MOTOR CARRIER SAFETY ADVISORY COMMITTEE
C/O: Federal Motor Carrier Safety Administration
1200 New Jersey Avenue, SE
Room W64-232
Washington, DC 20590

December 7, 2010

The Honorable Anne S. Ferro
Administrator
Federal Motor Carrier Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Administrator Ferro:

The Motor Carrier Safety Advisory Committee (MCSAC) accepted Task 10-03 at its August-September 2010 meeting. FMCSA tasked the Committee with expounding upon its previous Task 07-02 final report recommendation on best safety practices, which suggests that fleets (motor carriers) adopt Fatigue Management Programs by providing information, concepts, and ideas on ways fleets can develop a practical Fatigue Management Plan (FMP).

The Committee met in public meetings to discuss the Task from August 30 – September 1, 2010, and December 6 – 7, 2010. On December 7, 2010, the Committee approved the enclosed Task 10-03 report containing its recommendations.

I submit this report to FMCSA for its consideration.

Sincerely,

//signed//

David R. Parker
Chairman

Enclosure

Introduction

At its May 2007 meeting, the Motor Carrier Safety Advisory Committee (MCSAC) accepted and discussed Task 07-02: Commercial Motor Vehicle Non-Regulatory Safety Practices, noting that an important management best safety practice would be to "implement a Fatigue/Alert Management Program for drivers and related staff that interact with drivers or driver performance." The MCSAC identified this practice as a significant non-regulatory safety practice that could be implemented throughout the motor carrier industry and in Federal Motor Carrier Safety Administration (FMCSA) programs. During the August-September and December 2010 meetings on Task 10-03: Fatigue Management for Commercial Motor Vehicle Operators, the MCSAC expounded upon its 2007 recommendation by providing further detail on the relevant information, concepts, and ideas for how fleets (motor carriers) could develop practical Fatigue Management Plans (FMPs). To achieve this goal, the MCSAC heard from a panel of fatigue management experts from Australia, Canada, Mexico, and the United States on ways to incorporate elements essential to the worldwide success of such plans.

In considering Task 10-03, the MCSAC discussed the difference between an FMP and an Alertness Maintenance Program (AMP) and the appropriateness of recommending each. The MCSAC determined ultimately that a "management plan" implies a chain of responsibility for all involved and a comprehensive approach to fatigue-related safety issues, whereas a "maintenance program" has no such implications. Furthermore, the MCSAC noted that "management" implies a preferred proactive approach rather than a reactive one. For these reasons, the MCSAC decided to provide recommendations on an FMP in its Task 10-03 report.

This letter report presents the MCSAC's recommendations regarding Task 10-03. The Committee outlined the main questions that fleets (motor carriers) should consider in developing an FMP and identified seven key elements that should be incorporated into a carrier's FMP.

FMCSA Involvement

While the below concepts and ideas provide a conceptual framework that fleets (motor carriers) may use to develop their FMPs, the MCSAC recognizes that FMCSA's involvement and support will help ensure the success of such plans. Accordingly, the MCSAC identified the following specific items that FMCSA can pursue to assist carriers in their successful implementation of FMPs, as well as underscore the importance of fatigue management throughout the industry:

- Issue regular statements stressing the important role that all stakeholders play in improving fatigue management.
- Coordinate with the Department of Labor (DOL) and other government agencies, as well as non-governmental organizations, to include bus and truck drivers in educational materials they produce regarding work-related fatigue.
- Include fatigue as a topic addressed during driver physicals.
- Consider addressing fatigue as a component of the new entrant program.
- Consider incentives to promote the use of FMPs.

Developing a Fatigue Management Plan

Goals of an FMP for Carriers

The MCSAC identified the following potential goals of an FMP:

- Increase awareness and recognition of fatigue and its causes, including awareness and recognition of the central issues to address in an FMP, including but not limited to rest, quality sleep, total time spent on-duty, and driving environment.
- Facilitate an understanding of fatigue at all levels of a motor carrier.
- Recognize and identify all parties and their responsibilities within a motor carrier, recognize the importance of employee empowerment, and emphasize the importance of management commitment to an FMP.
- Recognize that fatigue is both an intra- and an interstate issue.
- Tailor a plan based on availability of resources, size of a motor carrier, and prior experience implementing programs related to fatigue management (e.g., Canada facilitates scalable programs that account for varying carrier size and level of experience with implementing a FMP).

Intended Audience for Carrier FMPs

The MCSAC identified the following intended audience for carrier FMPs:

- Motor carriers
- Drivers
- Dispatchers
- Consignors
- Shippers
- Receivers
- Lawmakers/policy makers
- Manufacturers
- Insurers
- Families of drivers
- Enforcement
- General public
- Intermediaries (e.g., brokers)
- Recruiters
- Truck driving training school industry
- Physicians
- Customers and passengers
- Labor unions

Key Elements of an FMP

The MCSAC identified the following key elements that could be included in an FMP, which are described in more detail below:

- Awareness (a guiding component for the overall FMP development process that plays a role in how all other FMP key elements are addressed)
- Education and outreach activities
- Cultural and behavioral guidelines
- Health and wellness
- Standardization of work and rest practices and schedules
- Monitoring and evaluation
- Technology

Key Elements of an FMP: Specific Information, Concepts, and Ideas

- *Awareness*
  - Increase basic awareness of fatigue.
  - Define the issue and consequences.
  - Identify each person's role within the chain of responsibility as it contributes to fatigue management.
  - Include frequent statements from FMCSA regarding the importance of involving all stakeholders.

- *Education and Outreach Activities*
  - Provide education and training opportunities for those affected (drivers, shippers, families, dispatchers, companies, customers, etc.).
  - Provide education on different types of fatigue (e.g., physical, mental).
  - Rely on science and/or data for support.
  - Re-examine studies and/or data regarding time on and off task.
  - Provide information regarding best practices for driver off-duty time as it relates to fatigue.
  - Emphasize dispatcher training, including focusing on standardization throughout industry.
  - Educate everyone involved in the chain of responsibility on how to record specific events (e.g., specific procedures for when detained).
  - Provide the opportunity for confidential fatigue counseling, when appropriate.
  - Increase internal awareness through outreach campaigns.
  - Increase education on consequences of being unaware (e.g., through user-friendly web pages).

- *Cultural/Behavioral Guidelines*
  - Increase and/or improve communication along the chain of responsibility.
  - Define "success" to emphasize that alertness is valued as much as productivity.
  - Modify corporate culture concerning the perception of fatigue management practices and policies:
    - Ensure alignment of agenda, incentives, etc.
    - Align corporate codes of conduct (e.g. goals, values, priorities, responsibilities, documentation).
  - Develop corporate safety and business performance measures that address such issues as absenteeism and claims.
  - Communicate corporate policies and expectations for new drivers regarding fatigue.
  - Improve the dispatcher/driver relationship by encouraging more direct interaction and establishing common goals tied to safety.
  - Revise recruitment policies to include targeted questions aimed at identifying lifestyle elements relevant to fatigue management.
  - Work with drivers to understand their level of fatigue while having available hours.

- *Health and Wellness*
    - Consider the implementation of a health and wellness program, which could be scaled according to company size and resource availability, and could contain the following elements:
        - Education on quality and quantity of sleep
        - Education about circadian rhythm
        - Education, awareness, screening, and treatment of sleep disorders, including information on the consequences of not getting screened and treated (e.g., risk of cardiac complications), and on healthy outcomes from treating sleep disorders
        - Education on the effects of over-the-counter and prescription medications on fatigue, specifically as they relate to driving
        - Improved availability of healthy food options
        - Smoking cessation and weight loss programs
        - Events that include families (e.g., Driver Appreciation Day) in order to expand accountability to families
        - Connection between management and physicians who conduct DOT physicals
        - Early screening to identify individuals at high risk for fatigue
        - Online self-assessment availability (e.g., health quotient questionnaire)
        - Wellness coaches employed by the company and/or gym membership subsidies

- *Standardization of Work and Rest Practices and Schedules*
    - Afford drivers the opportunity and materials for adequate sleep (e.g., climate-controlled environment through cab in truck, non-engine power source).
    - Give drivers consistent shifts (e.g., a night driver typically should keep that schedule).[1]
    - Consider standard hours supplemented by "power naps."
    - Distinguish between rest time and work time activities (e.g., commuting to work, fueling and cleaning, inspecting and servicing, loading and unloading).
    - Consider customizing shifts to align with driver preference and lifestyle.
    - Promote physical exercise to prevent fatigue (e.g., company exercise DVD describing exercises to perform before certain work activities like unloading).
    - Assure record-keeping that accounts for rest periods is in place (e.g., policy for self-monitoring).
    - Hold regular check-in appointments with drivers who have had multiple crashes.
    - Include boilerplate language for contracts between carriers and shippers to ensure FMP implementation.

- *Monitoring and Evaluation*
    - Monitor the effectiveness of the current plan. Evaluate and adjust accordingly.
    - Attempt to measure data on incidents that can be attributed to fatigue. Set specific goals for improvement.

[1] Gregory Belenky, M.D., presentation, *Sleep, Circadian Rhythms and Performance,* at December 2009 meeting, Task 10-01.

    - Consider an FMP pilot program addressing fatigue (after collecting and analyzing appropriate scientifically based data).

- *Technology*
    - Consider the use of fatigue management technology (e.g., Actigraph).
    - Increase the use of scheduling and dispatching tools to make them more robust.
    - Provide education and develop training systems and tools.
    - Install in-vehicle technologies, such as lane departure warning systems and forward collision warning systems.

Conclusion

Prior to the development of an FMP, the MCSAC understands that the organization developing the plan must first identify and agree upon the context within which such a plan would be used. For the purposes of Task 10-03, the MCSAC believes developing an FMP for carriers should occur within the context of recognizing the chain of responsibility involved in managing driver fatigue and awareness of the variety of contributing factors. Additionally, it is important to identify the relevant audience so that the components and language can be targeted accordingly.

In developing an FMP, the MCSAC believes carriers should focus on and incorporate the following components:

1. *Awareness*, which is integral to the entire planning activity and throughout all FMP areas;
2. *Education and outreach activities* to help drivers and others involved in the chain of responsibility understand how to recognize and take actions toward addressing fatigue;
3. *Cultural/behavioral guidelines* to communicate company policy regarding fatigue;
4. *Health and wellness* elements to prevent and address fatigue;
5. *Standardization of work practices/schedules to* support driver preferences and individual lifestyles to help avoid fatigue;
6. *Monitoring and evaluation* to improve carrier knowledge regarding essential components of an effective FMP; and
7. *Technology* to address adequately those issues associated with fatigue and to help prevent potential negative consequences associated with fatigue.

The MCSAC encourages FMP implementation. Although not all carriers are required to develop FMPs, the MCSAC identified this practice as a significant non-regulatory safety practice that could be implemented throughout the motor carrier industry.

The Committee intends for its recommendations to provide a guiding conceptual framework for both developing an FMP for carriers and determining the relevant information to include in the FMP itself. By increasing industry knowledge of effective FMP development, carriers, drivers, and other stakeholders can more clearly understand their roles in reducing driver fatigue and, ultimately, in improving roadway safety.