *Safe Integration of Automated Driving Systems-Equipped Commercial Motor Vehicles* (Docket No. FMCSA-2018-0037) – Advance Notice of Proposed Rulemaking (ANPRM)

To whom it may concern at the FMCSA:

Intelligent Imaging Systems Inc., and our subsidiary Drivewyze, are pleased to submit our written comments in response to the FMCSA's request for comments regarding *Safe Integration of Automated Driving Systems-Equipped Commercial Motor Vehicles* (Docket No. FMCSA-2018-0037) – ANPRM. We appreciate the opportunity to provide feedback on the proposed rulemaking to support the accommodation of emerging automated vehicle technologies and shape the future of connected vehicles.

Brief Corporate Background

Since 2003, Intelligent Imaging Systems (IIS) has established itself as a leader in the development of equipment and software for commercial vehicle enforcement (CVE), and more recently with connected vehicle technologies. Our proprietary Smart Roadside Inspection System (SRIS) is the most comprehensive roadside safety platform available for CVE and includes a suite of roadside sensors and smart infrastructure software. We have strong law enforcement relationships and technology deployments in over 47 jurisdictions.

IIS' wholly-owned subsidiary, Drivewyze, offers a weigh station bypass service, PreClear, in partnership with 45+ state agencies that enables commercial vehicles to save time and fuel bypassing weigh stations. Drivewyze includes cloud-based services and a large partner network of telematics providers. Drivewyze is the leader in connected truck technologies and serves

commercial drivers and fleets with innovative services beyond the Drivewyze PreClear bypass service, including Drivewyze Analytics Weigh Station Activity Reporting and Drivewyze Safety Notifications. To date, Drivewyze PreClear has successfully launched at over 800 sites in 45+ states and provinces and is now the largest bypass network in North America.

Docket Reference

IIS supports the FMCSA in its efforts to review and revise Federal Motor Carrier Safety Regulations (FMCSRs) in order to facilitate the safe introduction of automated driving systems (ADS) equipped Commercial Motor Vehicles (CMVs) on the nation's roadways. We are pleased to submit comments to help develop the regulatory framework surrounding automated vehicles, as per the following sections in Docket FMCSA-2018-0037:

- *VIII. Discussion of Current Safety Rules and the Public Responses to the March 26, 2018, RFC*
    - *7. Inspection, Repair and Maintenance*
    - *8. Roadside Inspections*

IIS Comments

1. **The FMCSA needs to consider the implications of automated driving systems on roadside law enforcement programs and activities**. When considering the safe integration of automated driving systems, FMCSA needs to place careful consideration on how to assign SAE International (SAE) vehicle levels and define vehicle compliance during commercial vehicle screening practices. Today, law enforcement officers across all States rely heavily on roadside identification and screening technologies to streamline the process of monitoring truck traffic and focus attention on carriers and vehicles that either have a poor safety history or are out of compliance in real time. The implications of automated driving systems and how these affect the operations currently employed by State enforcement should be carefully considered.

2. **More specifically, the FMCSA needs to consider how to verify vehicle compliance on the road.** For example, will a certification process be established wherein vehicles are assigned SAE identifier numbers based on defined, authorized levels of vehicle automation (e.g., SAE Levels 0-5)?

As another option to consider, the FMCSA could establish policy on required safety data message sets to send confirmation transmittals to law enforcement. These confirmation transmittals would communicate to law enforcement that automated vehicles (through on-board monitoring systems, for example) are certified or registered to be in autonomous mode and that they are in compliance with associated rules and requirements for autonomous travel on the road.

3. **The FMCSA should integrate with existing roadside systems using a technology-neutral, open communication protocol.** Having defined the communication content and message sets, as per IIS comment 2 above, the FMCSA should ensure the communication protocol is technology neutral and can be integrated across existing state screening systems which are already deployed and in use by CVE inspectors across the country. This means Original Equipment Manufacturers (OEMs) or after-market in-cab technology providers can utilize Dedicated Short Range Communications (DSRC), cellular, or any other communication technologies to transmit data to the roadside systems as long as the message set contains all the required information. FMCSA should also leverage existing roadside screening systems by requiring autonomous trucks to communicate to enforcement sites with a common message protocol that any state system can integrate into its own screening platforms. This will eliminate the requirement for FMCSA to develop its own roadside enforcement application and leverage the readiness in the market to modify existing interfaces already in place. Existing screening systems can be configured to display and screen all the information required to satisfy FMCSA and CVE agencies on the compliance status of an autonomous vehicle.

IIS is more than willing to answer any questions or provide additional feedback during this rule-making process. Please feel free to contact the undersigned.

Sincerely,

Brian Taylor
Director of Sales, ITS
E: btaylor@intelligentimagingsystems.com
T: 306.361.5737