



THE SECRETARY OF TRANSPORTATION
WASHINGTON, DC 20590

May 27, 2016

The Honorable John Thune
Chairman, Committee on Commerce, Science,
and Transportation
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

I am pleased to provide written notification regarding the characteristics of the design and implementation of wireless roadside inspection (WRI) systems, as required under section 5513 of the Fixing America's Surface Transportation Act (P.L. 114-94).

In 49 U.S.C. 31108(a)(3)(C)-(D), the U.S. Department of Transportation (DOT) is authorized to conduct "research, development, technology, and technology transfer activities" with respect to "improving the safety and efficiency of commercial motor vehicles through technological innovation and improvement" and "improving technology used by enforcement officers when conducting roadside inspections and compliance reviews to increase efficiency and information transfers." Based on this authority, the Federal Motor Carrier Safety Administration (FMCSA) initiated a WRI research project to test and validate technologies and methodologies that have the potential to improve safety by conducting inspections using wireless technologies that transmit real-time identification and information about the safety status of commercial motor vehicles (CMV), drivers, and carriers. The research will be used to support the development of a system that could, through electronic means, conduct a wireless North American Standard (NAS) Inspection Program Level 3 inspection (without driver interaction) at roadway speeds without an actual physical inspection.

In an effort that coincides with the WRI research, the Commercial Vehicle Safety Alliance (CVSA) established an ad hoc committee to investigate the value and feasibility of creating a new inspection level to the NAS Inspection Program that is based on electronic exchange of data. We are working closely with this CVSA committee. Establishing standards for this process enables a WRI program to move the world of CMV safety enforcement from screening capability to actual inspections.

Additional potential advantages of such a system include:

- Increased efficiency of roadside inspection (greater focus on potential violators allows compliant vehicles to bypass inspection stations);
- Increased number of inspections;
- Reduced environmental emissions from and energy use by compliant vehicles; and
- Reduced roadway congestion by reducing queues at inspection stations.

The Agency is currently undertaking a full scale field operational test (FOT). The FMCSA awarded an Interagency Agreement to the Department of Energy's Oak Ridge National Laboratory in September 2012 to conduct the testing. As of March 17, 2016, eight commercial vehicle fleets have committed 408 vehicles to participate in the research. We expect approximately 600 vehicles to participate in the 1-year data collection effort that began on March 15, 2016.

Section 5513 requires the Secretary of Transportation to submit a report regarding the design, development, testing, and implementation of the WRI system. The report must include a determination as to whether Federal roadside wireless inspection systems do three things. These items and our responses are as follows.

First, there was a concern that the system being tested would conflict with existing electronic screening systems, or replicate current capabilities. This is not the case. Currently, several types of screening tools permit vehicles to bypass inspection stations based on previously recorded – not-real-time – carrier information. These systems, however, do not have the capability to conduct an inspection at highway speeds. A screening system provides a flag to inspectors regarding potential safety violations on an approaching CMV. The FMCSA is not confident that the information provided in this flag could be used to augment a carrier's safety score without manual verification. This assessment is based on previously recorded data, so the inspector must manually confirm that the latest available information was used prior to entering the results into the Agency's inspection recording system. Conversely, the WRI research project is designed to assess real-time data, including driver's hours of service, commercial driver's license status, carrier operating authority, licensing and insurance, and inspection selection score that can confidently be entered directly into the inspection record without further verification and without stopping the vehicle.

In order to develop a system that can automatically augment a carrier's safety score without manual verification, FMCSA is evaluating cellular/satellite-based technologies as a delivery mechanism for this data. An evaluation is being done in a real world test of 600 vehicles over the course of 1 year. And, while this would not preclude the use of other communications technologies if WRI were to be more widely deployed beyond the test phase, these technologies were chosen based on the results of pilot tests of currently available communications technologies. It was determined that cellular/satellite-based systems provided the most feasible means of accomplishing this. The WRI is envisioned to be technology-neutral, requiring only that a communications system meet the established functionality that was designed to minimize fraud or unauthorized modification of data used for the assessment. Moreover, if a national WRI program were to be instituted, a transparent public process would be necessary to finalize any requirements.

Second, there was a question as to whether such a system would require additional statutory authority to incorporate generated inspection data into the SMS or the safety fitness determination program. Again, this is not the case. The WRI research project is electronically collecting the same data that would otherwise be collected manually at the roadside. The

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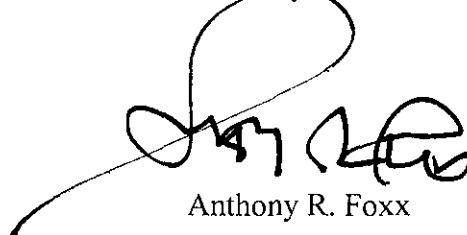
FMCSA's current statutes and regulations authorize the use of WRI technology to collect inspection information. Therefore, FMCSA does not require additional statutory authority.

Finally, FMCSA was asked to verify that it has applied appropriate restrictions to specifically address privacy concerns of affected motor carriers and operators. The FMCSA adhered to all current Federal data privacy requirements in developing the wireless inspection processing test system. Personally identifiable information will not be used for FOT. Drivers participating in the test are assigned an identification number by the communications provider that only the provider and the carrier can connect to the driver. Further, if the system is deployed after testing, it is envisioned to be part of FMCSA's existing database interface, so the privacy of data will be ensured through current protocols. This is, however, only one part of data transmission. The participating carrier and provider would establish the privacy and security protocol for data transmission as the data must also be passed between the CMV and the communications provider.

I have sent a similar letter-report to the Ranking Member of the Senate Committee on Commerce, Science, and Transportation; the Chairman and Ranking Member of the Senate Subcommittee on Surface Transportation and Merchant Marine Infrastructure, Safety, and Security; the Chairman and Ranking Member of the House Committee on Transportation and Infrastructure; and the Chairman and Ranking Member of the House Subcommittee on Highways and Transit.

If I can provide further information or assistance, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Anthony R. Foxx', with a long, sweeping underline that extends to the left.

Anthony R. Foxx