

The vision of the Office of Motor Carriers is to help move people, goods, and commercial motor vehicles on our Nation's highways in the most efficient, economical, and crash-free manner possible. The OMC research and technology program focuses on improving safety in interstate commercial motor vehicle operations and serves a trucking and motor coach industry that carries more than 40 percent of all intercity freight.

Studies are conducted in the following areas: commercial driver human factors, health, and performance needs; new and emerging driver and vehicle technologies; safety-related data collection and analysis needs; and performance-based changes to the Federal Motor Carrier Safety Regulations.

The OMC's human factors research projects aim to promote alert, healthy drivers and seek to improve the uniformity and effectiveness of driver training and licensing.



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A Qualitative Assessment of the Role of Shippers and Others in Driver Compliance with Federal Safety Regulations

Introduction

There is widespread perception among various trucking industry representatives and observers that commercial motor vehicle (CMV) operators are frequently forced to violate the Federal hours-of-service (HOS) regulations because of the tightness of their schedules. HOS regulations specify how long a CMV driver may drive continuously, and the length and number of breaks a driver must take.

This concern was identified as one of the top 10 safety issues at the 1995 FHWA National Truck and Bus Safety Summit. In addition, the National Transportation Safety Board has recommended that the FHWA undertake a rulemaking to prohibit shipment schedules that would require that a driver exceed regulations in order to complete a deadline.

Congress has also recommended action on this subject. In accordance with Congressional intent, the Office of Motor Carriers conducted a focus group study to determine the scope, nature, and extent of shipper involvement with violations of safety regulations. This tech brief summarizes the study final report (FHWA-MC-98-049).

Purpose

The purpose of this exploratory research was to identify and evaluate, through focus group sessions with trucking industry participants, those factors in the freight shipping process which appear to be related to CMV operators' violation of the Federal Motor Carrier Safety Regulations, including driver HOS regulations. Researchers sought to address the extent to which commercial shippers, receivers, dispatchers, and others involved in interstate truck-related commerce impose demands for the timely delivery of products that may result in HOS violations.

Methodology

The FHWA conducted a series of focus groups with representatives from the shipping community and the motor carrier industry. In October and December 1996, sessions were held in Baltimore, Maryland and St. Louis, Missouri. Ten groups were convened with five specific audiences: carriers and brokers; dispatchers; carrier-employed drivers; independent drivers; and shippers.

The 57 participants included 5 women and 52 men. Each session lasted about 90 minutes. Moderator's guides and participant information sheets were prepared in consultation with the Office of Motor Carriers staff and an industry advisory panel. Separate guides were prepared for each target audience, although the major topic



areas remained consistent. The research effort was directed toward the investigation of the following major issues:

- What party (or parties) is responsible for exerting pressure on drivers to violate safety regulations governing HOS?
- What key factors influence the setting of the original schedule?
- What key factors influence the ability to adhere to the original schedule?
- What roles do pickup and delivery requirements (e.g., appointments, loading/unloading demands) play in driver violations?
- Do some shippers (carriers/brokers, receivers) commodities tend to put more pressure than others on carriers/drivers to exceed the HOS regulations?
- To what extent have various developments (economic, social, regulatory) affected the scheduling of freight in the motor carrier industry?



Photo courtesy of the NY State Thruway Authority

Road construction, vehicle breakdowns, and bad weather are among the circumstances that can create delays along a route, causing a reasonable delivery deadline to become unrealistic.

The moderator solicited opinions about HOS violations, scheduling procedures for pickups and deliveries, and personnel involved in picking up and receiving freight. Other major topics addressed by all groups were: loading and unloading; pressure points that influence the shipping process; and communication difficulties experienced by all parties involved.

Findings

What party (or parties) is responsible for exerting pressure on drivers to violate safety regulations governing HOS?

Feedback from the focus groups revealed that, while multiple parties are involved, no single player in the shipping process can be held solely accountable for unreasonable scheduling and CMV driver violations of HOS rules. All contribute to the problem and all have a role to play in its resolution. **Figure 1** illustrates a typical shipping cycle and the pressures placed on drivers.

Many focus group participants stated the belief that shipper and motor carrier sales personnel are unaware of, or do not care about, pressures imposed on drivers. Also, the role of the dispatcher was considered crucial by all group participants, because dispatchers interact directly with drivers in setting the schedules that they must follow.

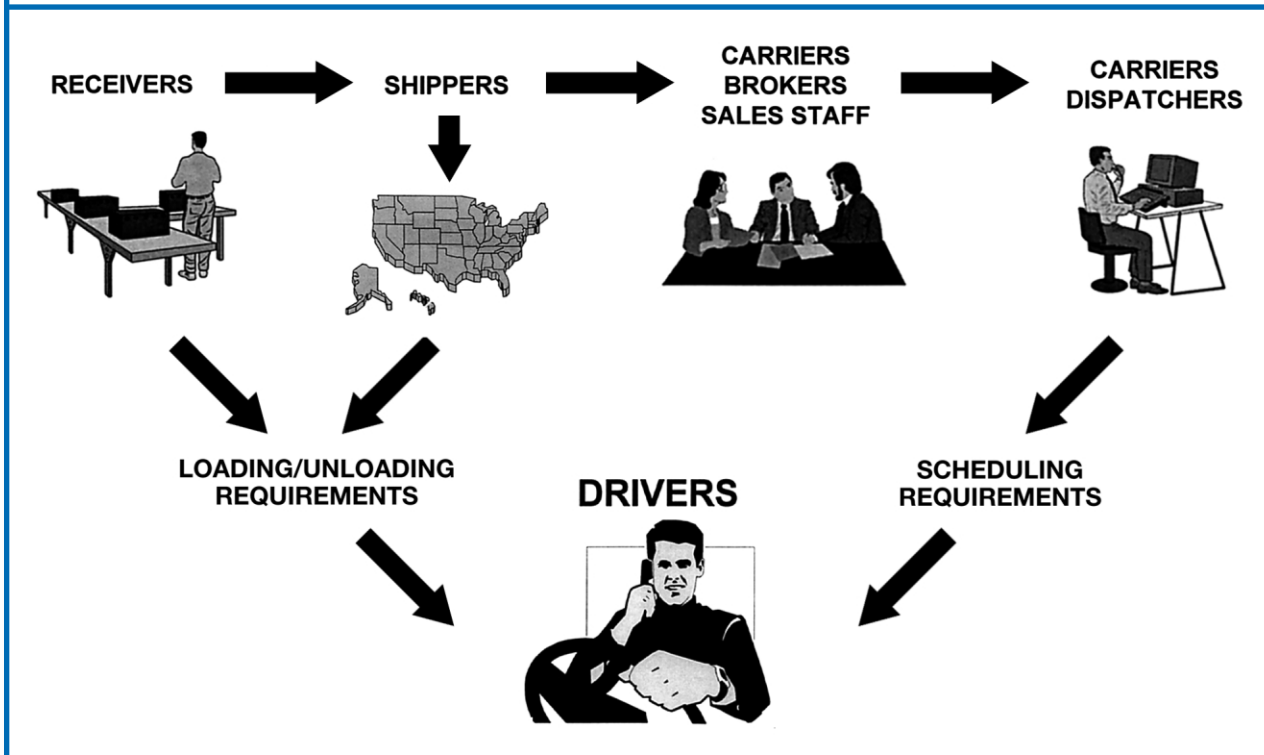
What key factors influence the setting of the original schedule?

Participants stated that schedules are often made before a driver leaves to pick up a shipment or even before products are ready to be shipped and that there is minimal driver input into the scheduling process. All participants commented that economic pressures strongly influence schedules and may compromise safety requirements. Several other key factors that influence scheduling were noted, including competition between carriers, and the type of freight being shipped.

What factors influence the ability to adhere to the original schedule?

Delivery deadlines that are initially reasonable may become unrealistic as a result of several factors. Participants listed many factors that can cause delays, including: road construction, accidents, bad weather, vehicle breakdowns, and roadside inspections. They asserted that the pressure to meet a schedule is present, regardless of delays, and that original deadlines are often not changed as needed. According to participants, drivers may feel pressure to make up time lost in delays, possibly by exceeding speed limits or driving more hours than regulations permit.

Figure 1.
Shipping Cycle: Pressures on Drivers



What roles do pickup and delivery requirements (e.g., appointments, loading/unloading demands) play in driver violations?

Participants noted that drivers are being inappropriately used to load and unload freight. The need for drivers to load or unload their own vehicles can often impede timely completion of a run and force the driver into excess hours in order to make delivery. Similarly, delays in accessing the unloading point can result in drivers feeling a need to make up for lost time.

Do some shippers commodities tend to put more pressure than others on carriers/drivers to exceed the HOS regulations?

Focus group participants stated that certain commodities are more time-sensitive than others and may not be accepted by the receiver if they arrive late. The types of hot freight that can place undue pressure on the delivery process include produce and other perishables, toys, hardware, steel and automobile parts. When transporting these types of freight, drivers may see no alternative other than speeding or exceeding the HOS regulations in order to make timely delivery.

When transporting hazardous materials, drivers are often required to use restricted routes and travel during specified hours, frequently adding miles and delays to the trip and putting pressure on drivers to make up the extra miles and time lost.

To what extent have various developments (economic, social, regulatory) affected the scheduling of freight in the motor carrier industry?

The ability of a motor carrier to turn down a delivery that requires a driver to exceed the HOS regulations is frequently constrained by the economic necessity to accept the business offered and/or to sustain a business relationship. Participants alleged that reputable firms will reject unrealistic deadlines, but that business pressures force others to accept them or risk losing the job to another motor carrier.

Recommendations

Based on factors identified by focus group participants, researchers recommended that the industry, individual companies, and the Federal government explore the following initiatives:

Industry Initiatives

- Better communication is needed among shippers, receivers, dispatchers, carrier/brokers and drivers so that the concerns of all parties can be taken into consideration when setting schedules for pickup and delivery.
- Alternative strategies, e.g., innovative pricing and planning initiatives that help reduce the pressure

Researcher

This study was performed by Global Exchange, Inc., 7910 Woodmont Ave., Suite 400, Bethesda, MD, 20814-3015, Contract No. DTFH61-95-C-00077.

Distribution

This Tech Brief is being distributed according to a standard distribution. Direct distribution is being made to the Resource Centers and Divisions.

Availability

The study final report is available from the National Technical Information Service, Telephone: (703) 605-6000, Order No. PB-98-172448.

Key Words

shipper, appointment, loading, unloading, hours of service, broker, receiver, dispatcher, commercial driver, just-in-time delivery.

Notice

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on drivers caused by impossible schedules, have been used by some motor carriers. These strategies need to be explored by others.

- Truck driver fatigue awareness/ countermeasures information and training sessions need to be made available to those involved in the scheduling and delivery of freight, particularly dispatchers who interface directly with the drivers and set their schedules.

Individual Company Initiatives

- Communication and coordination at all levels within a company need to be improved in setting appropriate delivery schedules. Personnel need to meet to discuss the challenges they experience and to identify strategies that they employ, or could employ, to cope with the pressures of the industry. Carrier and shipper sales personnel should work closely with dispatchers before pickup and delivery schedules are set.
- Carriers need to work with their dispatchers to educate them about driver needs and problems. Some motor carriers require their dispatchers to ride with drivers on a recurring basis. This and other strategies could help eliminate misunderstandings and should be explored.

Government Initiatives

- Explore with the Congress expanding Federal oversight of interstate shippers, receivers, and others who ship freight by motor carrier.
- Convene a conference or symposium with representatives of the various parties involved in the shipping process to identify and assess potentially effective corrective actions that can reduce the level of driver HOS violations brought about by improper scheduling.
- Participate in and facilitate development of training courses and outreach material that offer information about the HOS rules that could be provided to shipping organizations and provide awareness and understanding of fatigue and its effects on truck driver performance to shippers, carriers, and receivers.

Further Research

As directed by the Congress in the 1998 Transportation Equity Act for the 21st Century, subsequent research has been initiated on the extent to which unrealistic pickup and delivery demands by shippers, consignees and others encourage violations of the safety regulations. The study will seek quantitative data to determine the scope of the problem. Once the assessment is completed, the Secretary of Transportation will review the findings and determine whether to submit a plan to Congress seeking implementing authority to investigate and bring civil actions against shippers and others encouraging violations of the safety regulations.

The OMC and its industry partners have focused fatigue education, training, and outreach efforts to date on carriers, dispatchers, safety managers, and drivers. An in-progress scheduling practices study will gather additional information on the role of shippers in scheduling decisions by carriers and drivers and may result in development of information and educational materials specifically targeting shippers.