



EXECUTIVE CORRESPONDENCE

**U.S. Department
of Transportation**

Federal Motor Carrier
Safety Administration

1200 New Jersey Avenue SE
Washington DC 20590

ACTION MEMORANDUM TO THE DEPUTY ADMINISTRATOR

From: Larry W. Minor
Associate Administrator for Policy
6-2551

Thru: Charles A. Horan, III
Director, Office of Carrier, Driver, and Vehicle Safety Standards
6-2362

Prepared by: Thomas L. Yager
Chief, Driver and Carrier Operations Division
614-942-6477

Subject: Pilot Program to Allow Commercial Drivers to Split Sleeper Berth Time

ACTION REQUIRED

The Office of Policy recommends that you approve the attached Federal Register notice announcing the initiation of a "Flexible Sleeper-Berth Pilot Program."

SUMMARY

Drivers using a sleeper-berth (SB) have restrictions regarding the accumulation of hours in the SB when used to meet the requirement for the equivalent of 10 consecutive hours off duty. Currently, drivers using a SB are required to take 8 consecutive hours in the SB, and a separate 2-hour period of SB or off-duty time to meet the "equivalent of 10 consecutive hours." This requirement was part of the hours-of-service final rule published on August 25, 2005 (70 FR 50072). Prior to that change, drivers were allowed to "split" the 10 hours of SB time into two periods as long as neither was less than 2 hours. Recent research indicates that the pre-2005 SB rule may provide better fatigue prevention for the driver. MC-P and MC-R propose a pilot program to test this issue in a controlled on-the-road study.

BACKGROUND

During the proposed pilot program, participating drivers would have the option to split their 10 hours of SB time into two periods, neither being shorter than 3 hours. Driver metrics would be collected for the duration of the study, and participants' safety performance and fatigue levels would be analyzed. This pilot program seeks to produce statistically reliable evidence on the question whether split sleeper berth time affects driver safety performance and fatigue levels.

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RETURN IT WITH THE FILE COPIES TO ORIGINATING OFFICE**

Carriers and drivers desiring to participate would apply to FMCSA for acceptance in the pilot program. The Agency would reserve the right to limit the number of participants based on needs identified in a data collection plan. For the duration of the pilot, participants would be granted necessary exemptions from current regulations.

The attached Federal Register notice proposes criteria for participating drivers and carriers, outlines procedural steps and a data collection plan, and requests comments on these elements. Based on comments received, a final plan would be developed and announced for implementation of the pilot program.

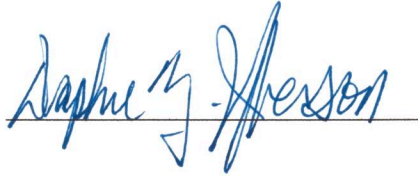
RECOMMENDATION

If you agree with our recommendation, please sign below and on the enclosed Federal Register notice.

Attachments

Deputy Administrator

APPROVED:



DISAPPROVED:

COMMENTS:

DATE:

5/30/17

Federal Motor Carrier Safety Administration

49 CFR Part 395

Docket No. FMCSA-2016-0260

Hours of Service of Drivers; Pilot Program to Allow Commercial Drivers to Split Sleeper Berth Time

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice; request for comments.

SUMMARY: FMCSA proposes a pilot program to allow temporary regulatory relief from the Agency's sleeper berth regulation, 49 CFR 395.1(g), for a limited number of commercial drivers who have a valid commercial driver's license (CDL), and who regularly use a sleeper berth to accumulate their required 10 hours of non-duty work status. During the pilot program, participating drivers would have the option to split their sleeper berth time within parameters specified by FMCSA. Driver metrics would be collected for the duration of the study, and participants' safety performance and fatigue levels would be analyzed. This pilot program seeks to produce statistically reliable evidence on the question whether split sleeper berth time affects driver safety performance and fatigue levels.

The Agency proposes criteria for participating drivers and carriers, outlines procedural steps and a data collection plan, and requests comments on these elements.

DATES: Comments must be received on or before [INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER.] The implementation date of the Pilot Program will be announced in subsequent **Federal Register** notices.

ADDRESSES: You may submit comments bearing the Federal Docket Management System (FDMS) Docket ID FMCSA-2016-0260 using any of the following methods:

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the online instructions for submitting comments.
- Fax: 1-202-493-2251
- Mail: Docket Operations, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building, Ground Floor, Room W12-140, Washington, DC 20590-0001.
- Hand Delivery or Courier: 1200 New Jersey Avenue, SE., West Building, Ground Floor, Room W12-140, Washington, DC 20590 between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Instructions: All submission must include the Agency name and the docket number. For detailed instructions on submitting comments and additional information on the exemption process, see the Public Participation heading below. Note that all comments received will be posted without change to [http:// www.regulations.gov](http://www.regulations.gov), including any personal information provided. Please see the Privacy Act heading below.

Docket: For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>, and follow the online instructions for accessing the dockets, or go to the street address listed above.

Privacy Act: In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to

www.regulations.gov, as described in the system of records notice (DOT/ALL-14 FDMS), which can be reviewed at www.dot.gov/privacy.

Public Participation: The Federal eRulemaking Portal is available 24 hours each day, 365 days each year. You can obtain electronic submission and retrieval help and guidelines under the “help” section of the Federal eRulemaking Portal Web site. If you want us to notify you that we received your comments, please include a self-addressed, stamped envelope or postcard, or print the acknowledgement page that appears after submitting comments online. Comments received after the comment closing date will be included in the docket and will be considered to the extent practicable.

FOR FURTHER INFORMATION CONTACT: Nicole Michel, Research Division, Federal Motor Carrier Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590-0001, by email at Nicole.michel@dot.gov, or by telephone at 202-366-4354. If you have questions on viewing or submitting material to the docket, contact Docket Services, telephone (202) 366-9826. Further information will be posted at the Web site for the proposed pilot program: www.sleeperberthstudy.com.

SUPPLEMENTARY INFORMATION:

I. Public Participation and Request for Comments

FMCSA encourages you to participate by submitting comments and related materials. In this notice, FMCSA requests certain information, but comments need not be limited to those requests.

Submitting Comments

If you submit a comment, please include the docket number for this notice (FMCSA-2016-0260), indicate the specific section of this document to which the

comment applies, and provide a reason for suggestions or recommendations. You may submit your comments and material online, by fax, mail, or hand delivery, but please use only one of these means. FMCSA recommends that you include your name and a mailing address, an e-mail address, or a phone number in the body of your document so the Agency can contact you if it has questions regarding your submission.

To submit your comment online, go to www.regulations.gov, put the docket number, "FMCSA-2016-0260" in the "Keyword" box, and click "Search." When the new screen appears, click on the "Comment Now!" button and type your comment into the text box in the following screen. Choose whether you are submitting your comment as an individual or on behalf of a third party and then submit. If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the facility, please enclose a stamped, self-addressed postcard or envelope. FMCSA will consider all comments and material received during the comment period.

Viewing Comments and Documents

To view comments, as well as documents mentioned in this notice as being available in the docket, go to www.regulations.gov and insert the docket number, "FMCSA-2016-0260" in the "Keyword" box and click "Search." Next, click the "Open Docket Folder" button and choose the document listed to review. If you do not have access to the Internet, you may view the docket online by visiting the Docket Management Facility in Room W12-140 on the ground floor of the DOT West Building,

1200 New Jersey Avenue, SE, Washington, DC 20590, between 9 a.m. and 5 p.m., e.t., Monday through Friday, except Federal holidays.

II. Legal Basis

On June 9, 1998, the President signed the Transportation Equity Act for the 21st Century (TEA-21) (Public Law 105-178, 112 Stat. 107). Section 4007 of TEA-21 amended 49 U.S.C. 31315 and 31136(e) to authorize the Secretary of Transportation (Secretary) to grant waivers and exemptions from some of the Federal Motor Carrier Safety Regulations (FMCSRs). The duration of a waiver is limited to 3 months, and the Secretary may grant the waiver without requesting public comment. By contrast, an exemption may be granted for up to 5 years¹, and may be renewed. The Secretary must provide the public with an opportunity to comment on each exemption prior to granting or denying the request.

Section 4007 also authorizes the Secretary to conduct pilot programs, which are research studies where one or more exemptions are granted to allow for the testing of innovative alternatives to certain FMCSRs. FMCSA must publish in the **Federal Register** a detailed description of each pilot program, including the exemptions being considered, and provide notice and an opportunity for public comment before the effective date of the program. The Agency is required to ensure that the safety measures in the pilot programs are designed to achieve a level of safety that is equivalent to, or greater than, the level of safety that would be achieved through compliance with the safety regulations. Pilot programs are limited to 3 years from the starting date.

¹ Changed from 2 years to 5 years by § 5206(a)(3) of the Fixing America's Surface Transportation (FAST) Act, effective October 1, 2015.

At the conclusion of each pilot program, FMCSA must report to Congress its findings, conclusions, and recommendations, including suggested amendments to laws and regulations that would enhance motor carrier, commercial motor vehicle (CMV), and driver safety, and improve compliance with the FMCSRs.

Section 4007 was implemented as an interim final rule (IFR) that created 49 CFR part 381 (63 FR 67600, Dec. 8, 1998). On August 20, 2004 (69 FR 51589), FMCSA adopted the IFR as a final rule (69 FR 51589). Part 381 established procedures to request waivers, apply for exemptions, and to propose pilot programs. It also required publishing notice of proposed pilot programs in the **Federal Register** to afford the public an opportunity for comment.

III. Background

Earlier Proposals

In early 2013, FMCSA informally expressed an interest in conducting a pilot program to study variations in the types of “splits” of the required off-duty periods that were allowed when using a sleeper berth. In June 2013, the National Association of Small Trucking Companies advised that it supported such a study and its members would be willing to participate. In December 2013, the American Trucking Associations, Inc. and the Minnesota Trucking Association submitted a joint proposal for a split sleeper-berth pilot program. FMCSA has developed today’s proposal based in part on these prior expressions of support and interest. FMCSA also took into account new sleep studies and findings when developing the proposal to ensure valid results, without detrimental safety impacts throughout the program, were reasonably expected.

Applicable Regulations

As described in 49 CFR 395.1(g)(1), a driver who operates a property-carrying CMV equipped with a sleeper berth² and who uses the sleeper berth provision must take at least 8 consecutive hours in the sleeper berth, plus a separate period of 2 consecutive hours either in the sleeper berth, off duty, or any combination of the two, before returning to on-duty status.

The Flexible Sleeper Berth Pilot Program offers participating drivers relief from the requirement for 8 consecutive hours in the sleeper berth.

Previous Research

During listening sessions for the Agency's 2010 notice of proposed hours-of-service rulemaking, many drivers said they would like some regulatory flexibility (i.e., an exemption from consolidated sleeper berth time) to be able to sleep when they get tired or as a countermeasure to traffic congestion. Although the Agency's 2011 final rule did not include a split sleeper berth option, FMCSA determined that the issue should be explored in greater depth. Subsequently, FMCSA reviewed the literature and completed its own laboratory study on the safety impacts of split sleep.

The majority of sleep studies to date demonstrate that well-timed split sleep has either a positive or no effect on subsequent neurobehavioral performance. This supports the theory that the restorative effects of sleep on performance may be maintained when splitting total sleep time into multiple segments. Further, split sleep does not negatively affect daytime neurobehavioral performance when compared to a consolidated sleep period of the same total duration. Table 1 provides a list of selected studies that support the safety benefits of split sleep for transportation operators.

² A "sleeper berth" is a sleeping compartment installed on a CMV that complies with the specifications in 49 CFR 393.76.

TABLE 1. SELECTED STUDIES SUPPORTING THE BENEFITS OF SPLIT SLEEP FOR TRANSPORTATION OPERATORS

Reference	Description
Thomas G. Raslear , Judith Gertler, and Amanda DiFiore (2013): “Work schedules, sleep, fatigue, and accidents in the U.S. railroad industry,” <i>Fatigue: Biomedicine, Health & Behavior</i> , 1:1-2, 99-115.	Study analyzes results from five surveys administered between 2006 and 2011 and provides a comprehensive description of fatigue in U.S. railroad workers employed in safety-sensitive positions.
Gianluca Ficca, John Axelsson, Daniel J. Mollicone, Vincenzo Muto, Michael V. Vitiello (2010): “Naps, cognition and performance,” <i>Sleep Medicine Reviews</i> 14, 249–258.	Literature review explores daytime split-sleep schedules and their effects on recovery (compared with consolidated sleep schedules) and the benefits of naps in terms of wakefulness performance and cognition.
Daniel J. Mollicone, Hans P.A. Van Dongen, David F. Dinges (2007): “Optimizing sleep/wake schedules in space: Sleep during chronic nocturnal sleep restriction with and without diurnal naps,” <i>Acta Astronautica</i> 60, 354 – 361.	Laboratory study of 93 adults investigates physiological sleep obtained in a range of restricted sleep schedules.
Daniel J. Mollicone, Hans P.A. Van Dongen, Ph.D., Naomi L. Rogers, Ph.D., and David F. Dinges, Ph.D. (2008): “Response Surface Mapping of Neurobehavioral Performance: Testing the Feasibility of Split Sleep Schedules for Space Operations,” <i>Acta Astronautica</i> , 63(7-10): 833–840.	Laboratory study of 90 adults examined feasibility of split-sleep schedules for astronauts with mission-critical space operations involving restricted nighttime sleep.
J. Horne (2011): “Obesity and short sleep: unlikely bedfellows?,” <i>Obesity Reviews</i> , 12: e84–e94.	Analysis critically examines the link between habitual short sleep and obesity, using a previously collected data set.
L. Di Milia, G. Kecklund (2013): “The distribution of sleepiness, sleep and work hours during a long distance morning trip: A comparison between night- and non-night workers,” <i>Accident Analysis and Prevention</i> , 53:17-22.	Study estimates the prevalence of chronic sleepiness and sleep restriction in a sample of 649 drivers.
Gregory Belenky, M.D., Steven R. Hursh, Ph.D., James Fitzpatrick, Hans P. A. Van Dongen, Ph.D. (2008): “Split Sleeper Berth Use and Driver Performance: A Review of the Literature and Application of a Mathematical Model Predicting Performance from Sleep/Wake History and Circadian Phase,” <i>American Trucking Associations</i> .	Study reviews the literature to examine the recuperative value of split versus consolidated sleep for performance and applies a mathematical model to evaluate the effects on performance of 288 sleeper berth provision compliant and non-compliant schedules.
Gregory Belenky, M.D., Melinda L. Jackson, Ph.D., Lindsey Tompkins, Briann Satterfield, Amy Bender (2012): “Investigation of the Effects of Split Sleep Schedules on Commercial Vehicle Driver Safety and Health,” <i>FMCSA</i> .	In-residence laboratory study of 53 healthy participants provides between-group comparisons of nighttime, split, or daytime sleep across a 5-day simulated workweek.

FMCSA sponsored an in-residence laboratory study entitled “Investigation of the Effects of Split Sleep Schedules on Commercial Vehicle Driver Safety and Health.” The study was conducted from January 2010 through May 2011. A copy of the report is filed in the docket identified at the beginning of this notice. Three sleep conditions were examined: consolidated nighttime sleep, split sleep, and consolidated daytime sleep. With respect to objectively measured sleep, during the 5-day simulated workweek, participants in the nighttime condition slept the most (8.4 hours ± 13.4 minutes), participants in the daytime condition slept the least (6.4 hours ± 15.3 minutes), and participants in the split-sleep condition fell somewhere in between (7.16 hours ± 14.2 minutes). The study found that consolidated daytime sleep resulted in less total sleep time, increased sleepiness, and an increase in blood glucose and testosterone at the end of the workweek. However, performance was not significantly affected by sleep opportunity placement. The findings suggest that, with respect to total sleep time, consolidated sleep is better than split sleep if the consolidated sleep opportunity is placed at night, but that split sleep is better than consolidated sleep if the consolidated sleep opportunity is placed during the day. This laboratory study and the studies referenced in Table 1 (as well as others) provide the scientific basis for the present study.

Previous sleep studies that have shown detrimental effects caused by split sleep are described in Table 2.

TABLE 2. SELECTED STUDIES SHOWING NEGATIVE IMPACTS OF SPLIT SLEEP FOR TRANSPORTATION OPERATORS

Reference	Description
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NTSB (1995). Factors that affect Fatigue in Heavy Truck Accidents. Volume I: Analysis. Safety Study NTSB Number: SS-95/01, NTIS Number: PB95-917001, Washington, D.C.	Study determined that split-shift sleeper berth use increased the risk of fatality and that duration of last sleep as well as continuous sleep were the most important predictors of fatigue-related accidents.
Hertz, R.P., "Tractor-Trailer Driver Fatality: The Role of Nonconsecutive Rest in a Sleeper Berth," Insurance Institute for Highway Safety, October 1987. Revised February 1988. http://www.fmcsa.dot.gov/rules-regulations/administration/rulemakings/final/05-16498-HOS-Final-Rule-8-25-05.htm .	Study found that CMV driver fatality was significantly associated with split sleeper berth use and that the quality and quantity of sleep obtained in the sleeper berth was less than that obtained when sleeping at home.
Dingus, et al, "Impact of Sleeper Berth Usage on Driver Fatigue," NHTSA, 2002. FMCSA-2004-19608-1994.	Concluded that sleeping in a moving vehicle impaired the quality of rest. ³
Pilcher, JJ and Huffcutt, Al. "Effects of sleep deprivation on performance: a meta-analysis." Pubmed.gov, May 1996. https://www.ncbi.nlm.nih.gov/pubmed/8776790 .	Found that a single, longer sleeping period was more refreshing than splitting sleep into multiple shorter periods and that fatigue and micro sleeps were more likely when an individual experienced disturbed sleep.

Most of these studies shown in Table 2 have findings that are potentially outdated due to advances in methods of conducting studies as well as advances in the understanding of fatigue, fatigue management, and how different sleep patterns affect performance and fatigue. More recent studies provide overwhelming documentation that the circadian rhythm affects fatigue far more than splitting sleep does, and that splitting sleep may be more beneficial than sleeping in a single day time period only. A literature review published by Belenky, et al in 2008 provides a strong case for conducting this pilot program, despite the earlier findings shown in Table 2. This literature review furthermore addresses the majority of publications mentioned in Table 2 with respect to why the subject of split sleep should be revisited.

IV. Pilot Program Requirements

³ Note that study is only relevant to driver's who participate in team driving scenarios, since this is the only situation where the vehicle can be moving while a driver is in the sleeper berth.

Specific requirements for pilot programs are found in Subparts D and E of 49 CFR Part 381. A pilot program is a study in which participants are given exemptions from one or more provisions of the Federal Motor Carrier Safety Regulations (FMCSRs) for up to 3 years to gather data to evaluate alternatives or innovative approaches to regulations, while ensuring that an equivalent level of safety is maintained.

A pilot program must include a program plan that incorporates the following six elements:

- (1) A scheduled duration of three years or less;
- (2) A specific data collection and safety analysis plan that identifies a method of comparing the safety performance for motor carriers, CMVs, and drivers operating under the terms and conditions of the pilot program, with the safety performance of motor carriers, CMVs, and drivers that comply with the regulation;
- (3) A reasonable number of participants necessary to yield statistically valid findings;
- (4) A monitoring plan to ensure that participants comply with the terms and conditions of participation in the pilot program;
- (5) Adequate safeguards to protect the health and safety of study participants and the general public; and
- (6) A plan to inform the States and the public about the pilot program and to identify approved participants to enforcement personnel and the general public. (49 CFR 381.500)

At the conclusion of each pilot program, the FMCSA will report to Congress the findings and conclusions of the program and any recommendations it considers

appropriate, including suggested amendments to laws and regulations that would enhance motor carrier, CMV, and driver safety and improve compliance with the FMCSRs. (49 CFR 381.520)

V. Structure of the Pilot Program

The purpose of this pilot program is to examine whether regulatory flexibility related to the sleeper berth provision could be used to improve driver rest and alertness. Currently, any interstate driver who 1) operates a property-carrying CMV equipped with a sleeper berth, and 2) uses the sleeper berth provision, must take at least 8 consecutive hours in the sleeper berth, plus a separate 2 consecutive hours either in the sleeper berth, off duty, or any combination of the two, before returning to on-duty status. The pilot program would give participating drivers a temporary exemption from this requirement for consolidated sleeper berth time, within parameters specified by the Agency. For study purposes, drivers would be allowed to split their sleep into no more than two sleeper berth segments. Current regulations allow drivers to use one 10 hour period, or splits of 9 and 1 hours or 8 and 2 hours. Drivers operating under the exemption for this study would be allowed to use any combination of split sleeper periods, totaling 10 hours, with neither period being less than 3 hours⁴, allowing for the driver to use splits of 3 and 7 hours, 4 and 6 hours, or two 5 hour periods. Following study enrollment, drivers would be able to use split or consolidated sleep schedules as they choose (within study parameters), but they must still meet the daily minimum rest requirements.

This pilot program would recruit CDL drivers who operate a CMV equipped with a sleeper berth and who regularly use the sleeper berth provision. The study group

⁴ Note that if a driver has one period which is less than 3 hours, they are in compliance with current rules and therefore not driving under the exemption.

would include drivers from small, medium, and large carriers, as well as team drivers and owner-operators. To ensure statistical significance, approximately 200 study group participants are desired. Each participating driver would be recommended, but not required, to complete the Driver Education Module (Module 3) and Driver Sleep Disorders and Management Module (module 8) of the NAFMP before data collection starts to ensure participants are aware of the risks of driving fatigued and have tools available to manage their fatigue throughout the study. Drivers will be asked whether or not they chose to complete these modules, or whether they had completed them prior to study application.

Participating carriers that meet the eligibility criteria, as described later in this notice, may assist in recruiting study group drivers. Drivers will be enrolled in the study contingent upon approval from their carrier, as applicable (owner-operators will not need to meet this requirement).

The pilot program would also collect driver identification details and data on sleep, safety-critical events (SCEs), subjective sleepiness ratings, and behavioral alertness for up to a 90-day period per driver.

VI. Management of the Pilot Program

FMCSA has designated a project manager for the pilot program. Participating carriers would be publicly announced. FMCSA would develop the applications, agreements, and forms to be used by interested carriers and potential study group members.

Eligibility requirements and procedural matters are discussed in Sections VII and VIII of this notice.

VII. Eligibility Criteria to Participate

A. Motor Carriers

Motor carriers who have drivers participating in the pilot program must meet the following requirements:

- Grant permission for drivers to participate in the Flexible Sleeper Berth Pilot Program.
- Agree to comply with all pilot program procedures, which will be established and made available in written form to carrier-applicants prior to initiation of the pilot program.
- Grant permission for researchers to install an onboard monitoring system (OBMS) and/or electronic logging device (ELD) in each participating driver's vehicle throughout the study duration.
- Grant permission for drivers participating in the study to operate under the flexible sleeper berth exemption, as well as an exemption allowing participating drivers to maintain two hours of service logs (the study-provided ELD system will be the only way to properly track flexible sleeper berth hours of service).

B. Study Group Drivers

In order to participate in the Flexible Sleeper Berth Pilot Program, drivers must meet the following eligibility requirements:

- Be at least 21 years of age when the pilot begins.
- Operate a CMV equipped with a sleeper berth and regularly use the sleeper berth.
- Have a valid CDL.

- Be medically fit for duty (have a medical certificate that is valid throughout the period of participation).
- Have carrier approval for participation in the study (unless driver is an owner-operator).
- May not be a slip-seat driver who shares use of the same truck or truck-tractor with another driver(s) during separate periods such as shifts, days, or weeks.
- May not drive outside of the United States.
- Agree to the release of specific information⁵ to FMCSA for purposes of the pilot.
- Agree to study procedures⁶, including the use of ELDs and camera-based OBMSs.

VIII. Process to Apply to Participate

A. Motor Carriers

- Visit the pilot program website (www.sleeperberthstudy.com) and complete an electronic application with screening questionnaire, which will request the following details, at a minimum: name, carrier information, company name, job title, carrier size, and whether the carrier's drivers have previously completed the NAFMP (specifically modules 3 and 8). The carrier must grant permission for OBMS and/or ELD equipment to be temporarily installed in the vehicles of participating drivers, and for drivers to use the study-provided ELD system for recording HOS during the period of data collection (up to 90 days).

⁵ Information will be specified by the time drivers apply to participate. Collection of specified information must be approved prior to initiation of pilot program.

⁶ Procedures will be specified by the time drivers apply to participate. Specific procedures must be established and approved prior to initiation of the pilot program.

- The carrier's representative must acknowledge that driver data to include OBMS video, driving data, sleep data, performance data, and caffeine data must remain confidential and will not be shared with the company. The exception to this is ELD data for properly recording a driver's HOS.

B. Study Group Drivers

- Visit the pilot program website (www.sleeperberthstudy.com) and complete an electronic application and screening questionnaire, which will request the following details, at a minimum: name, contact information, MEC expiration date, CDL status, typical operation type (solo, team, or slip seat), location of their home terminal, whether they regularly drive a truck equipped with a sleeper berth, whether they regularly use their sleeper berth, whether they have previously completed modules 3 and 8 of the NAFMP, and whether they currently use paper or electronic HOS logs.
- Participate in a phone call with a member of the research team to confirm interest and eligibility.
- Obtain carrier permission to participate (unless the individual is an independent owner operator).
- Provide written, informed consent after a briefing session on data collection techniques and methods.

VIII. Data Collection Plan

Details of the data collection plan for this pilot program are subject to change based on comments to the docket and further review by analysts. Factors to be collected from each participating carrier and driver before the pilot program begins are discussed

in Section VII of this notice. Participating drivers will drive an instrumented vehicle (instrumented by the research team with a study-provided OBMS and custom ELD) for up to 90 days. During a pre-study briefing, participants will receive a study-provided smartphone (installed with a variety of data collection applications), as well as a wrist actigraphy device.⁷ Participants whose vehicles are not already equipped with a compatible ELD will be provided with an approved ELD application (installed on the study-provided smartphone). At a minimum, FMCSA will gather the following data during the study:

- ELD data, to evaluate duty hours and timing, driving hours and timing, rest breaks, off-duty time, and restart breaks.
- OBMS data, to evaluate driving behaviors, SCEs (crashes, near-crashes, and other safety-related events), reaction time, fatigue, lane deviations, and traffic density (as discerned from viewpoints of the multiple cameras), road curvature, and speed variability.
- Roadside violation data (from carriers and drivers, as well as the Commercial Driver's License Information System (CDLIS)), including vehicle, duty status, hazardous materials, and cargo-related violations (contingent upon inspections).
- Wrist actigraphy data, to evaluate total sleep time, time of day sleep was taken, sleep latency, and intermittent wakefulness.

⁷ Participants will wear wrist actigraphy devices (similar to commercially available smart fitness watches) throughout their time in the study. Actigraphy is a minimally obtrusive, validated approach to assessing sleep/wake patterns.

- Psychomotor Vigilance Test (PVT)⁸ data, to evaluate drivers' behavioral alertness based on reaction times.
- Subjective sleepiness ratings, using the Karolinska Sleepiness Scale,⁹ to measure drivers' perceptions of their fatigue levels.
- Sleep logs, in which drivers will document when they are going to sleep, when they wake up, and whether they are using the sleeper berth. For split-sleep days, drivers will record how and why they chose to split their sleep.

Other information that may be needed will also be collected through the participating carrier. Every effort will be made to reduce the burden on the carrier in collecting and reporting this data.

IX. Paperwork Reduction Act

The pilot program will require participating motor carriers to collect, maintain, and report to FMCSA certain information about their drivers who are participating in the pilot program. This will include identifying information and safety performance data for use in analyzing the drivers' safety history. The Agency will develop forms to promote uniformity in the data collected by the pilot carriers.

The Paperwork Reduction Act of 1995 (the PRA) (44 U.S.C. 3501-3520) prohibits agencies from conducting information collection (IC) activities until they analyze the need for the collection of information and how the collected data will be managed. Agencies must also analyze whether technology could be used to reduce the burden imposed on those providing the data. The Agency must estimate the time burden

⁸ For this study, drivers will be required to complete daily iterations of a brief PVT, a 3-minute behavioral alertness test which measures drivers' alertness levels by timing their reactions to visual stimuli.

⁹ The KSS is a 9-point Likert-type scale ranging from "extremely alert" to "extremely sleepy" and has been widely used in the literature as a subjective assessment of alertness.

required to respond to the IC requirements, such as the time required to complete a particular form. The Agency submits its IC analysis and burden estimate to the Office of Management and Budget (OMB) as a formal information collection request (ICR); the Agency cannot conduct the information collection until OMB approves the ICR.

Because certain aspects of this pilot program—such as the content of forms and reports—have not been finalized, the Agency is not posting possible IC burden data at this time. When the pilot program is implemented, this information will be posted and additional comments will be taken.

X. Removal from the Program

FMCSA reserves the right to remove any motor carrier or driver from the pilot program for reasons related, but not limited to, failure to meet all program requirements.

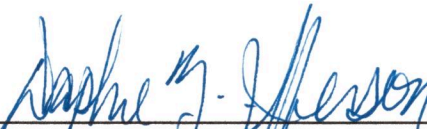
XI. Request for Public Comments

Instructions for filing comments to the public docket are included earlier in this notice. FMCSA seeks information in the following areas, but responses need not be limited to these questions:

1. Are any additional safeguards needed to ensure that the pilot program provides a level of safety equivalent to that without the consolidated sleeper berth time exemption?

2. Should completion of modules 3 and 8 of the NAFMP be required for study participation (instead of recommended)?
3. Are the data collection efforts proposed for carriers and drivers so burdensome as to discourage participation?
4. How should data collection efforts differ for team drivers?

Issued on:



Daphne Y. Jefferson
Deputy Administrator