Billing Code 4910-60-P

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Part 177

[Docket No. PHMSA-2010-0221 (HM-256)]

RIN 2137–AE63

Hazardous Materials: Limiting the Use of Electronic Devices by Highway

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to prohibit texting on electronic devices by drivers during the operation of a motor vehicle containing a quantity of hazardous materials requiring placarding under Part 172 of the 49 CFR or any quantity of a select agent or toxin listed in 42 CFR Part 73. Additionally, in accordance with requirements proposed by the Federal Motor Carrier Safety Administration (FMCSA), motor carriers are prohibited from requiring or allowing drivers of covered motor vehicles to engage in texting while driving. This rulemaking would improve health and safety on the Nation's highways by reducing the prevalence of distracted driving-related crashes, fatalities, and injuries involving drivers of commercial motor vehicles.

DATES: Comments must be received by [INSERT DATE 30 DAYS FROM PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments identified by the docket number PHMSA–2010– 0221 by any of the following methods:

- Federal eRulemaking Portal: Go to <u>http://www.regulations.gov</u>. Follow the online instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: Docket Operations, U.S. Department of Transportation, West Building, Ground Floor, Room W12-140, Routing Symbol M-30, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- Hand Delivery: To Docket Operations; Room W12-140 on the ground floor of the West Building, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Instructions: All submissions must include the agency name and docket number for this rule. Note that all comments received will be posted without change, including any personal information provided. Please see the discussion of the Privacy Act below.

<u>Docket</u>: For access to the docket to read background documents and comments received, go to <u>http://www.regulations.gov</u> at any time or to Room W12-140, Ground Level, Washington, DC between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Ben Supko, Office of Hazardous Materials Standards, (202) 366-8553, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., Washington, DC 20590 0001.

SUPPLEMENTARY INFORMATION:

I. Background

A. <u>US DOT Strategy</u>

The United States Department of Transportation (US DOT) is leading the effort to end the dangerous practice of distracted driving on our nation's roadways and in other modes of transportation. Driver distraction can be defined as the voluntary or involuntary diversion of attention from the primary driving tasks due to an object, event, or person that shifts the attention away from the fundamental driving task. The US DOT has identified three main types of distraction that occur while operating a motor vehicle:

- 1. Visual taking your eyes off of the road;
- 2. Manual taking your hands off of the wheel; and
- 3. Cognitive taking your mind off of driving.

The US DOT is working across the spectrum with private and public entities to tackle distracted driving, and will lead by example. The individual agencies of the US DOT are working together to share knowledge, promote a greater understanding of the issue, and identify additional strategies to end distracted driving. Additionally, the majority of the 50 states have forbidden texting while driving any motor vehicle. See US DOT Distracted Driving website, http://www.distraction.gov; see also Insurance Institute for Highway Safety website, http://www.iihs.org/.

B. <u>PHMSA Distracted Driving Safety Advisory Notice</u>

In support of the US DOT strategy to end distracted driving, PHMSA issued "Safety Advisory Notice: Personal Electronic Device Related Distractions (Safety Advisory Notice No.10-5)" on August 3, 2010 (75 FR 45697) to alert the hazardous materials community to the dangers associated with the use of mobile phones and electronic devices while operating a commercial motor vehicle (CMV; 49 CFR § 383.5). In the notice, PHMSA stresses the heightened risk of transportation incidents involving hazardous materials when CMV drivers are distracted by electronic devices. Accordingly, the notice urges motor carriers that transport hazardous materials to institute policies and provide awareness training to discourage the use of mobile telephones and electronic devices by motor vehicle drivers.

C. FMCSA Rulemaking and Definitions

1. FMCSA Rulemakings.

In a final rule published in the Federal Register today entitled, "Limiting the Use of Wireless Communication Devices" the Federal Motor Carrier Safety Administration adopted requirements prohibiting texting on electronic devices by CMV drivers. FMCSA's final rule adopts a prohibition consistent with requirements originally proposed and considers comments submitted in response to the original NPRM issued on April 1, 2010 under Docket FMCSA-2009-0370 (75 FR 16391). The final rule prohibits texting by CMV drivers operating in interstate commerce and imposes sanctions for drivers that fail to comply. In both the final rule and NPRM FMCSA cites numerous studies evaluating the dangers of various forms of distracted driving.

2. Definitions.

In existing Federal Motor Carrier Safety Regulations (FMCSRs; 49 CFR Parts 350-399) FMCSA defines a "CMV" in § 383.5 of the 49 CFR as follows:

<u>Commercial motor vehicle</u> means a motor vehicle or combination of motor vehicles used in commerce to transport passengers or property if the motor vehicle—

(a) Has a gross combination weight rating of 11,794 kilograms or more (26,001 pounds or more) inclusive of a towed unit(s) with a gross vehicle weight rating of more than 4,536 kilograms (10,000 pounds);

(b) Has a gross vehicle weight rating of 11,794 or more kilograms (26,001 pounds or more);

(c) Is designed to transport 16 or more passengers, including the driver; or

(d) Is of any size and is used in the transportation of hazardous materials as defined in this section.

In a final rule published today addressing the use of wireless communication devices by CMV drivers FMCSA defines the terms "electronic device" and "texting" in § 383.5 (75 FR 16403) as follows:

<u>Electronic device</u> includes, but is not limited to, a cellular telephone; personal digital assistant; pager; computer; or any other device used to input, write, send, receive, or read text.

<u>Texting</u> means manually entering alphanumeric text into, or reading text from, an electronic device.

(1) This action includes, but is not limited to, short message service, e-mailing, instant messaging, a command or request to access a World Wide Web page, or engaging in any other form of electronic text retrieval or entry, for present or future communication.

(2) Texting does not include:

(i) Reading, selecting, or entering a telephone number, an extension number, or voicemail retrieval codes and commands into an electronic device for the purpose of initiating or receiving a phone call or using voice commands to initiate or receive a telephone call;

(ii) Inputting, selecting, or reading information on a global positioning system or navigation system; or

(iii) Using a device capable of performing multiple functions (e.g., fleet management systems, dispatching devices, smart phones, citizen band radios, music players, etc.) for a purpose that is not otherwise prohibited in this part.

In addition, in today's final rule FMCSA defines the term "driving" in § 392.80(c) as follows:

<u>Driving</u> means operating a commercial motor vehicle, with the motor running, including while temporarily stationary because of traffic, a traffic control device, or other momentary delays. Driving does not include operating a commercial motor vehicle with or without the motor running when the driver has moved the vehicle to the side of, or off, a highway and has halted in a location where the vehicle can safely remain stationary.

D. <u>Studies, Data, and Analysis on Driver Distractions</u>

Distracted driving reduces a driver's situational awareness, decision making, or performance, possibly resulting in a crash, near-crash, or unintended lane departure by the driver. In an effort to understand and mitigate crashes associated with driver distraction, the US DOT has been studying the distracted driving issue with respect to both behavioral and vehicle safety countermeasures. Researchers and writers classify distraction into various categories, depending on the nature of their work. Texting while driving applies to these three types of driver distraction (visual, physical, and cognitive), and thus may pose a considerably higher safety risk than other sources of driver distraction. Below we summarize recommendations, studies, data, and analysis that provide the foundation for this NPRM.

1. NTSB Safety Recommendation H-06-27

On November 14, 2004, a motorcoach crashed into a bridge overpass on the George Washington Memorial Parkway in Alexandria, Virginia. This crash was the impetus for a National Transportation Safety Board (NTSB) investigation and subsequent recommendation (Safety Recommendation H-06-27) to FMCSA regarding cell phone use by passenger-carrying CMVs. The NTSB determined that one probable cause of the crash was the use of a hands-free cell phone, resulting in cognitive distraction; therefore, the driver did not "see" the low bridge warning signs.

In a letter to NTSB dated March 5, 2007, FMCSA agreed to initiate a study to assess:

- The potential safety benefits of restricting cell phone use by drivers of passenger-carrying CMVs;
- The applicability of an NTSB recommendation to property-carrying CMV drivers;
- Whether adequate data existed to warrant a rulemaking; and
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• The availability of statistically meaningful data regarding cell phone distraction. Subsequently, the report "Driver Distraction in Commercial Vehicle Operations" was published on October 1, 2009.

Driver Distraction in Commercial Vehicle Operations ("the VTTI Study") – Olson et al., 2009¹

Under contract with FMCSA, the Virginia Tech Transportation Institute (VTTI) completed its "Driver Distraction in Commercial Vehicle Operations" study² and released the final report on October 1, 2009. The purpose of the study was to investigate the prevalence of driver distraction in CMV safety-critical events (i.e., crashes, near-crashes, lane departures, as explained in the VTTI study) recorded in a naturalistic data set that included over 200 truck drivers and 3 million miles of data. The dataset was obtained by placing monitoring instruments on vehicles and recording the behavior of drivers conducting real-world revenue-producing operations. The study found that drivers were engaged in non-driving related tasks in 71 percent of crashes, 46 percent of near-crashes, and 60 percent of all safety-critical events. Tasks that significantly increased risk included texting, looking at a map, writing on a notepad, or reading.

Odds ratios (OR) were calculated to identify tasks that were high risk. For a given task, an odds ratio of "1.0" indicated the task or activity was equally likely to result in a safety-critical event as it was a non-event or baseline driving scenario. An odds ratio greater than "1.0" indicated a safety-critical event was more likely to occur, and odds ratios of less than "1.0"

¹ Olson, R. L., Hanowski, R.J., Hickman, J.S., & Bocanegra, J. (2009) Driver distraction in commercial vehicle operations. (Document No. FMCSA-RRR-09-042) Washington, DC: Federal Motor Carrier Safety Administration, August 2010, from http://www.fmcsa.dot.gov/facts-research/art-public-reports.aspx?

² The formal peer review of the "Driver Distraction in Commercial Vehicle Operations Draft Final Report" was completed by a team of three technically qualified peer reviewers who are qualified (via their experience and educational background) to critically review driver distraction-related research.

indicated a safety-critical event was less likely to occur. The most risky behavior identified by the research was "text message on cell phone,"³ with an odds ratio of 23.2. This means that the odds of being involved in a safety-critical event are 23.2 times greater for drivers who text message while driving than for those who do not. Texting drivers took their eyes off the forward roadway for an average of 4.6 seconds during the 6-second interval surrounding a safety-critical event. At 55 mph (or 80.7 feet per second), this equates to a driver traveling 371 feet, the approximate length of a football field, including the end zones, without looking at the roadway. At 65 mph (or 95.3 feet per second), the driver would have traveled approximately 439 feet without looking at the roadway. This clearly creates a significant risk to the safe operation of the CMV.

Other tasks that drew drivers' eyes away from the forward roadway in the study involved the driver interacting with technology: calculator (4.4 seconds), dispatching device (4.1 seconds), and cell phone dialing (3.8 seconds). Technology-related tasks were not the only ones with high visual demands. Non-technology tasks with high visual demands, including some common activities, were: reading (4.3 seconds), writing (4.2 seconds), looking at a map (3.9 seconds), and reaching for an object (2.9 seconds).

The study further analyzed population attributable risk (PAR), which incorporates the frequency of engaging in a task. If a task is done more frequently by a driver or a group of drivers, it will have a greater PAR percentage. Safety could be improved the most if a driver or group of drivers were to stop performing a task with a high PAR. The PAR percentage for

³ Although the final report does not elaborate on texting, the drivers were engaged in the review, preparation, and transmission of typed messages via wireless phones.

texting is 0.7 percent, which means that 0.7 percent of the incidence of safety-critical events is attributable to texting, and thus, could be avoided by not texting.

Task	Odds Ratio	Population Attributable Risk Percentage*	
Complex Tertiary** Task			
Text message on cell phone	23.2	0.7	
Other – Complex (e.g., clean side mirror)	10.1	0.2	
Interact with/look at dispatching device	9.9	3.1	
Write on pad, notebook, etc.	9.0	0.6	
Use calculator	8.2	0.2	
Look at map	7.0	1.1	
Dial cell phone	5.9	2.5	
Read book, newspaper, paperwork, etc.	4.0	1.7	
Moderate Tertiary** Task	••		
Use/reach for other electronic device	6.7	0.2	
Other – Moderate (e.g., open medicine bottle)	5.9	0.3	
Personal grooming	4.5	0.2	
Reach for object in vehicle	3.1	7.6	
Look back in sleeper berth	2.3	0.2	
Talk or listen to hand-held phone	1.0	0.2	
Eating	1.0	0	
Talk or listen to CB radio	0.6	*	
Talk or listen to hands-free phone	0.4	*	

* Calculated for tasks where the odds ratio is greater than one.

** Non-driving related tasks

A complete copy of the final report for this study is included in PHMSA Docket PHMSA-2010-0221, available at <u>http://www.regulations.gov</u>.

3. Text Messaging During Simulated Driving — Drews, et al., 2009⁴

This research was designed to identify the impact of text messaging on simulated driving performance. Using a high-fidelity driving simulator, researchers measured the performance of 20 pairs of participants while: (1) only driving, and (2) driving and text messaging. Participants followed a pace car in the right lane, which braked 42 times, intermittently. Participants were 0.2 seconds slower in responding to the brake onset when driving and text messaging, compared to driving-only. When drivers are concentrating on texting, either reading or entering, their reaction times to braking events are significantly longer.

4. Driver Workload Effects of Cell Phone, Music Player, and Text Messaging Tasks with the Ford SYNC Voice Interface Versus Handheld Visual-Manual Interfaces ("The Ford Study") — Shutko, et al., 2009⁵

A recent study by Ford Motor Company,⁶ involving 25 participants, compared using a hands-free voice interface to complete a task while driving with using personal handheld devices (cell phone and music player) to complete the same task while driving. Of particular interest

⁴Drews, F.A., Yazdani, H., Godfrey, C.N., Cooper, J.M., & Strayer, D.L. (Dec. 16, 2009). Text messaging during simulated driving. Salt Lake City, Utah: <u>The Journal of Human Factors and Ergonomics Society Online First</u>. Published as doi:10.1177/0018720809353319. Retrieved December 22, 2009, from http://hfs.sagepub.com/cgi/rapidpdf/0018720809353319?ijkey=gRQOLrGIYnBfc&keytype=ref&siteid=sphfs.

⁵ Shutko, J.,Mayer, J., Laansoo, E., & Tijerina, L. (2009). Driver workload effects of cell phone, music player, and text messaging tasks with the Ford SYNC voice interface versus handheld visual-manual interfaces (paper presented at SAE World Congress & Exhibition, April 2009, Detroit, MI). Warrendale, PA: Society of Automotive Engineers International. Available from SAE International at: <u>http://www.sae.org/technical/papers/2009-01-0786</u>.

⁶ The Engineering Meetings Board has approved this paper for publication. It has successfully completed SAE's peer review process under the supervision of the session organizer. This process requires a minimum of three (3) reviews by industry experts.

were the results of this study with regard to total eyes-off-road time when texting while driving. The study found that texting, both sending and reviewing a text, was extremely risky. The median total eyes-off-road time when reviewing a text message on a handheld cell phone while driving was 11 seconds. The median total eyes-off-road time when sending a text message using a handheld cell phone while driving was 20 seconds.

5. The Effects of Text Messaging on Young Novice Driver Performance — Hosking, et al., 2006⁷

Hosking studied a very different driver population, but obtained similar results. This study used an advanced driving simulator to evaluate the effects of text messaging on 20 young, novice Australian drivers. The participants were between 18 and 21 years old, and they had been driving 6 months or less. Legislation in Australia prohibits hand-held phones, but a large proportion of the participants said that they use them anyway.

The young drivers took their eyes off the road while texting, and they had a harder time detecting hazards and safety signs, as well as maintaining the simulated vehicle's position on the road than they did when not texting. While the participants did not reduce their speed, they did try to compensate for the distraction of texting by increasing their following distance. Nonetheless, retrieving and particularly sending text messages had the following effects on driving:

- Difficulty maintaining the vehicle's lateral position on the road
- Harder time detecting hazards

⁷ Hosking, S., Young, K., & Regan, M. (February 2006). The effects of text messaging on young novice driver performance. Victoria, Australia: Monash University Accident Research Centre, from: http://www.monash.edu.au/muarc/reports/muarc246.pdf.

- Harder time detecting and responding to safety signs
- Up to 400 percent more time with drivers' eyes off the road than when not texting
 - The Effect of Text Messaging on Driver Behavior: A Simulator Study Reed and Robbins, 2008⁸

The RAC Foundation commissioned this report⁹ to assess the impact of text messaging on driver performance and the attitudes surrounding that activity in the 17 to 24-year old driver category. There were 17 participants in the study. The results demonstrated that driving was impaired by texting. Researchers reported that "failure to detect hazards, increased response times to hazards, and exposure time to that risk have clear implications for safety." They reported an increased stopping distance of 12.5 meters, or three car lengths, and increased variability of lane position.

Cell Phone Distraction in Commercial Trucks and Buses: Assessing Prevalence in Conjunction with Crashes and Near-Crashes — Hickman¹⁰

The purpose of this research was to conduct an analysis of naturalistic data collected by DriveCam[®]. The introduction of naturalistic driving studies that record drivers (through video and kinematic vehicle sensors) in actual driving situations created a scientific method to study driver behavior under the daily pressures of real-world driving conditions. The research documented the prevalence of distractions while driving a CMV, including both trucks and

⁸ Reed, N. & Robbins, R. (2008). The effect of text messaging on driver behaviour: A simulator study. Report prepared for the RAC Foundation by Transport Research Laboratory. From: http://www.racfoundation.org/files/textingwhiledrivingreport.pdf.

⁹ The work described in this report was carried out in the Human Factors and Simulation group of the Transport Research Laboratory. The authors are grateful to Andrew Parks who carried out the technical review and auditing of this report.

¹⁰ Hickman, J., Hanowski, R., & Bocanegra, J. (2010). Distraction in Commercial Trucks and Buses: Assessing Prevalence and Risk in Conjunction with Crashes and Near-Crashes. Washington, DC: Federal Motor Carrier Safety Administration.

buses, using an existing naturalistic data set. This data set came from 183 truck and bus fleets comprising a total of 13,306 vehicles captured during a 90-day period. There were 8,509 buses and 4,797 trucks. The data sets in the current study did not include continuous data; it only included recorded events that met or exceeded a kinematic threshold (a minimum g-force setting that triggers the event recorder). These recorded events included safety-critical events (e.g., hard braking in response to another vehicle) and baseline events (i.e., an event that was not related to a safety-critical event, such as a vehicle that traveled over train tracks and exceeded the kinematic threshold). A total of 1,085 crashes, 8,375 near-crashes, 30,661 crash-relevant conflicts, and 211,171 baselines were captured in the dataset.

Odds ratios were calculated to show a measure of association between involvement in a safety-critical event and performing non-driving related tasks, such as dialing or texting. The odds ratios show the odds of being involved in a safety-critical event when a non-driving related task is present compared to situations when there is no non-driving related task. The odds ratios for text/email/accessing the Internet tasks were very high, indicating a strong relationship between text/e-mail/accessing the Internet while driving and involvement in a safety-critical event. Very few instances of this behavior were observed during safety-critical events in the current study and even fewer during control events. Although truck and bus drivers do not text frequently, the data suggest that truck and bus drivers who use their cell phone to text, e-mail, or access the Internet are very likely to be involved in a safety-critical event.

E. <u>Existing Texting Prohibitions and Restrictions by Federal, State, and Local</u> <u>Governments</u>

1. Executive Order 13513

The President immediately used the feedback from the DOT Summit on Distracted Driving and issued Executive Order 13513, which ordered that:

Federal employees shall not engage in text messaging (a) when driving a Government Owned Vehicle, or when driving a Privately Owned Vehicle while on official Government business, or (b) when using electronic equipment supplied by the Government while driving.

The Executive Order is applicable to the operation of CMVs by Federal government employees carrying out their duties and responsibilities, or using electronic equipment supplied by the government. This order also encourages contractors to comply while operating CMVs on behalf of the Federal government.

2. Regulatory Guidance

On January 27, 2010, FMCSA published regulatory guidance concerning the applicability of 49 CFR 390.17, Additional equipment and accessories, to any CMV operator engaged in "texting" on an electronic device while driving a CMV in interstate commerce (75 FR 4305). The guidance interpreted § 390.17 as prohibiting texting on electronic devices while driving because it decreases the safety of operations.

3. Federal Railroad Administration

On October 7, 2008, FRA published Emergency Order 26 (73 FR 58702). Pursuant to FRA's authority under 49 U.S.C. 20102 and 20103, the order, which took effect on October 1, 2008, restricts railroad operating employees from using distracting electronic and electrical devices while on duty. Among other things, the order prohibits both the use of cell phones and texting. FRA cited numerous examples of the adverse impact that electronic devices can have on safe operations. These examples included fatal accidents that involved operators who were

distracted while texting or talking on a cell phone. In light of these incidents, FRA is imposing restrictions on the use of such electronic devices, both through its order and a rulemaking that seeks to codify the order. In a NPRM published May 18, 2010, FRA proposed to amend its railroad communications regulations by restricting the use of mobile telephones and other distracting electronic devices by railroad operating employees (75 FR 27672).

4. State Restrictions

Texting while driving is prohibited in 30 States and the District of Columbia. A list of states and territories that have taken such actions can be found at the following DOT Web site: <u>http://www.distraction.gov/state-laws</u>. Generally, the state requirements are applicable to all drivers operating motor vehicles within those jurisdictions, including CMV operators. Because some states do not currently prohibit texting while driving, there is a need for a Federal regulation to address the safety risks associated with texting by CMV drivers. Generally, state laws and regulations remain in effect and could continue to be enforced with regard to CMV drivers, provided those laws and regulations are compatible with the Federal requirements. This proposed rule does not affect the ability of states to institute new prohibitions on texting while driving. For more information see the **Federalism** section later in this document.

II. <u>Applicability of this NPRM</u>

PHMSA's Office of Hazardous Materials Safety is the Federal safety authority for the transportation of hazardous materials by air, rail, highway, and water. Under the Federal hazardous materials transportation law (Federal hazmat law; 49 U.S.C. 5101 et seq.), the Secretary of Transportation is charged with protecting the nation against the risks to life, property, and the environment that are inherent in the commercial transportation of hazardous

materials. The Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) are promulgated under the mandate in § 5103(b) of Federal hazardous materials transportation law (Federal hazmat law; 49 U.S.C. 5101 et seq.) that the Secretary of Transportation "prescribe regulations for the safe transportation, including security, of hazardous material in intrastate, interstate, and foreign commerce." Section 5103(b)(1)(B) provides that the HMR "shall govern safety aspects, including security, of the transportation of hazardous material the Secretary considers appropriate." As such, PHMSA strives to reduce the risks inherent to the transportation of hazardous materials in both intrastate and interstate commerce.¹¹

The final rule published in the Federal Register today by FMCSA under Docket FMCSA-2009-0370 incorporates texting restrictions into § 392.80 of the FMCSRs that apply to CMV motor carriers and drivers in interstate commerce. During the coordination process for PHMSA's August 3, 2010 safety advisory notice on distracted driving, PHMSA and FMCSA representatives expressed concern that changes to the FMCSRs regarding distracted driving would only apply to motor carriers and drivers of CMVs that operate in interstate commerce.¹² As such, the final rule published by FMCSA today regarding distracted driving does not apply to motor carriers and drivers that transport a quantity of hazardous materials requiring placarding

¹¹ The term "intrastate commerce" is trade, traffic, or transportation within a single state. The term "interstate commerce" is trade, traffic, or transportation involving the crossing of a state boundary. Additionally, "interstate commerce" includes transportation originating or terminating outside the state of United States.

¹² In accordance with § 390.3(a) the rules in Subchapter B, including Parts 350-399, of the 49 CFR are applicable to all employers, employees, and commercial motor vehicles, which transport property or passengers in interstate commerce. The only FMCSA regulations that are applicable to intrastate operations are: the commercial driver's license (CDL) requirement, for drivers operating commercial motor vehicles as defined in 49 CFR 383.5; controlled substances and alcohol testing for all persons required to possess a CDL; and minimum levels of financial responsibility for the intrastate transportation of certain quantities of hazardous materials and substances.

under Part 172 of the 49 CFR or any quantity of a material listed as a select agent or toxin in 42 CFR Part 73 in intrastate commerce.

PHMSA developed this NPRM to expand the population of drivers who are prohibited from texting by FMCSA's final rule to include drivers who transport a quantity of hazardous materials requiring placarding under Part 172 of the 49 CFR or any quantity of a material listed as a select agent or toxin in 42 CFR Part 73 in intrastate commerce. The safety benefits associated with limiting the distractions caused by electronic devices are equally applicable to drivers transporting a quantity of hazardous materials requiring placarding under Part 172 of the 49 CFR or any quantity of a material listed as a select agent or toxin in 42 CFR Part 73 in intrastate commerce via intrastate as they are to interstate commerce. The use of an electronic device while driving constitutes a safety risk to the motor vehicle driver, other motorists, and bystanders. As adopted in the FMCSA final rule, the consequences of texting while driving a CMV can include state and local sanctions, fines, and possible revocation of commercial driver's licenses.

III. <u>Summary of Changes</u>

In accordance with the comments received and public meeting discussion this NPRM proposes the following changes by section:

Section 177.804. We propose to add a new paragraph (b) to prohibit texting by any person transporting a quantity of hazardous materials requiring placarding under Part 172 of the 49 CFR or any quantity of a material listed as a select agent or toxin in 42 CFR Part 73. As such, motor carriers and drivers who engage in the transportation of covered materials must comply with the distracted driving requirements in § 392.80 of the FMCSRs.

IV Regulatory Analysis and Notices

A. <u>Statutory/Legal Authority for this Rulemaking</u>

This rulemaking is issued under authority of the Federal hazardous materials transportation law (49 U.S.C. 5101 et seq.), which authorizes the Secretary of Transportation to prescribe regulations for the safe transportation, including security, of hazardous materials in interstate, intrastate, and foreign commerce.

B. Executive Order 12866 and DOT Regulatory Policies and Procedures

PHMSA has determined that this rulemaking action is a significant regulatory action under Executive Order 12866, Regulatory Planning and Review, and significant under DOT regulatory policies and procedures because of the substantial Congressional and public interest concerning the crash risks associated with distracted driving, even though the economic costs of the rule do not exceed the \$100 million annual threshold.

Executive Order 12866 requires agencies to regulate in the "most cost-effective manner," to make a "reasoned determination that the benefits of the intended regulation justify its costs," and to develop regulations that "impose the least burden on society." As discussed throughout this rulemaking, the intent of this NPRM is to expand the applicability of FMCSA's final rule and prohibit texting by drivers of motor vehicles that contain a quantity of hazardous materials requiring placarding under Part 172 of the 49 CFR or any quantity of a material listed as a select agent or toxin in 42 CFR Part 73. As a result, the population of motor carriers covered by this proposed rule is comprised of a very small portion of motor carriers operating in intrastate commerce.

PHMSA's calculated its affected population by assessing hazmat registration data from the 2010 - 2011 registration year. This data is collected on DOT form F 5800.2 in accordance with § 107.608(a) of the 49 CFR. Generally, the registration requirements apply to any person who offers for transportation or transports a quantity of hazardous materials requiring placarding under Part 172 of the 49 CFR. Additional data collected on form F 5800.2 verify that the person is indeed a carrier, the mode of transportation used, and the US DOT Number.¹³ Using this kev data from the registration form submissions we can make some assumptions to estimate the number of persons registered that we consider motor carriers subject to this NPRM. Based on our analysis of form F 5800.2 – 18,841 persons have registered as motor carriers of hazardous materials. Of those 18,841 persons 17,599 included a US DOT Number. Therefore, based on PHMSA's registration data, the difference between persons registered as motor carriers and persons that have obtained a US DOT Number is 1,242 (18,841 - 17,599 = 1,242). PHMSA considers these persons to be intrastate motor carriers. We compared these numbers with the FMCSA Motor Carrier Management Information System (MCMIS).¹⁴ Based on MCMIS data we verified that the 1,242 carriers identified through registration data have not been issued a US DOT Number by FMCSA.

http://www.fmcsa.dot.gov/factsfigs/formspubs.htm

¹³The FMCSRs require certain commercial carriers to obtain a US DOT number by filling out DOT form MC-150 (OMB Control Number 2126-0013). Companies that operate commercial vehicles transporting passengers or hauling cargo in interstate commerce must be registered with the FMCSA and must have a US DOT Number. The US DOT Number serves as a unique identifier when collecting and monitoring a company's safety information acquired during audits, compliance reviews, crash investigations, and inspections. FMCSA provides two services for people who need to obtain a U.S. DOT number. The MC-150 form can be downloaded from the FMCSA web site in PDF form and mailed in; or, they may file electronically via the web site. Both options are found at the following URL:

¹⁴ MCMIS contains information on the safety fitness of commercial motor carriers (truck & bus) and hazardous material shippers subject to both the FMCSRs and the HMR. This information is available to the general public through the MCMIS Data Dissemination Program.

To better define the population of intrastate motor carriers subject to this rulemaking we assessed the data further. Generally, registration data is limited to persons that offer or transport placarded quantities of hazardous materials. Registration data does not include persons that transport a material listed as a select agent or toxin in 42 CFR Part 73. In addition, the data includes those intrastate motor carriers that are required to obtain a US DOT Number through their state even if they operate solely in intrastate commerce. FMCSA indicates that 28 states currently require motor carriers to obtain a US DOT Number, regardless if they operate in interstate or intrastate commerce.¹⁵ Based on these assumptions, the number of intrastate carriers identified through hazmat registration data may be underestimated by up to 60% to 70%.

Another assumption that must be considered is that 30 states and the District of Columbia have adopted a broad based ban on texting while driving. As a result, it is likely that 60% of the carriers identified as intrastate carriers are already subject to a ban on texting while driving. Accordingly, this would indicate that the number of intrastate carriers identified as uncovered by a texting ban by evaluating hazardous materials registration data could be over estimated by as much as 60%.

Based on the assumptions outlined above, and PHMSA's desire to take a conservative approach to the affected population, we multiply the number of intrastate carriers identified through registration data by a 20% underreporting factor. This will result in a total population affected by this rulemaking of 1,490 intrastate motor carriers $(1,242 \times 1.20 = 1,490)$. In addition to the number of interstate motor carriers, PHMSA estimates that each interstate motor carrier employs approximately 8 drivers. Therefore, the estimated population of intrastate motor carrier

¹⁵ "What is a USDOT Number?" See: <u>http://www.fmcsa.dot.gov/registration-licensing/registration-USDOT.htm</u>

drivers affected by this proposed rule is $11,920 (1,490 \ge 11,920)$. This conservative estimate ensures that PHMSA is fully considering the impacts of expanding applicability of the FMCSA final rule to prohibit texting by drivers of motor vehicles that contain a quantity of hazardous materials requiring placarding under Part 172 of the 49 CFR or any quantity of a material listed as a select agent or toxin in 42 CFR Part 73.

The regulatory evaluation prepared in support of this rulemaking considers the following potential costs: (a) loss in carrier productivity due to time spent while parking or pulling over to the side of the roadway to perform texting activities; (b) increased fuel usage due to idling as well as exiting and entering the travel lanes of the roadway; and (c) increased crash risk due to covered CMVs that are parked on the side of the roadway and exiting and entering the travel lanes of the roadway. The regulatory evaluation also considers potential costs to the states. However, since the analysis does not yield appreciable costs to the states, further analysis pursuant to the Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1532) was deemed unnecessary.

PHMSA estimates that this proposed rule will cost \$5,227 annually. Additionally, PHMSA has not identified a significant increase in crash risk associated with drivers' strategies for complying with this proposed rule. As indicated in the regulatory evaluation, a crash resulting in property damage only (PDO) averages approximately \$17,000 in damages. Consequently, the texting prohibition would have to eliminate just one PDO crash every 3.25 years for the benefits of this proposed rule to exceed the costs. A summary of the costs and threshold analysis is provided in the following table:

Summary of Costs and Threshold Analysis

Cost of Lost Carrier Productivity	\$438
Cost of Increased Fuel Consumption	\$3,411
Cost of Parking, Entering and Exiting Roadway Crashes	\$1,378
Total Costs (annual)	\$5,227
Benefit of Eliminating One Fatality	\$6 million
Break-even Number of Lives Saved	< 1

The productivity losses, as well as other costs, were estimated for only one year, as the entire threshold analysis was performed as an undiscounted annual estimation. The loss of productivity is expected to diminish (but not necessarily vanish within one year), as the motor carrier industry adjusts to the texting restriction and as new (permissible) technologies arise that compensate for the loss of the texting functionality. PHMSA is unaware of the specific future technologies that might arise, but we continue to research and monitor technological changes in the market.

C. <u>Executive Order 13132</u>

Executive Order 13132 requires agencies to assure meaningful and timely input by state and local officials in the development of regulatory policies that may have a substantial, direct effect on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. A rule has implications for Federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on state or local governments and would either preempt state law or impose a substantial direct cost of compliance on them. We invite state and local governments to

comment on the effect that the adoption of this rule may have on state or local safety or environmental protection programs.

D. Executive Order 13175

This proposed rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13175 ("Consultation and Coordination with Indian Tribal Governments"). Because this proposed rule does not significantly or uniquely affect the communities of the Indian tribal governments and does not impose substantial direct compliance costs, the funding and consultation requirements of Executive Order 13175 do not apply.

E. <u>Regulatory Flexibility Act</u>

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601-612) requires Federal agencies to consider the effects of the regulatory action on small business and other small entities and to minimize any significant economic impact. The term "small entities" comprises small businesses and not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. Accordingly, DOT policy requires an analysis of the impact of all regulations on small entities, and mandates that agencies strive to lessen any adverse effects on these businesses.

PHMSA has conducted an economic analysis of the impact of this proposed rule on small entities and certifies that a Regulatory Flexibility Analysis is not necessary because the rule will not have a significant economic impact on a substantial number of small entities subject to the requirements of this proposed rule. We assume that all of the 1,490 motor carriers identified by this proposed rule are small entities. However, the direct costs of this rule that small entities may incur are only expected to be minimal. They consist of the costs of lost productivity from

foregoing texting while on-duty and fuel usage costs for pulling to the side of the road to idle the truck or passenger-carrying vehicle and send or receive a text message. The majority of motor carriers are small entities. Therefore, PHMSA will use the total cost of this proposed rule (\$5,227) applied to the number of small entities (1,490) as a worse case evaluation which would average \$3.51 annually per carrier.

F. Executive Order 13272 and DOT Regulatory Policies and Procedures

This notice has been developed in accordance with Executive Order 13272 ("Proper Consideration of Small Entities in Agency Rulemaking") and DOT's procedures and policies to promote compliance with the Regulatory Flexibility Act to ensure that potential impacts of draft rules on small entities are properly considered.

G. <u>Paperwork Reduction Act</u>

This rule would call for no new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501-3520).

H. <u>Regulation Identifier Number (RIN)</u>

A regulation identifier number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN contained in the heading of this document can be used to cross-reference this action with the Unified Agenda.

I. Unfunded Mandates Reform Act of 1995

This proposed rule does not impose unfunded mandates, under the Unfunded Mandates Reform Act of 1995. It does not result in costs of \$140.8 million or more to either state, local, or tribal governments, in the aggregate, or to the private sector, and is the least burdensome alternative that achieves the objective of the rule.

J. Privacy Act

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (Volume 65, Number 70; Pages 19477-78) or you may visit <u>http://www.dot.gov</u>. This rule is not a privacy-sensitive rulemaking because the rule will not require any collection, maintenance, or dissemination of Personally Identifiable Information (PII) from or about members of the public.

K. National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA) requires Federal agencies to consider the consequences of major Federal actions and that they prepare a detailed statement on actions significantly affecting the quality of the human environment. PHMSA assessment did not reveal any significant positive or negative impacts on the environment expected to result from the rulemaking action. There could be minor impacts on emissions, hazardous materials spills, solid waste, socioeconomics, and public health and safety. Interested parties are invited to address the potential environmental impacts of regulations applicable to the storage of explosives transported in commerce. We are particularly interested in comments about safety and security measures that would provide greater benefit to the human environment, or on alternative actions the agency could take that would provide beneficial impacts.

List of Subjects

49 CFR Part 177

Hazardous materials transportation, Motor carriers, Radioactive materials, Reporting and recordkeeping requirements.

In consideration of the foregoing, 49 CFR Chapters I and III are proposed to be amended as follows:

PART 177--CARRIAGE BY PUBLIC HIGHWAY

1. The authority citation for part 177 would continue to read as follows:

Authority: 49 U.S.C. 5101-5128; 49 CFR 1.53.

2. The text of Section 177.804 is redesignated as paragraph (a) and a new paragraph (b) is added to read as follows:

§ 177.804 Compliance with Federal Motor Carrier Safety Regulations.

* * * * *

(a) <u>General</u>. * * *

(b) Prohibition against texting. Drivers of commercial motor vehicles, as defined in 49

CFR § 383.5, transporting a quantity of hazardous materials requiring placarding under Part 172 of the 49 CFR or any quantity of a material listed as a select agent or toxin in 42 CFR Part 73 are prohibited from texting while driving in accordance with § 392.80 of the FMCSRs.

Issued in Washington, DC, on , under authority delegated in 49 CFR Part 106.

R. Ryan Posten,

Senior Director

for Hazardous Materials Safety