Comments on
Federal Motor Carrier Safety Administration (FMCSA)
Advanced Notice of Proposed Rulemaking and
Request for Comments Regarding On-Board Recorders

Better Enforcement of Regulations Needed and Long Overdue

Public Citizen welcomes the opportunity to offer comments concerning electronic on-board recorders (EOBR). Fatigue-related crashes have long plagued the commercial trucking industry, with deadly results for both truckers and the driving public. FMCSA estimates of annual fatigue-related truck-crash fatalities have ranged from 276 to 755. To protect highway safety, hours-of-service (HOS) regulations place critical limits on driver duty time to ensure that truckers are able to receive the rest they need to drive safely. Limits on driver time especially are important to highway safety because they counter a tragically prevalent industry pay system that exploits drivers to increase marginal profits through intense pressure to drive longer hours, endangering both drivers and others on the road.

Compliance is critical to reaping the benefits of HOS regulations. FMCSA, however, relies upon manual logbooks known as driver records of duty status (RODS) for documenting driver hours of service. Essentially no more than an honor code system, RODS provide enormous potential for abuse, and falsification of duty time is “widespread” by FMCSA’s own admission. This method of documenting hours of

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1 65 FR 25546. 68 FR 22494.
3 65 FR 25558.
service effectively undermines enforcement of HOS rules and denies truckers and the driving public the benefits of HOS regulations.

A better method of recording driver duty status might not have been readily available when federal HOS regulations were first promulgated over 65 years ago, but automated recorders capable of more accurately documenting duty status have been available for over 35 years, and can now be purchased off-the-shelf.\(^4\) It is an injustice to both truckers and the driving public that the Department of Transportation (DOT) has not even seriously pursued requirements for technology to accurately record duty status. Moreover, the U.S. Court of Appeals for the District of Columbia Circuit harshly criticized FMCSA for failing to account for driver health in its 2003 HOS final rule, yet, amazingly, the agency excludes driver health from its discussion of the benefits of EOBRs in this Advanced Notice of Proposed Rulemaking (ANPRM) and Request for Comments. Each year, lives are unnecessarily lost because DOT has not required automated and tamper proof recorders for all carriers under the agency’s jurisdiction.

It is far past time FMCSA issued a requirement on automated recorders. Automated recorder technology has been available for decades. Congress recognized the potential of automated recorders to improve HOS compliance in 1988 legislation requiring DOT to issue a rulemaking addressing HOS issues. Also, advocacy groups have petitioned DOT to require automated recorders since 1986. The agency in 1999 proposed an EOBR rule, but failed to issue it. Now, with this ANPRM/Request for Comments, the agency is moving forward, but at a snail’s pace. The agency must fix this dangerous hole in HOS regulations promptly and fulfill this major part of its duty to improve large truck safety.

*Strong Incentives to Break Hours-of-Service Regulations*

Two prevalent payment methods in the trucking industry, by-the-mile and by-the-trip pay, provide strong incentives for truckers to stay on the road as long as possible and engage in other risky behaviors that endanger both them and others on the road. Also, with these two forms of compensation, driver time is essentially free for employers, providing little incentive for them to limit driver duty time or facilitate the efficient transport of goods. This system exploits drivers and encourages dangerous behaviors.

In the U.S., approximately 93 percent of long-haul truckers are paid by the mile or by the trip, rather than by the hour.\(^5\) Illegal in Europe, by-the-mile and by-the-trip pay reward long hours and high speeds. This system is ripe with the potential for disaster, and the statistics show it: Total on-the-job deaths are higher for truckers than for any other


occupation, and in 2002, 4,897 people were killed and 130,000 injured in crashes involving large trucks.

Studies have shown drowsy driving to be a factor in many crashes involving large trucks. In a 1990 study, the National Transportation Safety Board (NTSB) cited fatigue as a probable cause in 31 percent of fatal-to-the-driver large truck crashes it investigated. Additionally, in a 1995 study, NTSB cited driver fatigue as a probable cause in 58 percent of the single-vehicle large truck crashes it investigated. In the same study, NTSB cited a general research consensus that trucker fatigue is a contributing factor in as many as 30 to 40 percent of all large truck crashes.

NTSB also reported that in interviews with drivers involved in single-vehicle crashes, 19 of 107 drivers admitted falling asleep while driving. Additionally, a FHWA-sponsored survey revealed that 28 percent of drivers admitted falling asleep while driving in the prior month. Of those drivers who admitted falling asleep, 32.2 percent admitted falling asleep between 3 and 6 times in the past month.

The long hours that by-the-mile and by-the-trip pay reward also endanger the mental and physical health of truckers. Long, solitary shifts can bring feelings of isolation and can strain personal relations. Truckers have reported feeling lonely, tired, and irritable, as well as depression, anxiety, and skeletal-muscular problems.

Additionally, long hours can lead to drug use. There is a strong connection between HOS violations and drug use, suggesting that drivers may use drugs to stay awake during long shifts. While those drivers who break HOS rules may be predisposed towards reckless behavior, there is also a significant relation between positive drug test results among professional drivers and a shipment deadline for the load being delivered. This undercuts reckless predisposition as an explanation for the connection between drug use and HOS violations. Assuming that drivers on deadline work long hours, which is highly likely, this additionally supports the notion that long hours encourage drug use.

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8 Fatigue, Alcohol, Other Drugs, and Medical factors in Fatal-to-the-Driver Heavy Truck Crashes, NTSB Number SS-90/01. National Transportation Safety Board. 1990.
10 Id.
13 Fatigue, Alcohol, Other Drugs, and Medical factors in Fatal-to-the-Driver Heavy Truck Crashes, NTSB Number SS-90/01. National Transportation Safety Board. 1990.
14 Id.
By-the-mile and by-the-trip pay also provide little incentive for employers to limit driver hours. With these two payment methods, a driver’s time is essentially free, and companies may view long driving hours only as quicker delivery, at no extra cost. This system therefore also provides a strong incentive to promote long duty hours.

Another consequence of “free” driver time is that employers may disregard trucker duty time, contributing to the problem of inefficient dispatches and long waits at shippers and receivers. Lost time costs employers nothing, and with little reason for them to increase efficiency and reduce long waits at shippers and receivers, truck drivers spend an average of 33 – 40 hours per week at loading docks.\(^\text{15}\) Lost time does cost drivers, though, insofar as it consumes on-duty time that otherwise could be spent as paid driving time. This places the burden of making up lost time squarely on the shoulders of truckers, who often absorb lost time by illegally documenting it as off-duty time.\(^\text{16}\) This unlawful practice keeps drivers on duty longer, at the expense of the critical time needed for rest and sleep.

Public Citizen has received numerous emails from truckers complaining about long waits at shippers and receivers. One trucker wrote: “it is customary for drivers to have to lie on their log books showing an unload of 15 to 30 minutes when in actuality the receivers (who are capable of unloading in 30 min or less) typically take 4 hours or more….”

More than just rewarding and promoting dangerous behaviors, by-the-mile and by-the-trip pay make them virtually inevitable. This system sets the industry up for the plague of risky behavior from which it suffers.

Truckers do not drive long hours simply to make extra money. For many, driving long hours is the only way they can make a living at all. Time lost at shippers and receivers or because of inefficient dispatch is cut from a driver’s paycheck if they cannot drive the maximum driving hours. In order to make a decent wage, drivers often must absorb lost time by staying on duty longer. One trucker who wrote Public Citizen described the dilemma truckers face: “We have a choice: to drive safely and live in poverty, drive unsafe and exchange our health for money, or stop driving.” Clearly, this is not a choice—but the purest form of exploitation.

*HOS Regulations Play a Critical Role in Limiting On-Duty Hours and Protecting Highway Safety*

With strong incentives to drive long hours, effective HOS regulations can and should provide a necessary counterbalance. Dangerous behaviors endemic to the trucking industry jeopardize driver mental and physical health, and endanger the lives


and livelihoods of the driving public. New and improved HOS regulations are critical to curbing long driver duty hours in an industry structured to produce them.

HOS regulations are intended to limit drivers to on-duty hours consistent with circadian rhythm, so as to limit fatigue. As a matter of human physiology, truckers can work only so long before suffering performance deterioration. Studies have shown that performance ability decreases after eight hours on duty, and decreases, in FMCSA’s language, “geometrically” during the tenth and eleventh hours on-duty.\(^{17}\)

Such deteriorated performance can have tragic results. FMCSA estimates of annual fatigue-related truck-crash fatalities have ranged from 276 to 755.\(^{18}\) Additionally, studies have shown that truckers at fault in fatal crashes are 2½ times more likely to have driven at least 10 hours than drivers not at fault,\(^ {19}\) and 82 percent of single-vehicle large truck crashes involving drivers who exceeded HOS limits were fatigue related.\(^ {20}\)

As these statistics make painfully clear, HOS regulations that limit trucker on-duty time to account for natural human fatigue and circadian rhythm are critical to highway safety. There is practically no dispute on this issue. Congress recognized the importance of limiting driver duty time in 1935, and Department of Transportation (DOT) has long acknowledged the dangers of drowsy driving. In 1988, the Federal Highway Administration (FHWA) emphasized the central role driver fatigue plays in large truck crashes and suggested that the problem primarily resulted from violation of HOS regulations.\(^ {21}\) Driver fatigue was also voted the top safety concern at a 1995 FHWA summit involving drivers, motor carrier representatives, government officials and safety advocates.\(^ {22}\)

**Driver Records of Duty Status (RODS) Undermine Compliance with Hours of Service Regulations**

Though DOT recognizes the importance of HOS regulations, it has effectively undermined them by relying upon manual logbooks for documenting driver hours of service. In order to be effective, HOS rules must be followed. Given the strong incentives to break HOS rules, enforcement is absolutely critical to upholding the integrity of HOS regulations and maximizing the benefits they offer, as FMCSA itself has acknowledged.\(^ {23}\)

\(^{17}\) 68 FR 22471.
\(^{18}\) 65 FR 25546. 68 FR 22494.
\(^{22}\) 65 FR 25541.
\(^{23}\) 68 FR 22500 – 01; 65 FR 25585; and 65 FR 25596.
Inexplicably, the agency still relies upon a completely out-of-date method of documenting HOS that renders enforcement utterly hollow. First promulgated in 1938, regulations allow drivers to keep track of their own hours in logbooks. Amounting to little more than an honor code, this method of recording HOS provides no protection against the falsification of records. And because police heavily rely upon them to identify HOS violations, RODS undermine enforcement of HOS and, subsequently, HOS regulations themselves.

With so many incentives to violate HOS regulations and with RODS making it so easy to get away with doing so, it is no surprise that studies reveal extensive falsification of HOS records. In a University of Michigan survey, only 16 percent of drivers reported that logbooks are generally accurate, and 56 percent of drivers admitted working more hours than recorded in the last month. In fact, the average driver in the survey worked 64.3 hours in the last seven days, with 25 percent and 10 percent of drivers working 75 hours and 94 hours, respectively.24 These responses corroborate previous surveys, which show widespread violation of HOS rules and falsification of records.

Also, the U.S. Court of Appeals for the District of Columbia Circuit has acknowledged that “driver noncompliance with federal regulation… might be described as the stuff of legend,” citing lyrics from the song “Six days on the Road,” by E. Green and C. Montgomery:

The I.C.C. is a-checking on down the line.
Well, I’m a little overweight and my log books are way behind.
But nothing bothers me tonight, I can dodge all the scales all right,
Six days on the road, I’m gonna make it home tonight.25

Also, because RODS allow easy violation of HOS regulations, carriers are provided with a tempting opportunity to seek a competitive advantage over other carriers by breaking HOS rules. By keeping drivers on the road longer than HOS regulations allow, carriers are able to provide faster delivery and deliver more than carriers that comply with HOS regulations. Carriers that comply with HOS regulations then face a competitive disadvantage in comparison to those carriers that do not comply, strongly discouraging compliance with HOS regulations. Given widespread noncompliance with HOS regulations and the agency’s lax attitude towards enforcement, carriers may view compliance as merely an unnecessary incursion upon profits.

Enforcement of HOS regulations is critical. A report written by top specialists at FHWA states that “because compliance with hours-of-service regulations… has a strong influence on the ability of a driver to perform safely, recording of duty status and time

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24 65 FR 25558
becomes an essential regulatory issue.” FMCSA is fully aware of widespread noncompliance with HOS regulations, including logbook falsification, which it has described as “widespread.” In fact, the agency’s Regulatory Impact Analysis (RIA) of its 2003 final rule revising HOS regulations took non-compliance to be the norm, and calculated costs based on status quo noncompliance, setting out a different and less likely set of calculations that assumed full compliance.

Incredibly, DOT has, at best, only passively pursued technologies that would improve driver compliance with HOS regulations. The agency currently has no automated recorder requirement, and it has not even issued a requirement for the long-haul sector despite its own acknowledgement of long-haul drivers’ exceeding involvement in fatigue-related fatal crashes.

### Unnecessary Deaths Due to Agency Inaction

So many factors overwhelmingly point to the need for a method of ensuring accurate HOS records. However, federal agencies responsible for large truck safety have failed to update RODS regulations to protect truckers and the public. RODS might have been the only viable option for recording hours of service over 65 years ago when HOS regulations were promulgated, but the fact that DOT has not issued critical revisions to reflect technological advances since then is absolutely irresponsible. Lives are unnecessarily lost week after week because of DOT’s inaction.

Technology to improve the accuracy of HOS records and enforcement has been available for decades. The European Commission established a regulation requiring an automated recorder in 1970, nearly 35 years ago. Today, all European Union nations, Turkey, Israel, Japan, South Korea, Brazil, and Venezuela fully require automated recorders. Yet the United States, with its vastly larger trucking fleet, dependence on the shipment of goods over highways, high death rate, massive non-compliance and financial capability continues to lag behind on this basic safety measure.

A recent example of consistent agency inaction on this issue is FMCSA’s failure to issue in final form its 2000 proposal to require EOBRs for long-haul and regional drivers in its 2003 final rule. The agency claimed that neither “the costs nor the benefits of EOBR systems are adequately known,” yet data suggest that automated recorders on large trucks improve highway safety. In Germany in 1975, the first year tachographs fully penetrated the trucking fleet, there was one crash involving large trucks

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27 65 FR 25546.
30 65 FR 25540.
31 68 FR 22488.
resulting in injury per 790,000 kilometers traveled. In 1985, the number of miles traveled per crash resulting in injury rose 54 percent, while the number of miles traveled per crash resulting in injury for passenger cars rose only 22 percent during the same period. The mechanical tachographs used in Germany during that period were highly susceptible to tampering, yet their full implementation throughout the truck fleet still resulted in a reduction in injuries resulting from crashes involving large trucks.

NTSB also has long advocated mandatory implementation and use of recorders to monitor HOS. In 1990, NTSB recommended that DOT require automated recording devices in carriers. In 1998, after eight years of agency inaction, NTSB classified the recommendation as “Closed—Unacceptable Action.” As mentioned in FMCSA’s current rulemaking, NTSB stated that it found “no indication of aggressive research and prompt action to develop and require advanced technical solutions to address the intent of Safety Recommendation H-90-28.” Despite NTSB’s recommendation and subsequent placement of automated recorders on its “top ten” list, DOT has failed to act on this critical issue.

Also contradicting FMCSA’s claim, DOT reports have acknowledged the benefits automated recorders offer for safety and hours of service compliance. A 2001 report by the Office of the Inspector General (OIG) stated that “use of electronic recorders and other technologies to manage the hours-of-service requirements has significant safety value.” Additionally, a FHWA report noted that many carriers that have used automated on-board recorders improved compliance with HOS regulations. FMCSA also has predicted that electronic recorders would reduce crashes and has agreed with NTSB that EOBRs would reduce violations by making record falsification difficult and by changing attitudes towards compliance.

Despite compelling evidence that automated recorders improve highway safety, NTSB’s repeated urgings, and DOT’s own admission of their benefits, DOT has staunchly resisted requiring automated recorders for carriers. In fact, DOT has ignored numerous petitions from auto safety groups to require automated recorders for nearly 20 years. The Insurance Institute for Highway Safety (IIHS) petitioned DOT to require automated recorders in long-distance carriers in 1986, 1987, 1988, 1989, and 1995. Several advocacy groups also joined IIHS in petitioning DOT to require automated recorders in 1995. DOT denied all petitions. Additionally, IIHS submitted further evidence of the technical and economic feasibility of such devices in 2000 and 2002. Its 2000 submission included reference to a study showing a reduction in crash occurrences among vehicles equipped with electronic recorders. This petition was similarly denied.

34 65 FR 25585.
35 65 FR 25563 and 65 FR 25570.
36 65 FR 25567 and 65 FR 25596.
Even with a Congressional mandate, DOT has failed to grant recording technology the attention it is due. In 1988, Congress passed a law requiring DOT to issue a rulemaking to improve safety regarding compliance with HOS regulations that specifically mentioned on-board recorders. DOT never issued the rule. In 1995, Congress ordered FHWA to revise HOS regulations to address a number of fatigue-related truck safety issues. On-board recorders again were among the issues listed, yet FHWA never issued the final rulemaking Congress required.\textsuperscript{37}

In 2000, the agency did issue a notice of proposed rulemaking (NPRM) to require truckers to use EOBRs instead of RODS. FMCSA, however, removed the EOBR requirement from the final rule it issued in 2003, citing three primary reasons for its retraction. The agency claimed that: one, it knew neither the costs nor the benefits of EOBRs; two, implementing a performance standard for EOBRs might be difficult; and three, EOBRs might be too intrusive.\textsuperscript{38}

Public Citizen sued FMCSA over the final rule, which Public Citizen claimed violated Congress’s mandate. In a decision in favor of Public Citizen, the U.S. Court of Appeals for the District of Columbia Circuit found FMCSA’s three excuses “flawed.” The court stated that Congress’s mandate “required the agency, at a minimum, to collect and analyze data on the costs and benefits of requiring EOBRs,” noting that “the agency’s explanation in all likelihood does not conform to this statutory requirement.”\textsuperscript{39} Further, the court stated “the agency has offered no good reason for treating this problem with such passivity.”\textsuperscript{40}

HOS regulations are critical to highway safety, yet they are only effective if they are adequately enforced. RODS, however, greatly compromise enforcement capabilities, effectively undermining HOS regulations and endangering truckers and the driving public. EOBRs would allow for more accurate recording of HOS and would provide much-needed teeth for enforcement of these critical rules.

Action on this issue is long overdue. It is astounding that the agency is merely requesting comments on automated recorders, rather than requiring their installation as a final rule. The agency should have looked into this critical issue with the emergence of automated recorder technology, not decades later. We are worried that FMCSA’s ANPRM/Request for Comments will be only another example of agency inaction on this critical issue. We desperately hope, however, that FMCSA will redeem itself and require EOBRs for all commercial motor carriers under the agency’s jurisdiction. Though it is already too late for many, this action would grant truckers and the driving public the safety they both deserve. The agency must take this opportunity to live up to its responsibility to save lives.

\textsuperscript{37} 49 U.S.C § 31136.
\textsuperscript{38} 68 FR 22488 – 89.
\textsuperscript{39} Public Citizen v. Federal Motor Carrier Safety Administration, 374 F.3d 1209 (D.C. Cir. 2004).
\textsuperscript{40} Id.


In addition to safety benefits for truckers and the driving public, EOBRs also offer economic benefits to the trucking industry. EOBRs would reduce costs to the industry that are the result of fatigue-related crashes, allow for better scheduling and routing of trucks, and eliminate the costly paperwork burden associated with RODS. Indeed, many trucking companies have electronic systems for scheduling trucks and tracking deliveries, making the additional HOS tracking function a relatively simple matter.

Many sources, including carriers, have cited the economic benefits of EOBRs. Vehicle operating cost topped both the primary and secondary reasons carriers listed for acquiring electronic recorders.\textsuperscript{41} Also, FMCSA noted in its ANPRM/Request for Comments that EOBRs would improve asset management, customer service, and scheduling of vehicles and drivers. In Europe, driver, union, and carrier response to automated recorder requirements reportedly has been positive.\textsuperscript{42} Recorders are viewed as contributing to equal competitive conditions, fostering a better reputation for the transportation industry, and protecting against driver exploitation.\textsuperscript{43}

Additionally, FMCSA stated in its ANPRM/Request for Comments that EOBRs would “substantially reduce the collection of information requirements” of RODS. The paperwork cost associated with RODS is enormous, and substantial savings in this area would greatly benefit the trucking industry. FMCSA estimated in its ANPRM/Request for Comments that motor carriers incur a time burden of 161 million hours each year, and the total cost of RODS is $63.3 million annually.

Reductions in fatigue-related crashes that would come with better enforcement of HOS regulations would also reduce costs to industry. An FHWA report noted that “savings can also be derived from avoidance of adverse occurrences, such as crashes….”\textsuperscript{44} FHWA cited repairs, insurance claims, cargo damage, increased insurance premiums, and customer relationships as economic costs of crashes.

With so much to gain economically from the use of EOBRs for monitoring HOS compliance, claims that EOBRs will impose an unbearable cost burden upon carriers are at best dubious. In 1998, FHWA invited carriers already using GPS technology to use GPS-based automated recorders to monitor HOS compliance. Despite minimal costs, as carriers already possessed GPS technology, only one carrier accepted.

As this illustrates, cost is not the primary objection to EOBRs for many carriers. Rather, it is likely that the real objection to EOBRs is that they will hold carriers to HOS

\textsuperscript{42} Lehmann, Dr. Gerhard. Statement at International Symposium on Transportation Recorders. May 1999.
\textsuperscript{43} Id.
\textsuperscript{44} Thomas, Neill L. and Deborah M. Freund. \textit{On-Board recording for Commercial Motor Vehicles and Drivers: Microscopic and Macroscopic Approaches}. 1999.
regulations, which they have continually been able to evade. FMCSA has a responsibility to enforce HOS regulations, and failing to do so compromise both safety and the integrity of the agency and HOS regulations. FMCSA should not grant objections to compliance with HOS regulations any consideration in the agency’s deliberations on driver acceptability of EOBRs. It is the agency’s responsibility to ensure compliance with HOS regulations, regardless of whether carriers wish to comply or not.

EOBRs with GPS Technology Provide an Opportunity to Bolster Homeland Security and Would Enable Better Responses to Crashes Involving Trucks Carrying Hazardous Material

Trucks carrying hazardous material provide a tempting target for terrorists, and post 9/11 concerns make this an issue that cannot be ignored—even though the Bush administration has done just that for three years. EOBRs with GPS technology would allow tracking of trucks, especially trucks carrying hazardous materials, providing a much needed security measure. GPS technology would also allow for quicker and more prepared responses to crashes involving trucks carrying hazardous material. EOBRs with GPS technology could be designed to automatically notify emergency responders of a crash involving a truck carrying hazardous material. Information about crash severity, the chemicals that a truck was carrying, and crash location also could be relayed to emergency personnel, enabling a far more prepared response to crashes.

Voluntary Use of EOBRs is Ineffective and Counterproductive

While FMCSA has provided carriers with the opportunity of using EOBRs instead of RODS to monitor hours-of-service, only one company has accepted the offer. Without a requirement from FMCSA, carriers will remain reluctant to use EOBRs. It is likely that one of the primary reasons for this is that carriers fear that if they adopted EOBRs, they would suffer a competitive disadvantage in relation to companies that do not, allowing them more easily break HOS rules. Thus, voluntary use will not provide the full safety benefits of EOBRs.

Privacy Concerns

It is important to guard EOBR data against abuse, but unwarranted privacy concerns do not outweigh the numerous economic and safety benefits that EOBRs offer. Rather than robbing truckers, industry, and the driving public of the benefits of EOBRs, FMCSA should address privacy concerns by looking into ways to protect EOBR data from abuse.

Also, DOT has already confronted privacy concerns regarding monitoring of driver HOS. In 1980, FHWA rejected claims that RODS unduly invaded driver privacy, noting that they are used to monitor compliance with federal regulations.\(^\text{45}\) EOBRs, as

\[^{45}\text{45 FR 82284 and 45 FR 82289.}\]
FMCSA acknowledged in its 2000 NPRM, are simply “a more effective form of the self-monitoring and -reporting drivers have been required to perform for many decades.”\(^{46}\)

**Responses to Requested Comments**

FMCSA must require EOBRs for all trucks under the agency’s jurisdiction, including both long-haul and short-haul carriers. Public Citizen below responds to FMCSA’s requested comments on the capabilities and technological features needed to ensure effective EOBRs. Responses are provided as appropriate.

**A. Synchronization of Recorder to a Vehicle Operation Parameter:** As FMCSA notes in its ANPRM/Request for Comments, relying exclusively upon vehicle location and interpretive algorithms to detect driving time has been ineffective in the past. The literature and technology review FMCSA sponsored also noted that relying solely upon vehicle location data was an unreliable method of determining driving time.\(^{47}\) The review stated that “the coupling of vehicle location and engine data would improve the quality of the data that is being used to generate the driver log,”\(^{48}\) and specifically recommended a combination of vehicle location data and engine data to monitor compliance with HOS regulations.\(^{49}\) Accurate monitoring of duty hours is critical to enforcement of HOS regulations and to driver acceptance of EOBRs. FMCSA should follow the recommendation of the report it commissioned when issuing an EOBR requirement.

**B. Amendment of Records:** Manual entry of duty status and revision of records effectively undermines the purpose of an automated recorder. EOBRs should be designed so that there is no need to amend records. This includes both amending records and manually entering duty status. A driver should not be allowed to revise or manually enter portions of records that recorders are capable of providing. For instance, a driver should not be allowed to revise driving time records, as recorders can accurately monitor driving time. Additionally, the agency must favor recorders that can accurately record non-driving duty status, rather than allow drivers to amend records. For instance, EOBRs that signal with a beep or a blinking light when driver input is needed would undercut the need for drivers to revise non-driving duty records.

**C. Duty Status Categories When the CMV Is Not Moving:** Again, the agency should require recorders that eliminate the need to amend records.

**D. Ensuring that Drivers are Properly Identified:** Driver identification is critical to ensuring the accuracy of EOBRs in monitoring driver hours of service. Biometric

\(^{46}\) 65 FR 25563.


\(^{48}\) Id.

technology, such as a fingerprint scan, may enable a far more precise identification of drivers. Also vehicles should not be able to be turned on until an authorized driver logs in. This would increase security and prevent EOBRs from inadvertently applying on-duty hours to the wrong driver. Miles driven should be recorded for each driver and companies should pay drivers based on these records. This would discourage team drivers from splitting hours between drivers when, in fact, one has done most of the driving.

E. Reporting and Presentation Formats: Any violations should clearly appear on the screen of the recorder so that, at a glance, enforcement personnel can determine whether a driver has committed any violations. The agency should consult enforcement personnel to determine which screen format works best.

F. Audit Trail: An audit trail would assist enforcement of HOS regulations. However, measures to ensure that data cannot be altered must be enacted.

H. Verification of Proper Operation: We support a method for verifying correct EOBR operation, as it is necessary to ensure accurate records. The method the agency ultimately chooses should be easy enough to allow drivers to quickly check for correct recorder function prior to trips, and also to allow enforcement personnel to conduct quick checks at roadside stops. In the case of a malfunctioning recorder, a driver should not be allowed to depart on a trip with a malfunctioning recorder. If a recorder malfunctions mid-trip, a driver should be allowed to use RODS for only a short period of time.

I. Testing and Certification Procedures: FMCSA or some other federal agency should conduct testing of recorders. Recorder manufacturers should not be allowed to certify their own devices. Allowing this would make it very easy for manufacturers to sell non-compliant recorders to carriers, compromising safety. A list similar to NHTSA’s Conforming Product List may be the best approach.

J. EOBR Maintenance and Repair: Recorders should be required to document any malfunctions and record notice of the malfunction, including information about its nature and the date and time. This information should also be automatically displayed on the screen of the recorder. Repairs and calibrations should only be made at an agency-approved facility. This would reduce the likelihood of errors and fraud. To allow necessary agency oversight, FMCSA should have access to facilities and relevant materials.

K. Development of “Basic” EOBRs to Promote Increased Carrier Acceptance: As FMCSA’s commissioned literature review noted, combining engine and vehicle location data is needed to ensure the accuracy of the data used to calculate driver hours of service. A minimally compliant EOBR that does not incorporate both sets of data will compromise accurate monitoring of driver hours of service. FMCSA should follow the recommendation of its commissioned literature review when issuing an EOBR requirement and require EOBRs that incorporate both engine and vehicle location data.
M. Potential Benefits and Costs: FMCSA, OIG, and FHWA have all recognized the safety benefits of EOBRs and data suggest that automated recorders improve highway safety. Also, NTSB and highway safety advocacy groups have long recommended mandatory use of automated recorders to monitor HOS compliance and improve highway safety. Carriers, FMCSA, and FHWA have also recognized the economic benefits of using EOBRs to monitor HOS compliance. Additionally, European truckers, carriers, insurance companies, and unions have voiced support for recorder legislation, citing several benefits from industry-wide use of automated recorders.

Given the invaluable benefits of lives saved and injuries avoided, on a purely economic level, the benefits of using EOBRs may well outweigh the cost of equipping trucks with EOBRs.

Because of rampant noncompliance with HOS regulations, EOBRs, which help facilitate critical enforcement of HOS regulations, would essentially provide the benefits that HOS regulations intend to, but currently do not. Though federal law, enforcement of HOS regulations has been undermined for decades. This has denied truckers and the public the safety they deserve while also jeopardizing DOT’s integrity. Additionally, FMCSA does not even mention the benefits EOBRs would have on driver health in the ANPRM/ Request for Comments. The U.S. Court of Appeals for the District of Columbia Circuit lambasted FMCSA’s 2003 final rule for its failure to account for driver health, yet the agency has again done just that.

N. Incentives to Promote EOBR Use: Any incentives granted should be part of a timely phase-in period leading to 100 percent compliance for carriers subject to HOS regulations.

O. Miscellaneous Questions:

1. FMCSA should mandate recorders combining engine and vehicle location data (such as GPS) for all motor carriers under the agency’s jurisdiction. The agency must also follow all other specifications outlined above, which are critical to ensuring effective EOBRs.

2. An FHWA report acknowledges that EOBRs have improved carrier compliance with HOS regulations.\textsuperscript{50} FMCSA also has agreed that EOBRs would reduce HOS violations.\textsuperscript{51}

3. Recorders must be capable of recording accurate duty records, all information relevant to accurate duty records, and extensive crash data. See particular specifications above.

\textsuperscript{50} Thomas, Neill L. and Deborah M. Freund. \textit{On-Board recording for Commercial Motor Vehicles and Drivers: Microscopic and Macroscopic Approaches}. 1999.

\textsuperscript{51} 65 FR 25563.
4. FMCSA should focus on acquiring recorders capable of recording duty status without driver input. Recorders should be designed so that there is no need for drivers to make revisions.

5. GPS technology is capable of precise location detection. FMCSA’s requirement should reflect this.

6. Biometric identification technology, particularly fingerprint scans, is available and would ensure accurate driver identification.

7. Drivers should not be allowed to amend records.

8. FMCSA should require a standardized file transfer protocol to better facilitate easy data transfer.

9. Any incentive should be granted as a reward for early-compliance with an across-the-board requirement.

Conclusion

FMCSA must require EOBRs for all commercial carriers under its jurisdiction, including both long-haul and short-haul carriers. To ensure accuracy and effectiveness, EOBRs must combine engine and location data to monitor compliance with HOS regulations. EOBRs also must accurately record driver duty status, and must be designed to eliminate the need for driver input. Additionally, EOBRs must be equipped with features to ensure accurate driver identification. Too many lives have already been lost because the agency has failed to meet its responsibility on this issue. FMCSA should immediately issue a rulemaking requiring EOBRs for all commercial carriers under its jurisdiction.