Comment from John Grosvenor

August 28,2019,

The Honorable Raymond P. Martinez
Administrator
Federal Motor Carrier Safety Administration
1200 New Jersey Avenue S.E. Washington, DC 20590

RE: Docket Number FMCSA- 2018-0037

Dear Administrator Martinez,
Thank you for this opportunity to express my thoughts on this important matter.

Automated Driving Systems Require a Human Driver
The issue with this circumstance is that only one mind may operate a vehicle at any given time. When we rely on artificial intelligence to operate within the capacity of of driving a vehicle while a human is at the controls will only allow for confusion. Such as automatic breaking systems coming on while the operator of the vehicle is in the process of manuevering the vehicle. Now the vehicle has nearlly come to a stop due to excessive braking, which brings traffic behind the vehicle to a stop and may cause an accident, when the driver had already planned on his speed in regard to how he planned on manuevering the vehicle (real life experience). When the human operator is not in full operation of the vehicle, that operator will become bored and easily distracted, or possibly fall asleep. If such an occurance should happen the driver will not be capable of taking full control of the vehicle in an emergency situation. If ever we adopt the use of fully autonomous vehicles then we may like to have a human driver in the vehicle in the event there is a malfunction. However, drivers remain skilled through practice and the dynamics of land travel in a commerrcial motor vehicle require the driver to remain in control of the vehicle at all times to keep in steady practice.

Endorseent to Operate an Automated Vehicle
It would be practical to require a person to undergo special training to operate an autonomous vehicle. Therefore an endorsement would reflect that training.

Driver's Hours of Service Rules
Due to the fact that the human driver will become easily bored or sleepy the hours of service rules will need to be unique compared to current hours of service rules to mitigate the risk for accidents. More breaks will be necessary to keep the driver awake and alert.

Medical Qualifications for Human Operators
There is no reason to require any other medical examination then what is already in place.

Distracted Driving and Monitoring
It is inevitable that any human driver will become distracted or fall asleep. Monitoring may be required to assure that the human driver is safe and alert in the event that they must take over the controls. As aforementioned, it is best to leave the driving to the human driver and forgo autonomy. This would eliminate any associated cost with monitoring systems.

Inspection, Repair, and Maintenance
Any commercial motor vehicle, autonomous or otherwise, should require the same roadside DOT inspections as nonautonomous vehicles. As for repair and maintenance, the more components that are used to build a vehicle, the more that can go wrong with the vehicle. This raises concern for safety with vehicles that will have a need for the use of so many sensors. To rely on all of these components will increase the chances for something to go wrong. Understanding the life expectancy

of such components may help to eliminate the risk but that is not a guarantee.

Cybersecurity; and Confidentiality of Shared Information
Cybersecurity is a great concern in regards to autonomous vehicle as are components used in non-autonomous vehicles, such as the electronic logging device. The ability of any bad actor to hack into autonomous vehicles is quite easy. Someone may hack into a vehicle for various reasons, to be a prankster, to access proprietary data, cargo theft, or use the vehicle for terrorist activity. For over ten years no one has had the capability to mitigate the risk for hacking. Due to the fact that it is impossible to build a firewall for components that must be able to communicate with each other in rapid succession. One of the greatest threats to hacking is the communication system from vehicle to any remote area or facility. Communication systems are vulnerable to hackers and allow a gateway to the electronic components of the vehicle. Another issue with hacking is the fact that there are no determinable means to recognize when a vehicle has been hacked and therefore, no means to record such an event. This is due to the fact that a firewall system would have to be put in place in order to perform such a task. In the event that a vehicle with a human driver on board is hacked, the driver may stand falsely accused of wrongdoing and may be criminally held responsible for any and all damages that may occur.

It is imperative for the FMCSA, in collaboration with other agencies in the Department of Transportation, to stop the continued use of autonomous vehicles until safer measures may be utilized to preserve the lives and well being of everyone within the boundaries of the United States.

Thank you for your consideration,
John C. Grosvenor