U.S. Department
of Transportation

**Federal Motor Carrier
Safety Administration**

Office of the Administrator

1200 New Jersey Avenue, SE
Washington, DC 20590

MAY 11 2009

Refer to: MC-PRS

The Honorable Mark V. Rosenker
Acting Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, SW
Washington, DC 20594

Dear Acting Chairman Rosenker:

I am pleased to provide the Federal Motor Carrier Safety Administration's (FMCSA) response to the National Transportation Safety Board's (NTSB) letter dated February 2, 2009, regarding safety recommendations H-08-13 and H-08-14. The Agency acknowledges the safety issues identified by NTSB as a result of its investigation. FMCSA actively advocates the development and use of advanced vehicle safety technologies that can help prevent fatigue-related crashes. The Agency also works to heighten industry awareness of the dangers of inverted duty and sleep periods through a myriad of education and outreach initiatives and already has several promising initiatives underway that address driver fatigue. These initiatives address the safety recommendations issued by NTSB.

> **H-08-13: Develop and implement a plan to deploy technologies in commercial vehicles to reduce the occurrence of fatigue-related accidents.**
>
> **H-08-14: Develop and use a methodology that will continually assess the effectiveness of the fatigue management plans implemented by motor carriers, including their ability to improve sleep and alertness, mitigate performance errors, and prevent incidents and accidents**

H-08-13

In 2005, the U.S. Department of Transportation's (DOT) Intelligent Transportation System (ITS) Joint Program Office, National Highway Traffic Safety Administration (NHTSA), and FMCSA partnered to conduct a field operational test (FOT) of a Drowsy Driver Warning System (DDWS). A DDWS alerts the driver that he or she is fatigued to a point that may lead to lane departure or road departure. The initial results of the DDWS FOT indicated some inherent limitations with the system, particularly during day-time hours and with drivers wearing eyeglasses. The FMCSA is currently developing, through a Small Business Innovative Research (SBIR) project, an advanced DDWS to provide feedback to drivers on their level of alertness. In 2009, FMCSA anticipates transitioning this SBIR project from a proof of concept to the principal

research and prototype development phase. This phase will take approximately two years. Depending on the results of this research, the effort may enter the commercialization phase. In order to justify commercialization, the SBIR prototype system should improve technology (using machine vision) to measure percentage of eye closure and use multiple sensors (measuring a minimum percentage of eye closure and lane tracking deviations that are associated with drowsiness) to evaluate driver alertness. Once the technology is developed, it must be tested in a field environment to ensure that the device is validated for measuring driver fatigue.

FMCSA is unaware of any currently available technology that can be used by all commercial motor vehicle (CMV) drivers in day-time and night-time driving conditions. Further, there is ambiguity regarding a fatigue warning device—particularly its efficacy and cost. Once a device has been tested and validated, FMCSA will consider strategies to promote the voluntary use of the technology.

In addition, the Agency continues to pursue a rule that would require certain motor carriers to install electronic on-board recorders to monitor their drivers' compliance with the hours-of-service (HOS) regulations. We believe such a rule would have a deterrent effect on drivers and carriers with a history of exceeding the normal HOS limits. This rulemaking continues to be a high priority for DOT. In addition, DOT is considering a follow-on rulemaking that will expand the population of carriers that will be required to have EOBRs.

H-08-14

Since 1999, FMCSA has been involved in the North American Fatigue Management Program (NAFMP), an initiative that aims to develop, implement, evaluate, and finalize a comprehensive, integrated fatigue management program for the motor carrier industry operating under various regulatory jurisdictions of North America. This collaborative international project is sponsored by FMCSA, Transport Canada, Alberta Infrastructure and Transportation, the Alberta Workers' Compensation Board, the Commission de la santé et de la sécurité du travail du Québec (the Quebec Workers' Compensation Board), and the Société de l'assurance automobile du Québec (Quebec Automobile Insurance Corporation). In-kind, operational, and other support is provided by the motor carrier industry through the participation of the Alberta Motor Transport Association, the American Transportation Research Institute, the Association du camionnage du Québec (Quebec Trucking Association), the Canadian Trucking Alliance, and Canadian and American motor carrier companies that take part in various aspects of program development and operational testing.

The NAFMP entails four phases. In Phase I, researchers identified requirements for an effective fatigue management plan and developed a comprehensive approach designed specifically for drivers, dispatchers, and company managers. Phase II involved development of educational and training materials as well as the development and assessment of procedures for field testing the NAFMP. In Phase III, researchers conducted an FOT that included protocol development and field testing of the effectiveness of the comprehensive NAFMP compared to current industry practices. This FOT involved three motor carriers in Alberta, Quebec, and California. The FOT collected baseline data during drivers' regular routes; provided sleep disorder assessment and treatment educational workshops on fatigue for drivers, their families, and dispatchers; offered on-going management support and consultation to help companies develop policies and

implement practices consistent with an FMP (e.g., scheduling, etc.); and collected post-FMP data during drivers' regular routes. This FOT concluded recently and FMCSA is in the process of reviewing the final report.

Based on the draft final Phase III report, FMCSA would determine whether or not to continue with Phase IV of this effort. In Phase IV, the steering committee would use lessons learned to improve the program and to finalize recommended practice guidelines, manuals, and other training materials. In this phase, the deployment strategy for the NAFMP will also be developed.

FMCSA is committed to improving education and training for motor carrier professionals to reduce driver fatigue, mitigate performance errors, and prevent fatigue-related incidents and crashes. The Agency will consider the voluntary adoption of standardized fatigue management plans at the conclusion of the NAFMP.

FMCSA looks forward to working with NTSB to address fatigue and respectfully requests that NTSB classify safety recommendations H-08-13 and H-08-14 as "Open—Acceptable Response." We share the NTSB's goal of improving motor carrier safety and believe the actions described above are responsive to the safety recommendations.

Sincerely yours,

Rose A. McMurray
Acting Deputy Administrator