



National Highway Traffic Safety Administration

49 CFR Parts 563 and 585

[Docket No. NHTSA-2025-0050]

RIN 2127-AM78

Event Data Recorders

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM); response to petitions for reconsideration.

SUMMARY: NHTSA published a final rule on December 18, 2024, in response to a mandate of the Fixing America's Surface Transportation Act (FAST Act) to establish the appropriate recording period in NHTSA's Event Data Recorder (EDR) regulation (49 CFR Part 563). The final rule amended the pre-crash data capture requirements of EDRs by increasing the recording duration and sample rate from 5 seconds at 2 Hz to 20 seconds at 10 Hz. The agency received three petitions for reconsideration from the Alliance of Automotive Innovation, the EDR Committee of SAE International, and FCA US LLC (a subsidiary of Stellantis N.V.) in response to the final rule. NHTSA is proposing to delay the compliance date from September 1, 2027, to September 1, 2028, and implement a phase-in period for EDRs to meet the new requirements.

DATES: Comments must be received by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. In compliance with the Paperwork Reduction Act, NHTSA is also seeking comment on a reinstatement with modification to a previously approved information collection. For additional information, see the Paperwork Reduction Act section under the Rulemaking Analyses and Notices section below. All comments relating to the information collection requirements should be submitted to NHTSA and to the Office of Management and Budget (OMB) at the address listed in the **ADDRESSES** section on or before

[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Proposed Compliance Dates: NHTSA proposes delaying the compliance date and adopting a 4-year phase-in period to comply with the requirements in 49 CFR Part 563 as amended by the final rule published on December 18, 2024, final rule, “Event Data Recorders.” The proposal would require that 25 percent of a manufacturer’s applicable vehicles produced from September 1, 2028, to August 31, 2029, comply with Part 563, followed by 50 percent from September 1, 2029, to August 31, 2030, 75 percent from September 1, 2030, to August 31, 2031, and 100 percent on and after September 1, 2031. NHTSA also proposes that vehicles manufactured in two or more stages or that are altered are not required to comply with the rule until on or after September 1, 2031. Small-volume and limited-line manufacturers would be required to comply beginning on September 1, 2032. The proposal would permit voluntary early compliance.

ADDRESSES: You may submit comments to the docket number identified in the heading of this document by any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the online instructions for submitting comments.
- *Mail:* Docket Management Facility, M-30, U.S. Department of Transportation, West Building, Ground Floor, Rm. W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- *Hand Delivery or Courier:* West Building, Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590 between 9 a.m. and 5 p.m. Eastern Time, Monday through Friday, except Federal holidays. To be sure someone is there to help you, please call 202-366-9332 before coming.
- *Fax:* 202-493-2251.

Regardless of how you submit your comments, please mention the docket number of this document.

Comments on the proposed information collection requirements should be submitted to: Office of Management and Budget at www.reginfo.gov/public/do/PRAMain. To find this particular information collection, select “Currently under Review – Open for Public Comment” or use the search function. It is requested that comments sent to the OMB also be sent to the NHTSA rulemaking docket identified in the heading of this document.

Instructions: For detailed instructions on submitting comments and additional information on the rulemaking process, see the Public Participation heading of the Supplementary Information section of this document. Note that all comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided.

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

Confidential Business Information: If you claim that any of the information in your comment (including any additional documents or attachments) constitutes confidential business information within the meaning of 5 U.S.C. 552(b)(4) or is protected from disclosure pursuant to 18 U.S.C. 1905, please see the detailed instructions given under the Public Participation heading of the Supplementary Information section of this document.

Privacy Act: Please see the Privacy Act heading under the Regulatory Analyses section of this document.

FOR FURTHER INFORMATION CONTACT: For technical issues, you may contact Joshua McNeil, Office of Crashworthiness Standards (joshua.mcneil@dot.gov). For legal issues, you may contact Eli Wachtel, Office of the Chief Counsel (eli.wachtel@dot.gov). You can reach these officials by phone at 202-366-1810. Address: National Highway Traffic Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue SE, Washington, DC 20590.

SUPPLEMENTARY INFORMATION

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I. Executive Summary

In this notice of proposed rulemaking (NPRM), NHTSA responds to petitions for reconsideration of a final rule published December 18, 2024, that amended the data capture requirements of event data recorders (EDRs) to specify a 20-second recording duration and a 10 Hz sample rate.¹ The primary purpose of an EDR is to record technical information for a brief period before, during, and after a collision, aiding in post-crash analysis and reconstruction. The data recorded by the EDR provides a snapshot of the vehicle dynamics that can aid crash investigators in assessing the performance of specific safety equipment, including air bag deployment strategies, air bag operation, and event severity. This information can also help NHTSA and others identify potential opportunities for safety improvements in current and future vehicles and implement more effective safety regulations. Manufacturers are not required to install EDRs in their vehicles. However, EDRs that are voluntarily installed must meet the requirements NHTSA has established in 49 CFR Part 563 (Part 563).

NHTSA received three petitions for reconsideration of the December 2024 final rule from the Alliance of Automotive Innovation (Auto Innovators),² the EDR Committee of SAE International (SAE),³ and FCA U.S. LLC (FCA), a subsidiary of Stellantis N.V.⁴ NHTSA is

¹ 89 FR 102810 (December 18, 2024).

² NHTSA-2024-0084-0005.

³ NHTSA-2024-0084-0004.

⁴ NHTSA-2024-0084-0003.

granting the petitions for reconsideration in part and proposing to adopt the compliance timeline requested by both SAE and Auto Innovators in their respective petitions. This modified timeline would provide manufacturers with an extended lead time and a phase-in to allow them to integrate the necessary EDR and Airbag Control Module (ACM)⁵ architecture changes within their current model development cycles without disrupting existing product plans. The agency's proposal balances the need for enhanced crash data, as mandated by the FAST Act, with practical industry constraints to ensure these safety advancements can be implemented effectively across the entire vehicle fleet. However, NHTSA is not proposing to adjust the recording duration and sample rate requirements for EDRs as finalized in the December 2024 final rule. These technical specifications represent enhancements to vehicle crash data collection capabilities that will support more comprehensive crash investigations. NHTSA is deferring a final decision on reconsideration until after review of comments received in response to this NPRM.

NHTSA is proposing to extend the lead time for initial compliance with the requirements of the December 18, 2024, rule by one year from September 1, 2027, to September 1, 2028. In addition, NHTSA proposes adding a phase-in period that would require 25 percent of a manufacturer's fleet equipped with EDRs to be compliant with the requirements of the final rule beginning in the first year of compliance, and an additional 25 percent each year after that, until the fleet is fully compliant in the fourth year. This matches the lead time and phase-in period suggested in the petitions received from Auto Innovators and SAE. We seek comment on all aspects of this proposal.

II. Background

A. Event Data Recorders and Part 563

⁵ Manufacturers have different names for this module including the Airbag Control Unit (ACU), Sensing Diagnostic Module (SDM), Restraints Control Module (RCM), Powertrain Control Module (PCM), Supplemental Restraint System (SRS), and the like. In this document, ACU and ACM may be used interchangeably as both terms were presented in the petitions for reconsideration.

NHTSA established Part 563 on August 28, 2006, setting forth requirements for the accuracy, collection, storage, survivability, and retrievability of data in vehicles equipped with EDRs. NHTSA does not mandate EDRs on vehicles, but, if vehicles are equipped with EDRs, the EDRs must meet specific data capture requirements as outlined in Tables I-III of Part 563. Table I lists 15 data elements all EDRs subject to Part 563 are required to record, along with the recording interval (duration) and data sample rate. Table II lists optional data elements that EDRs are not required to capture, but if recorded, are subject to the recording interval (duration) and sample rate for each listed data element in Table II.⁶ All data elements in Tables I and II must be reported according to the range, accuracy, and resolution in Table III of Part 563. Since Part 563 became fully effective on September 1, 2012, the adoption of EDRs has been nearly universal. NHTSA's internal analysis estimates 99.5 percent of model year 2021 passenger cars and other vehicles with a gross vehicle weight rating (GVWR) of 3,855 kilograms (kg) (8,500 pounds) or less are equipped with EDRs that comply with Part 563.

EDRs are often integrated into a vehicle's ACM, the electronic system used to determine the deployment timing for air bags. EDRs record data related to restraints and deployment internal to the ACM, often at or just after a triggering event, referred to as crash data. EDRs also record data from other existing vehicle sensors such as wheel speed or accelerator pedal position that is transferred from the vehicle's other onboard computers (electronic control units or ECUs) to the ACM via controller area network (CAN) or similar communication. The EDR temporarily stores this pre-crash data in a buffer. When a triggering event occurs, pre-crash and crash data are stored in non-volatile memory, so it survives even if the vehicle battery is damaged or disconnected in the crash. This data can include vehicle speed, throttle position, brake application, steering angle, seatbelt use, and air bag deployment timing. If a vehicle is equipped with an EDR, it must contain at a minimum the data outlined in Table I of Part 563, but

⁶ Two data elements in Table II are listed as "if equipped," meaning if a vehicle has the specified equipment, the specified information must be recorded.

manufacturers can add additional data elements at their discretion. The required pre-crash data elements in Table I include: (1) speed, vehicle indicated; (2) engine throttle, percent full (or accelerator pedal, percent full); and (3) service brake, on/off. The storage size of this data is considered small, often just kilobytes, because the EDR only stores a short interval of data around the time of a triggering event.

B. Rulemaking Actions

On June 22, 2022, pursuant to section 24303 of the Fixing America's Surface Transportation Act (FAST Act), Pub. L. No. 114-94 (December 4, 2015), NHTSA issued an NPRM to amend Part 563.⁷ The NPRM relied on the findings of an EDR Duration Study⁸ required by the FAST Act and information gathered from NHTSA's defects investigation experience which indicated that EDR data can be used to assess whether a vehicle operated properly at the time of an event, or to help detect undesirable operations. The June 2022 NPRM proposed extending the recording interval and data sample rate of pre-crash data elements under Part 563 from 5 seconds at 2 Hz to 20 seconds at 10 Hz (*i.e.*, an increase from 2 samples per second to 10 samples per second).

NHTSA explained in the June 2022 NPRM that extending the recording duration from 5 to 20 seconds would help capture critical data on the initiation of pre-crash actions and maneuvers for most crashes. The June 2022 NPRM acknowledged the proposed changes could result in additional costs, as more memory would be required to store the increased amount of pre-crash data. However, the agency explained the additional memory could be incorporated into the existing or planned memory design in vehicles, based on the relatively small amount of memory necessary to record the pre-crash data for 20 seconds at 10 Hz.⁹ NHTSA proposed an effective date of the first September 1 one year after the publication of the final rule, noting that

⁷ 87 FR 37289 (June 22, 2022).

⁸ Event Data Recorder Duration Study [Appendix to a Report to Congress. Report No. DOT HS 813 082B], 2022, <https://doi.org/10.21949/1530244>.

⁹ NHTSA estimated that an increase in pre-crash recording duration from 5 seconds to 20 seconds with an increase in recording frequency from 2 Hz to 10 Hz would require 1.33 Kb of additional memory for one event.

a one-year lead time was appropriate because increasing the required pre-crash data would not require any additional hardware or a substantial redesign of either the EDR or the vehicle and would likely require only minimal software changes.

After reviewing comments submitted in response to the June 2022 NPRM, NHTSA published a final rule on December 18, 2024, that increased the pre-crash recording duration and sample rate requirements of the seven pre-crash data elements in Part 563 from 5 seconds to 20 seconds, as proposed.¹⁰ Per the statutory mandate of the FAST Act, the December 2024 final rule aimed to establish the appropriate period for EDRs to capture and record vehicle-related data to provide sufficient information to investigate the cause of motor vehicle crashes.

NHTSA explained in the December 2024 final rule that the increased recording duration will provide more details on actions taken prior to crashes. Specifically, vehicle actions such as running a stop sign or red light could be captured in full and included in crash reconstruction when supplemented with roadway and traffic control information. The increased recording duration could also help capture any corrective maneuvers taken by a vehicle prior to an initial road departure or braking and acceleration actions taken in the approach stage before traversing large intersections. NHTSA explained that the increased sample rate will help clarify the interpretation of pre-crash data, including braking and steering actions taken by the vehicle, especially in situations where an action occurs just prior to impact (between 0.5 seconds prior to impact and the time of impact). The agency also noted that this could both help reduce potential uncertainty related to the relative timing of recorded data elements and assist with the identification of potential pedal misapplication. The compliance date set by NHTSA for the December 2024 final rule was September 1, 2027, for vehicles equipped with an EDR. Small-volume or limited-line manufacturers were given until September 1, 2029, to comply, and altered or multi-stage manufacturers were given until September 1, 2030, to comply.

¹⁰ Three data elements are included in Table I of part 563 as mandatory elements to be recorded if an EDR is equipped. Four data elements are included in Table II of part 563 as having to meet certain requirements if they are recorded by the EDR.

III. Summary of Petitions for Reconsideration

NHTSA regulations allow any interested person to petition the Administrator for reconsideration of a rule. Under NHTSA's regulations, petitions for reconsideration must provide an explanation why compliance with the rule is not practicable, is unreasonable, or is not in the public interest. In addition, petitions must be received within 45 days of the publication of the final rule. The Administrator may consolidate petitions relating to the same rule. The Administrator may issue a final decision on reconsideration without further proceedings or may provide opportunity for comment.¹¹

The agency received three petitions for reconsideration in response to the December 2024 final rule from Auto Innovators, SAE, and FCA.¹² In its petition, Auto Innovators stated that the changes to the pre-crash recording period and sample rate lack sufficient evidence of safety benefits and impose significant implementation burdens. The petition from Auto Innovators raised three main concerns. First, the petition stated that NHTSA's reliance on the EDR Duration Study in the December 2024 final rule without fully addressing comments to the June 2022 NPRM was inadequate.¹³ Second, the petition claimed that the two-year lead time in the final rule (compliance date of September 1, 2027) underestimated the complexity of changing the hardware and software for EDRs. The petition disputed NHTSA's claim that many EDRs can meet the new requirements with minor changes, citing needs for increased memory, energy, and redesigned components, which could strain supply chains and vehicle production cycles. Third, Auto Innovators stated that NHTSA's analysis in the December 2024 final rule oversimplified the costs of compliance by focusing on component-level upgrades (*e.g.*, capacitors, memory) and did not adequately consider broader redesign, validation, and recertification expenses for existing and late-stage development vehicles. The petition stated that capacitor size estimates differed by

¹¹ 49 CFR 553.35, 553.37.

¹² NHTSA-2024-0084-0005 (Auto Innovators), NHTSA-2024-0084-0004 (SAE), and NHTSA-2024-0084-0003 (FCA).

¹³ Auto Innovators and SAE in response to the June 2022 NPRM critiqued aspects of the EDR Duration Study, including the model year of the vehicles, the small set of data elements, and the basis for concluding that 20 seconds of pre-crash data enhances crash analysis beyond the previous requirement of 5 seconds.

a factor of approximately 1,000 and that any changes to the number of capacitors could impact the vehicle architecture or onboard computers. Regarding crash data retrieval (CDR) tools, Part 563 mandates that manufacturers ensure commercially available tools for EDR data access and retrieval within 90 days of a vehicle's first sale if the vehicle is equipped with an EDR. 49 CFR 563.12. Auto Innovators highlighted the unaddressed cost, complexity, and lead time for updating CDR tools for all manufacturers within the 90-day window, especially without a phase-in period.

Auto Innovators sought a revised rule that balances safety goals with practical implementation to maintain the current level of EDR implementation. The petitioner suggested a three-year lead time with a four-year phase-in (25/50/75/100 percent). NHTSA understands this suggestion to mean the first September 1 that is three years from the publication of the December 2024 final rule. Auto Innovators requested that NHTSA reassess the feasibility and benefits of the December 2024 final rule and conduct a more thorough cost-benefit analysis with industry input. It also urged alignment with international standards.¹⁴

SAE stated that the December 2024 final rule is impractical, unreasonable, and not in the public interest. SAE noted that it advocates for the use of EDRs as tools for crash reconstruction, not driver behavior monitoring devices, and stated that the prior requirements (5 seconds at 2 Hz) are sufficient. SAE stated that 20 seconds of pre-crash data captures speculative actions unrelated to crash causation, posing risks of privacy violations and misleading reconstructions without crash-site evidence. SAE disputed NHTSA's reliance on the EDR Duration Study, asserting that no evidence supports the benefit of longer data capture durations. Regarding CDR tools, while most manufacturers use Bosch CDR products,¹⁵ SAE stated that due to the complicated connection and interface requirements for each manufacturer, Bosch would have to develop new

¹⁴ UN ECE No. 160 maintains the 5 seconds/2 Hz minimum requirements for pre-crash recorded data elements.

¹⁵ In comments on the June 2022 NPRM, Bosch suggested exempting older, soon-to-be discontinued models from the amendments, arguing that capturing new vehicle technologies is more beneficial than extending recording duration. While supporting a sample rate increase to 10 Hz for better capture events such as braking, steering, and lane change maneuvers, Bosch noted that even this change alone would require software and hardware modifications.

software and possibly all new interfaces and software to read EDR data. SAE asserted this development process will be further complicated by longer imaging times for each device due to the increased amount of EDR data.¹⁶

SAE also stated that a two-year timeline is inadequate and would require manufacturers to implement extensive hardware and software updates and perform rigorous testing and validation, and could prompt manufacturers to disable EDRs, thus undermining safety goals. SAE recommended retaining the previous recording requirements or adopting a phase-in and hosting a workshop to assess manufacturer needs if the new recording requirements are maintained. SAE also questioned NHTSA's cost justification process under the Office of Management and Budget (OMB) guidelines, requesting related documentation and cited the cost estimates provided by Auto Innovators in response to the June 2022 NPRM.¹⁷ SAE recommended that NHTSA reconsider the final rule, citing minimal societal benefit, privacy risks, and industry burdens. SAE also requested a three-year lead time with a four-year phase-in (25/50/75/100 percent).

FCA's petition stated that it supports the goal of extending the EDR capture and recording period but that the two-year lead time is impractical to implement. FCA explained that the design changes necessary to update their EDRs do not align with existing product plans, necessitating costly, expedited investments. FCA asserted that a more gradual timeline would reduce costs significantly, potentially to zero, by aligning with standard industry product lifecycles. FCA suggested a 4-year phase-in as follows: September 1, 2027: 25 percent compliance; September 1, 2028: 50 percent compliance; September 1, 2029: 75 percent compliance; September 1, 2030: 100 percent compliance. FCA stated that this timeline would allow current vehicle models to be phased out under existing rules while new models adopt the

¹⁶ SAE notes there are currently 22 manufacturers and 55 brands supported worldwide by the tool, and these changes would require a substantial workload. SAE mentions that other EDR data collection tool suppliers (*e.g.*, GIT) would be negatively impacted.

¹⁷ Auto Innovators estimated the cost burden for the initial year would be \$231.36 million. That estimate is \$8.4 million per manufacturer (for 17 manufacturers) for development and testing plus the incremental EDR module cost (\$5.40) times the number of vehicles fitted in that year.

updated standards, enabling cost-effective validation through crash tests. FCA stated that removing EDR functionality due to timeline pressures would not align with its safety and transparency goals as it remains committed to maintaining EDR technology. FCA emphasized that EDRs aid post-crash analysis rather than directly saving lives.

IV. Discussion and Analysis

NHTSA is proposing to grant the petitions in part by extending the lead time and implementing a phase-in schedule to align the changes made to EDRs more closely with the production life cycles of vehicles. The added lead time and phase-in period aims to ease the financial burden associated with the testing and development stages necessary to validate the EDR functions as intended and not compromise performance of the air bag deployment systems. The three petitions expressed concerns with the following general areas of the final rule: lead time, costs and benefits, estimate of hardware and software changes, basis for recording duration, industry standards, and CDR development. The sections below examine each topic in turn, discussing the petitions and explaining the agency's response.

A. Lead Time and Phase-In Schedule

Lead Time

Auto Innovators, SAE, and FCA stated that the final rule's compliance date (September 1, 2027) is impractical, forcing a redesign of current EDRs and electrical systems across all vehicle models. They recommended a phase-in schedule: Auto Innovators and SAE suggested an additional year of lead time (a total of three years of lead time) followed by a four-year phase-in (25/50/75/100 percent), while FCA suggested a four-year phase-in (25/50/75/100 percent) starting from the rule's compliance date (a total of two years of lead time).¹⁸

NHTSA has tentatively determined that the implementation timeline for the December 2024 final rule may create unnecessary redesign and validation costs, especially with regards to

¹⁸ The final rule required all vehicles equipped with an EDR to meet the new requirements beginning two years following the first September 1 after publication. Because the final rule was published in December 2024 the compliance date was set as September 1, 2027.

late-stage design and in-market vehicles, and may risk some such vehicles no longer being equipped with EDRs. Therefore, the agency is proposing to amend Part 563 by extending the lead time by one year and adding the phase-in period suggested by Auto Innovators and SAE in their petitions for reconsideration. This option is being proposed in part because, based on the cost estimates below, the extra year of lead time compared to the schedule suggested by FCA would reduce costs further. This option is also being proposed to lower the risk that NHTSA and a wide range of stakeholders could lose access to valuable EDR data. Since Part 563 is an “if equipped” standard, manufacturers retain discretion over whether to install EDRs in vehicles, provided any EDRs that are installed on light vehicles required to have frontal air bags comply with the regulation’s requirements. If some manufacturers determine that costs or technical issues involved in bringing certain models into compliance with the requirements in the December 2024 final rule outweigh the benefits of including EDRs, they may discontinue EDR installation.

NHTSA’s December 2024 final rule set an effective date of September 1, 2027. The approximately two years and eight months provided more implementation flexibility than the June 2022 NPRM’s proposed one-year lead time. This decision was partially based on manufacturer feedback suggesting some EDRs already had the memory, energy, and processing power for capturing 20 seconds of pre-crash data at 10 Hz. NHTSA did acknowledge that even EDRs with the capability to record 20 seconds of pre-crash data would require testing and validation to ensure compliance and to prevent interference with air bag timing. However, NHTSA admitted that it lacked the data to estimate how many EDRs in the current vehicle fleet possess the necessary hardware for the new requirements, given adequate time for software changes and system validation.

The agency acknowledges that manufacturers may have insufficient time to adopt in full the new requirements which could force limiting some of their EDR functionality. As highlighted in the petitions, the development cycle and installation of EDRs can span three to

four years, and manufacturers may have already finalized EDRs for model years 2026 through 2030, making immediate changes costly.

Therefore, to lower the risk that NHTSA and a wide range of stakeholders could lose access to valuable EDR data due to burdensome cost and redesign constraints imposed by the December 2024 final rule's original timeline, NHTSA proposes to extend the lead time and add a phase-in schedule for vehicles equipped with EDRs to meet the pre-crash recording requirements. The agency did not intend for manufacturers to remove EDR functionality and did not suggest manufacturers remove EDRs to meet the requirements in the December 2024 final rule. NHTSA anticipates that a phase-in schedule would allow manufacturers to implement the necessary EDR and ACM architecture changes in existing model development cycles. This approach also ensures the agency's continued collection of valuable data from vehicles with EDRs that do not yet meet the new requirements.

The phase-in schedule, excluding small volume and multi-stage manufacturers, would be as follows for vehicles equipped with EDRs:

- 25 percent of the vehicles manufactured on or after September 1, 2028, and before September 1, 2029.
- 50 percent of the vehicles manufactured on or after September 1, 2029, and before September 1, 2030.
- 75 percent of the vehicles manufactured on or after September 1, 2030, and before September 1, 2031.
- 100 percent of the vehicles manufactured on or after September 1, 2031.

Small-volume manufacturers and multi-stage manufacturers would not be subject to the phase-in. Small-volume manufacturers would have an additional year to comply, and multi-stage manufacturers and alterers would have two additional years. As proposed, the requirements would apply beginning September 1, 2032, to small-volume manufacturers or limited-line manufacturers and September 1, 2033, for vehicles manufactured by manufacturers producing altered vehicles or vehicles in two or more stages.

Cost Savings Associated with this Proposed Rule

In developing this response to the petitions, NHTSA analyzed potential cost savings from different lead time extensions and phase-in schedules. Table 1 summarizes societal cost saving based on a three-year phase-in with a one-year lead time extension. The proposed lead time and phase-in (one-year extension followed by 25/50/75/100 percent phase-in) means the first model year (MY) impacted by the final rule would apply to consumers purchasing new MY2029 vehicles. The phase-in would begin on September 1, 2028, with 25 percent compliance of vehicles between September 1, 2028, and August 31, 2029, increasing to 50 percent and 75 percent in the following years, and 100 percent after August 31, 2031. This phase-in is projected to save \$9.95 to \$25.14 million in 2028, \$6.63 to \$16.76 million in 2029, and \$3.32 to \$8.38 million in 2030. The lead time extension itself is projected to save an additional \$13.26 to \$33.52 million in 2027, resulting in total quantified savings of \$33.15 to \$83.80 million from 2027 to 2030. When discounting at three percent, the cost savings is approximately \$29.77 million to \$75.23 million. When discounting at seven percent, the cost savings is approximately \$25.95 million to \$65.57 million.

In comments to the June 2022 NPRM and the petitions addressed in this document, manufacturers documented significant implementation costs associated with the mandatory updates to EDRs across their vehicle fleets. The estimates from Auto Innovators indicated that mid-cycle engineering modifications would require an estimated \$231.36 million in redesign expenditures in the first year followed by \$88.56 in subsequent years. The additional lead time and phase-in schedule would enable manufacturers to integrate compliant EDRs into their standard development timelines, eliminating the need for costly expedited engineering solutions. NHTSA's conservative estimate of \$33.15 million to \$83.80 million in quantified savings represents only the direct costs avoided through this approach to extend the lead time and offer a phase-in. The agency does not have the information to estimate the additional cost savings from manufacturers not having to make substantial design changes to vehicle models in the middle of

their production cycle. Manufacturers may find further unquantifiable savings through flexibility and technological advancements, allowing them to phase out older EDRs lacking the necessary capabilities to record for 20 seconds at 10 Hz without requiring extensive modifications. For example, NHTSA anticipates that emerging storage technologies could replace Electrically Erasable Programmable Read-Only Memory (EEPROM), currently a common method for recording EDR data. These newer technologies would allow data to be written to non-volatile memory more quickly than EEPROM, potentially reducing the reserve power needed if the vehicle battery fails during the data recording process. If manufacturers determine that alternatives like flash memory or ferroelectric random-access memory (FRAM) are suitable for EDRs and cost-effective solutions, the implementation costs may decrease. In addition, as technology advances, manufacturers can expect either reduced prices for existing memory components or increased storage capacity at comparable price points, without significantly increasing the physical size of EDR modules.

Table 1 – Summary of Cost Savings by Model Year 3-Year Phase-In and 1-Year Extension (Millions)

Model Year	Phase in Schedule	Incremental Cost		Estimated Cost Savings to Society	
		FRE	Supplemental Analysis	Quantified	Unquantified
2028	0%	\$13.26 - \$33.52	\$0	\$13.26 - \$33.52	Potential reduction in cost due to increased flexibility, developments in technology, and learning.
2029	25%	\$13.26 - \$33.52	\$3.32 - \$8.38	\$9.95 - \$25.14	
2030	50%	\$13.26 - \$33.52	\$6.63 - \$16.76	\$6.63 - \$16.76	
2031	75%	\$13.26 - \$33.52	\$9.95 - \$25.14	\$3.32 - \$8.38	
2032+	100%	\$13.26 - \$33.52	\$13.26 - \$33.52	\$0	
Total Cost Savings				\$33.15 - \$83.80	

Note: Values may not sum due to rounding.

B. Cost Estimates

The petitioners raised several issues with the cost analysis in the December 2024 final rule. Broadly, petitioners raised issues with the component hardware and software cost estimates NHTSA used, such as an inadequate estimate of the changes to the amount of memory and reserve power that would be needed, the costs associated with additional validation and testing

needed to meet the new requirements, and the component estimates in the final regulatory evaluation (FRE)¹⁹ supplementing the December 2024 final rule.

NHTSA is not adjusting its cost estimates with regard to hardware and software changes in response to the petitions. It is not clear from the Auto Innovators' petition what aspect of the December 2024 final rule petitioners are requesting be amended if such a change in cost estimates is made. Nonetheless, the agency previously underestimated the amount of time some manufacturers would need to design, test, and validate EDRs after implementing hardware and software changes. The proposed additional lead time and phase-in period should alleviate the financial burden associated with manufacturers having to upgrade EDRs across their models. It may also allow manufacturers to increase the amount of non-volatile memory and RAM, if needed, and validate the correct transfer rates and frequencies of the required data (Table I elements). It would also allow manufacturers to assess whether more reserve energy is necessary to write the increased amount of data within the EDR or additional reserve energy sources for maintaining power for other vehicle systems after a triggering event. Furthermore, this proposed extended period may facilitate the testing and development of newer, faster data processing and writing technologies, potentially reducing the reserve energy needed for reliable data capture.

Regarding the component hardware itself, NHTSA estimated in the June 2022 NPRM and December 2024 final rule that the amount of memory required to meet the new requirements would increase from 0.90 kB to 2.26 kB per event, not accounting for necessary memory buffers. While the June 2022 NPRM initially anticipated near-zero costs based solely on memory upgrades, the December 2024 final rule's analysis was updated to account for EDRs lacking sufficient hardware to accommodate the increased data. This revised cost analysis included incremental expenses for upgrading all hardware components necessary for buffering and writing the data to non-volatile memory. Feedback indicated many manufacturers use flash memory (standalone or in microcontrollers) with capacities up to 96 kB to capture EDR data. A few

¹⁹ NHTSA-2024-0084-0002.

manufacturers are recording pre-crash data at 10 Hz (but not for 20 seconds) while many already capture pre-crash data elements not listed as required data elements to capture in Table I of Part 563. Based on the estimated data increase of 1.33 kB per event, NHTSA continues to believe manufacturers either have sufficient memory in a subset of their EDRs or can develop EDRs with more memory, if needed, to capture 20 seconds of data given enough time to test and develop EDRs.

Based on the amount of data to be recorded with the extended duration and the current amount of memory available in EDRs (32 Kb to 96 Kb), NHTSA did not anticipate a need for more reserve power in the December 2024 final rule and has not received information to change this assumption in the NPRM. Another study on EDRs published by NHTSA (referred to as the EDR Technologies Study in the NPRM and 2024 Final Rule)²⁰ showed a decade-long trend of manufacturers moving from EEPROM to flash memory, which should reduce the amount of time necessary to write the data and consequently the reserve energy needed to complete the writing process. Manufacturers had indicated to NHTSA that some EDR modules already possess the hardware capabilities (in terms of memory, power, and controller specifications) to meet the new requirements. Therefore, NHTSA is not adjusting its cost estimates for hardware and software changes.

NHTSA is not altering the component-level costs presented in the FRE supplementing the December 2024 final rule. The agency provided a cost range (\$13.26 million to \$33.52 million annually) based on the hardware specification of two EDR platforms to meet the new Part 563 requirements, which were components selected to meet the AEC-Q200 standard. NHTSA is addressing an error in the analysis, however, that the FRE should have used “mF” (millifarad) instead of “µF” (microfarad) as the standard unit of capacitors. The agency’s cost estimates have therefore been revised to include upgrading from a 3.3-mF capacitor to a 6.8-mF capacitor. The average unit prices, after a 70 percent discount, were \$0.24 for 3.3-mF capacitors

²⁰ DOT HS 812 929.

(based on 24 quotes) and \$0.26 for 6.8-mF capacitors (based on 13 quotes), resulting in a \$0.02 difference, consistent with the component-level upgrade cost presented in the FRE.

C. Basis for December 2024 Final Rule and Benefits

The petitions from Auto Innovators and SAE critiqued the EDR Duration Study that NHTSA used to justify extending the recording duration and criticized NHTSA discussion in the June 2022 NPRM and December 2024 final rule of the benefits of the increased amount of EDR pre-crash data.²¹ Auto Innovators requested that NHTSA reconsider the EDR duration and frequency specifications and examine the possibility that similar safety benefits can be attained through less burdensome requirements. SAE requested that NHTSA retain the prior 5-second duration and 2-Hz recording frequency for pre-crash data elements or adopt a phase-in schedule for manufacturers to meet the new EDR requirements.

NHTSA is not proposing to amend these aspects of Part 563. Auto Innovators claims NHTSA has not demonstrated the potential safety benefits of the extended recording duration. However, Congress mandated NHTSA conduct a study to determine an appropriate recording duration for providing sufficient information to investigate the cause of motor vehicle crashes. Following the submission of this study's findings, the FAST Act required NHTSA to issue a final rule. The June 2022 NPRM and December 2024 Final Rule extensively detail the benefits of increasing the recording duration.

The fundamental purpose of Part 563 is to ensure EDRs record data "valuable for effective crash investigations and for analysis of safety equipment performance." The EDR Duration Study's findings clearly indicate that the current 5-second pre-crash recording duration under Part 563 fails to capture the initiation of pre-crash braking and steering maneuvers in a significant number of cases. The study showed that extending the pre-crash recording duration would capture a greater amount of information regarding a vehicle's actions leading up to a triggering event, thereby increasing the value of EDR data for crash investigations. Based on

²¹ Auto Innovators and SAE offered similar comments in response to the June 2022 NPRM (87 FR 37289).

these findings, a 20-second recording duration is necessary to ensure that the initiation of pre-crash actions and crash avoidance maneuvers are captured for the majority of crashes. This recording duration will increase the utility of the recorded information, potentially leading to further advancements in the safety of both current and future vehicles. Furthermore, the study concluded that a more comprehensive understanding of pre-crash actions will aid in the evaluation of crash avoidance systems (such as lane departure warning, lane keeping assist, forward collision avoidance, automatic emergency braking, and intersection safety assistance systems), even if specific data from these systems is not directly reported by the EDR.

The EDR Duration Study aimed to identify the necessary recording duration for investigating crash causation. The study was not directed to prove that increasing the recording duration of EDR data would increase safety or to estimate the cost of design changes associated with extending the recording duration. NHTSA believes the study provides a robust basis for increasing the recording duration to 20 seconds based on the study's finding that a 5-second window often misses significant pre-crash actions, particularly for road departure and intersection crashes. The study showed that 5 seconds is insufficient to capture crucial information, such as the initiation of crash avoidance maneuvers like braking and steering, in a considerable percentage of crashes where EDRs are triggered. For example, the study demonstrated that approximately 35 percent of drivers that applied brakes did so outside of the 5-second window prior to impact. The actions of the vehicles captured beyond 5 seconds would assist investigators with crash reconstruction. Moreover, the study indicated that 20 seconds would encompass the 90th percentile of recording duration needed for lane departure, intersection, and rear-end crashes.

NHTSA acknowledges the vehicles used in the study lacked modern safety features that could have intervened within five seconds of the crash event. However, current regulations do not mandate that EDRs capture the status of active safety systems. While manufacturers may voluntarily record data on modern safety features in their EDRs, it could not be consistently

included in the study. Consequently, the current five-second recording duration of most EDRs inherently restricts the ability to analyze crash causation beyond that timeframe. The study used the 100-Car Naturalistic Driving Study (NDS) and Strategic Highway Research Program (SHRP 2) NDS because they contained data extending beyond five seconds, enabling researchers to analyze vehicle actions in rear-end crashes, lane departures, and the approach and traversal stages when passing through an intersection.

The EDR Duration Study was conducted in two phases. Phase one used existing crash data from NHTSA's database to analyze how often the five-second EDR recording duration failed to capture the start of driver actions before crashes. This phase established that the five-second requirement was inadequate and proved the need for longer recording durations. Phase two used naturalistic driving study data to examine the complete timeline of driver pre-crash actions (beyond five seconds pre-crash). Researchers used this real-world driving behavior data to determine what EDR recording duration would be needed to capture when drivers first began taking pre-crash actions. Phase two of the EDR Duration Study examined newer vehicles than the vehicles examined in Phase one. Though active safety features are not required to be recorded in EDRs, Phase two found that increased recording time could allow for more voluntary recording of active safety systems. The activation times for ABS in that data ranged from two to nine seconds before a crash, further demonstrating the inadequacy of a five-second recording duration to capture all relevant pre-crash vehicle dynamics. Moreover, understanding vehicle dynamics and driver behavior that occur before ABS activation is crucial for comprehensive crash causation analysis. These earlier timeframes can contain the initial decision points and driving patterns that precipitate the conditions leading to ABS engagement. Without this extended timeline data, investigators could miss critical information about steering and braking inputs, early avoidance maneuvers, and progressive system interventions that form the complete causal chain of events.

The EDR Duration Study referred to driver “behavior” and “actions” interchangeably. Literature has shown that crash causation is often related to driver error, so understanding a driver’s actions pre-crash is crucial. Therefore, the study focused on the duration needed to capture a driver’s actions pre-crash in full, which is within the scope of EDR data collection for effective crash investigation purposes. Consequently, the Phase two objective was precisely to determine a recording duration that enhances the certainty of capturing the complete timeline of pre-crash actions.

NHTSA underscores that achieving the most accurate reconstruction of events triggering EDR recording necessitates the continued integration of all pertinent information alongside EDR data. When analyzing data more likely to represent normal driving behavior and less directly related to crash causation, the EDR Duration Study specifically examined actions preceding the event, such as changes in steady-state vehicle velocity and the earliest instances of braking. A finding from Phase two of the study was that a 20-second pre-crash data window would encompass the 90th percentile of the required recording duration for the analyzed crash modes (lane departure, intersection, and rear-end) and associated crash avoidance maneuvers.

NHTSA emphasizes that the 20-second extended recording duration will be particularly beneficial in analyzing intersection crashes. These crashes typically involve an approach stage as the vehicle nears the intersection and a traversal stage in which the vehicle is exposed in the intersection. Based on the EDR Duration Study, extending the pre-crash recording duration to 20 seconds would capture approximately 90 percent of all intersection events and nearly all braking scenarios, compared to less than one percent with the five-second recording duration. The extended duration, combined with the increased sample rate, would document the complete sequence of driver actions from initial accelerator release (occurring up to 12 seconds pre-crash) through brake application (up to 10 seconds pre-crash) to any evasive maneuvers. With typical intersection events lasting 10-19 seconds depending on the configuration, the longer duration would capture the entire approach and traversal phases. This EDR data would reveal the critical

decision points across various intersection sizes and approach types (*e.g.*, complete stops, low-speed rolling stops, high-speed rolling stops). Similarly, in road departure crashes, longer durations could capture more complete information on gradual lane departures and corrective steering or braking maneuvers initiated by the driver before the initial departure from the roadway. This extended duration could also prove valuable in analyzing events occurring on larger highways, potentially capturing the actions of a vehicle as it approaches a stop sign or a signaled intersection, even across multiple lanes.

Regarding privacy concerns, NHTSA reaffirms that EDRs do not record personally identifiable information. The data captured is routinely overwritten, preserving data only when specific crash events meet the defined trigger threshold in Part 563. Extending the pre-crash recording duration to 20 seconds is not anticipated to heighten privacy concerns, as it involves no new or significantly altered technology for collecting, storing, or disseminating personally identifiable information. Moreover, the Driver Privacy Act of 2015, enacted under the FAST Act after Part 563's establishment, legally designates the vehicle owner or lessee as the owner of EDR data. Retrieval of this recorded data is strictly limited to purposes of enhancing motor vehicle safety and safety research (provided the data remain non-personally identifiable), or with the explicit consent of the vehicle owner or through a lawful court or administrative order. These privacy protections should effectively address expressed concerns while enabling the agency to fulfill the FAST Act's mandate of establishing an appropriate recording period within NHTSA's EDR regulation.

Auto Innovators and SAE stated that there will remain an ongoing need to collect supplementary data like police reports and ADAS event data for a more complete understanding of crash causation. NHTSA agrees that supplemental information (*e.g.*, police reports) remains crucial for researchers, law enforcement, and reconstructionists to analyze vehicle and crash dynamics. However, NHTSA clarifies that the FAST Act's mandate specifically addressed pre-crash recording duration, not the addition of ADAS event data to be captured by EDRs. In

response to SAE's caution against solely relying on EDR data, NHTSA emphasizes that the December 2024 final rule did not suggest abandoning the consideration of other critical factors in crash investigations. Instead, the increased data, coupled with a higher sample rate, aims to offer a more complete understanding of the pre-crash actions of the vehicle and their interplay.

NHTSA is not mandating the inclusion of additional data elements beyond those listed in Part 563 at this time. However, the extended lead time and phase-in period proposed in this notice could present an opportunity for manufacturers to modernize the EDRs being equipped in their vehicles if they so choose. This timeframe may allow manufacturers the flexibility to develop and rigorously test EDR systems capable of capturing crucial information related to crash avoidance technologies and other ADAS like SAE Level 2 systems.²² This includes data that is already available within other existing ECUs onboard the vehicle, but that may not currently be recorded by the EDR. Notably, some manufacturers already equip vehicles with EDRs that capture status for systems like adaptive cruise control, automatic emergency braking, forward collision warning, and lane departure warning, which are all data elements beyond the current Part 563 requirements. Manufacturers may voluntarily add data elements to be recorded by their EDRs, provided these additions do not compromise the EDR's ability to meet the minimum data capture requirements outlined in Part 563. This modernization could significantly enhance the richness and utility of EDR data for future safety research and analysis.

Therefore, NHTSA is not proposing to amend the 20-second recording duration and 10 Hz sample rate requirements for EDRs as finalized in the December 2024 final rule.

D. Industry Standards

In its petition, SAE asked for more information on the process associated with the Office of Management and Budget (OMB) Circular No. A-119 (Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment

²² SAE Level 2 refers to features that provide steering and brake/acceleration support to the driver. An example would be lane centering and adaptive cruise control features functioning at the same time while the driver constantly supervises the support features to maintain safety.

Activities). SAE asked whether NHTSA sent any documentation to OMB in justification of the costs and the rationale per OMB's conformity assessment activities (per OMB A-119).²³ SAE requested the agency to identify and share such documentation. Auto Innovators stated that NHTSA should have exercised discretion when implementing the FAST Act requirement and instead should have sought to align with established industry standards and international regulatory requirements more closely.

NHTSA carefully considered the consensus standards applicable to EDR data elements in establishing Part 563 and in amending Part 563 in the December 2024 final rule.²⁴ NHTSA declined to adopt the voluntary consensus standards for the pre-crash recording because such a decision would be inconsistent with the best available information to the agency and conflict with the outcome of a study required by the FAST Act. The factors the agency considered when implementing a conformity assessment program are discussed in the preamble to the December 2024 final rule with regards to the requirements of the National Technology Transfer and Advancement Act of 1995 (NTTAA) (Pub. L. 104-113). These factors have not changed, and NHTSA declines to propose amending Part 563 pursuant to align with industry consensus standards.

With regards to material submitted pursuant to Circular A-119, the Circular A-119 annual report does not typically include rulemaking and decision information, such as costs. It identifies where NHTSA regulations incorporate a government-unique standard in lieu of an industry-developed voluntary consensus standard and explains the reasons for such usage.

²³ In relevant part, OMB A-119 states, "In those circumstances where an agency elects to use or develop a government unique standard in lieu of using a voluntary consensus standard, Section 12(d) of the NTTAA requires the agency to submit a report describing the reason(s) to OMB. Under the Circular, this report is submitted to OMB through the National Institute of Standards and Technology (NIST). For more information on reporting, see Sections 9-11 of this Circular." Section 9 of OMB A-119 states, "At minimum, your agency must have the ability to provide to OMB, through NIST, (1) a report on the agency's use of government-unique standards in lieu of voluntary consensus standards, along with an explanation of the reasons for such 33 usages, as required by Section 12(d) of the NTTAA and as described in Section 5c of this Circular; and (2) a summary of your agency's activities undertaken to carry out the provisions of this Circular."

²⁴ There are consensus standards related to EDRs, most notably standards published by SAE (J1698— Event Data Recorder), Institute of Electrical and Electronics Engineers (IEEE) (Standard 1616, IEEE Standard for Motor Vehicle Event Data Recorder) and UN Regulation No. 160 (which was followed by UN Regulation No. 160 Revision 1).

E. CDR Development

Part 563 mandates that manufacturers ensure commercially available tools for EDR data access and retrieval within 90 days of a vehicle's first sale if the vehicle is equipped with an EDR. 49 CFR 563.12. NHTSA acknowledges the concerns raised by Auto Innovators, SAE, and Bosch regarding EDR data accessibility. The additional lead time and phase-in proposed here should enable producers of EDR data retrieval tools to update, test, and validate their new products, including direct-to-module cables, ensuring their capability to retrieve the EDR data effectively.

V. Rulemaking Analyses and Notices

Executive Orders 12866 and 14192

This proposed rule does not meet the criteria of a "significant regulatory action" under Executive Order (E.O.) 12866. Therefore, the Office of Management and Budget (OMB) has not reviewed this proposed rule under that Executive Order.

Under E.O. 14192, a deregulatory action is an action that has been finalized and has total costs less than zero. The rulemaking, if finalized as proposed, would be an E.O. 14192 deregulatory action.

The requirements specified in the final rule provide benefits through the use of EDR data in crash defects investigations. However, the FRE was not able to quantify those benefits. The FRE accounted for the incremental costs associated with the final rule. Incremental costs reflect the increase in total lifetime cost for end users as a result of meeting the requirements specified in the final rule relative to costs incurred under the baseline. Therefore, the incremental costs reflected in the analysis are associated with upgrading currently compliant EDRs to meet the requirements specified in the final rule. Those incremental costs reflect hardware and software costs, as well as costs for redesign, validation, and labor. The FRE estimated that the incremental cost associated with the final rule ranged from approximately \$13.26 million to \$33.52 million in 2022 dollars.

This rulemaking is a deregulatory action under E.O. 14192 because it would reduce the implementation burden associated with the December 2024 final rule, which increased the pre-crash data recording duration and sample rate required under 49 CFR Part 563. While the substantive requirements adopted in the December 2024 final rule remain unchanged, the agency is proposing to modify the compliance schedule in response to petitions for reconsideration that identified implementation challenges and risk of unintended consequences.

Petitioners explained that the original compliance date imposed a rigid and accelerated timeline that did not align with typical vehicle development cycles. These conditions would have imposed high compliance costs, disrupted product planning, and could have resulted in the removal or disabling of EDR functionality in some vehicle models—undermining the very safety objectives the rule was designed to advance. Quantified cost savings are discussed in more detail above, in Section IV.A. Also, as noted, the safety benefits of the December 2024 final rule were unquantified. This was similar when NHTSA established Part 563. This was due to the difficulties in estimating both the exact portion of benefits creditable to an increased amount of EDR data after a standard is implemented or a safety countermeasure is developed and of quantifying how the benefits to safety research and emergency response translate to improved vehicle safety. Nonetheless, the agency acknowledges that it is likely the implementation timeline created a regulatory failure by imposing a disproportionate burden relative to those benefits, particularly for vehicle platforms in late-stage design or production. The agency seeks comment with information which may aid this determination. This proposed rule would correct that failure.

Regulatory Flexibility Act

Under the Regulatory Flexibility Act (RFA) (5 U.S.C. 601-612) (as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996; 5 U.S.C. 601 *et seq.*), agencies must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (*i.e.*, small businesses, small organizations,

and small government jurisdictions). No regulatory flexibility analysis is required, however, if the head of an agency or an appropriate designee certifies that the rule does not have a significant economic impact on a substantial number of small entities. I certify that this rulemaking action would not have a significant economic impact on a substantial number of small entities. The factual basis for this certification is provided below.

The proposed delay in the compliance date and creation of a phase-in period would reduce the burden on small entities by providing more time to comply with the new requirements. In addition, limited line²⁵ and small-volume manufacturers²⁶ would only need to produce vehicles with EDRs that meet the requirements, if the vehicle is equipped with an EDR, on or after September 1, 2032. Manufacturers producing altered vehicles or vehicles in two or more stages would have one additional year, until September 1, 2033, for compliance.

NHTSA has concluded that this proposed rule would not have a significant economic impact on a substantial number of small entities; therefore, an analysis is not included.

Executive Order 13132 (Federalism)

NHTSA has examined this rule pursuant to E.O. 13132 (64 FR 43255, August 10, 1999) and concluded that no additional consultation with States, local governments, or their representatives is mandated beyond the rulemaking process. The agency has concluded that this rule does not have sufficient federalism implications to warrant consultation with State and local officials or the preparation of a federalism summary impact statement. The rule does not have “substantial direct effects on the States, on the relationship between the national government and

²⁵ Limited line manufacturer means a manufacturer that sells three or fewer carlines, as that term is defined in 49 CFR 583.4, in the United States during a production year.

²⁶ Small-volume manufacturer as defined in § 571.127, “Automatic emergency braking systems for light vehicles,” is an original vehicle manufacturer that produces or assembles fewer than 5,000 vehicles annually for sale in the United States.

the States, or on the distribution of power and responsibilities among the various levels of government.”

This proposed rule would amend an existing regulation. When 49 CFR Part 563 was promulgated in 2006, NHTSA explained its view that any State laws or regulations that prohibit the types of EDRs addressed by Part 563 would create a conflict and therefore be preempted.²⁷ As a result, regarding this proposed rule, NHTSA does not believe there are current State laws or regulations for EDRs that conflict with Part 563.

Executive Order 12988 (Civil Justice Reform)

With respect to the review of the promulgation of a new regulation, section 3(b) of E.O. 12988, “Civil Justice Reform” (61 FR 4729, February 7, 1996), requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) clearly specifies the preemptive effect; (2) clearly specifies the effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct, while promoting simplification and burden reduction; (4) clearly specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. This document is consistent with that requirement.

Pursuant to this E.O., NHTSA notes as follows. The issue of preemption is discussed above, in the section discussing E.O. 13132 (Federalism). NHTSA notes further that there is no requirement that individuals submit a petition for reconsideration or pursue other administrative proceedings before they may file suit in court.

Executive Order 13609 (Promoting International Regulatory Cooperation)

E.O. 13609, “Promoting International Regulatory Cooperation” (77 FR 26413, May 1, 2012), promotes international regulatory cooperation to meet shared challenges involving health,

²⁷ The 2006 final rule promulgating 49 CFR Part 563 discussed preemption at length. See 71 FR 50907, 51029 (August 28, 2006).

safety, labor, security, environmental, and other issues and to reduce, eliminate, or prevent unnecessary differences in regulatory requirements.

The agency is currently participating in the negotiation and development of technical standards for Event Data Recorders in the United Nations Economic Commission for Europe (UNECE) World Forum for Harmonization of Vehicle Regulations (WP.29). As a signatory member, NHTSA is obligated to initiate rulemaking to incorporate safety requirements and options specified in Global Technical Regulations (GTRs) if the U.S. votes in the affirmative to establish the GTR. No GTR for EDRs has been developed at this time. NHTSA has analyzed this proposed rule under the policies and agency responsibilities of E.O. 13609 and has determined this rulemaking would have no effect on international regulatory cooperation.

National Environmental Policy Act

The Department has analyzed the environmental impacts of this notice of proposed rulemaking pursuant to the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 *et seq.*). Pursuant to 49 CFR 1.81, the Secretary has delegated the “functions” under NEPA to the Administrators “as they relate to the matters within the primary responsibility of each Operating Administration.” NHTSA has determined that this proposed rule is categorically excluded pursuant to 23 CFR 771.118(c)(4). Categorical exclusions are actions identified in an agency’s NEPA procedures that do not normally have a significant impact on the environment and therefore do not require either an environmental assessment (EA) or environmental impact statement (EIS). This rulemaking, which proposes to amend the regulations regarding Event Data Recorders to extend the lead time and establish a four-year phase-in, is categorically excluded pursuant to 23 CFR 771.118(c)(4) (Planning and administrative activities not involving or leading directly to construction, such as: Training, technical assistance and research; promulgation of rules, regulations, directives, or program guidance; approval of project concepts; engineering; and operating assistance to transit authorities to continue existing service or increase service to meet routine demand). NHTSA does not anticipate any environmental impacts, and there are no extraordinary circumstances present in connection with this rulemaking.

Paperwork Reduction Act

Under the procedures established by the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501 *et seq.*), a Federal agency must request and receive approval from OMB before it collects certain information from the public and a person is not required to respond to a collection of information by a Federal agency unless the collection displays a valid OMB control number. On May 28, 2025, and November 18, 2025, NHTSA published notices and requests for comment on a reinstatement with modification of a previously approved information collection to collect information regarding a reporting and recordkeeping requirement to facilitate

enforcement of updates to FMVSS No. 208, “Occupant crash protection.” Those documents also requested to rename the Information Collection Request (ICR) associated with OMB Control No. 2127-0535 as “49 CFR Part 585; Phase-In Reporting Requirements” and to consolidate all phase-in reporting requirements including in 49 CFR Part 585 in that ICR. This proposed rule would establish new information collection requirements for phase-in reporting and record retention requirements related to EDRs. The ICR for a reinstatement with modification of a previously approved information collection described below has been forwarded to the Office of Management and Budget (OMB) for review and comment. The ICR describes the nature of the information collection and the expected burden.

Agency: National Highway Traffic Safety Administration (NHTSA).

Title: Phase-In Reporting Requirements.

OMB Control Number: 2127-0535.

Form Number: N/A.

Type of Request: Reinstatement with modification of a previously approved information collection.

Type of Review Requested: Regular.

Requested Expiration Date of Approval: 3 years from date of approval.

Summary of the Collection of Information: This collection would require manufacturers of passenger cars, multipurpose passenger vehicles, trucks, and buses with a gross vehicle weight rating of 3,855 kg (8,500 pounds) or less that are equipped with EDRs to provide motor vehicle production data for the following four years: September 1, 2028, to August 31, 2029; September 1, 2029, to August 31, 2030; September 1, 2030, to August 31, 2031; and September 1, 2031, to August 31, 2032. Manufacturers would annually submit a report, and maintain records related to the report, concerning the number of such vehicles that meet the EDR requirements of Part 563 during the phase-in of those requirements.

Description of the Need for the Information and Proposed Use of the Information: The purpose of the reporting requirements would be to aid the agency in determining whether a manufacturer of passenger cars, multipurpose passenger vehicles, trucks, and buses with a GVWR of 3,855 kg (8,500 pounds) or less and an unloaded vehicle weight of 2,495 kg (5,500 pounds) or less, has complied with the event data recorder requirements during the phase-in of those requirements.

Affected Public: The respondents are manufacturers of passenger cars, multipurpose passenger vehicles, trucks, and buses having a gross vehicle weight rating of 3,855 kg (8,500 pounds) or less that are equipped with EDRs.

Estimated Number of Respondents: Approximately 22 vehicle manufacturers.

Estimated Total Annual Burden Hours: NHTSA estimates that the total annual hour burden is 22 hours.

The annual burden involves the tasks of collection of the information required by the annual report as well as placing the information in a form suitable for record keeping and data retrieval. Because almost all the information required is already recorded by the manufacturers as part of their production control and tracking systems, a nominal assessment of half a burden hour per respondent is estimated for data retrieval and report preparation and half a burden hour per respondent for the record keeping of the data. Therefore, NHTSA estimates that the average total burden for submitting data will be 11 hours per year (22 manufacturers \times .5 hours = 11 hours) and estimates that the average total burden for record retention will be 11 hours per year (22 manufacturers \times .5 hours = 11 hours). NHTSA estimates the labor costs associated with these labor hours using hourly labor rates published by the Bureau of Labor Statistics (BLS). BLS estimates that hourly wages represent approximately 70.2 percent of total compensation for private industry workers.²⁸ For the labor costs associated with this ICR, NHTSA uses the mean hourly wage of \$40.64 per hour for “Technical Writers” (occupational code 27-3042) for the

²⁸ See Table 1. Employer Costs for Employee Compensation by ownership (June 2025), available at <https://www.bls.gov/news.release/pdf/ecec.pdf> (accessed September 12, 2025).

Motor Vehicle Manufacturing Industry (Sectors 31, 32, and 33)²⁹ and applies the 70.2 percent factor to find the total compensation rate of \$57.89 per hour (\$40.64 per hour divided by 0.705). The total annual labor cost associated with the burden hours is estimated to be \$1,273.58 (time burden of 22 hours × \$57.89 cost per hour).

Table 1 – Estimated Annual Burden Hours and Labor Cost

Information Collection	Number of Respondents	Total Annual Burden Hours per Respondent	Hourly Labor Cost	Total Annual Labor Cost per Respondent	Total Annual Burden Hours	Total Annual Labor Cost
Phase-In Reporting	22	.5	\$57.89	\$28.95	11	\$636.79
Phase-In Recordkeeping	22	.5	\$57.89	\$28.95	11	\$636.79
TOTAL	22	1	\$57.89	\$57.89	22	\$1,273.58

Estimated Total Annual Burden Cost: \$0

NHTSA estimates that there are no costs associated with the proposed information collection other than labor costs associated with the burden hours.

Public Comments Invited: You are asked to comment on any aspects of this information collection, including (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; (b) the accuracy of the Department's estimate of the burden of the proposed information collection; (c) ways to enhance the quality, utility and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

National Technology Transfer and Advancement Act

²⁹ See May 2023 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 336100—Motor Vehicle Manufacturing, available at https://www.bls.gov/oes/2023/may/naics4_336100.htm#27-0000 (accessed September 12, 2025).

Under the National Technology Transfer and Advancement Act of 1995 (NTTAA) (Pub. L. No. 104-113), “all Federal agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments.” Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies, such as SAE. The NTTAA directs agencies to provide Congress, through OMB, explanations when the agency decides not to use available and applicable voluntary consensus standards. The NTTAA requires agencies to use voluntary consensus standards in lieu of government-unique standards except where inconsistent with law or otherwise impractical. In the December 2024 final rule, NHTSA provided a discussion of why that final rule declined to use voluntary consensus standards. This discussion remains applicable to this proposed rule which would not change aspects of Part 563 for which there are voluntary consensus standards. Please refer to Section IV.D for discussion of voluntary consensus standards in regard to OMB Circular A-119.

Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (Pub. L. No. 104-4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditures by States, local or Tribal governments, in the aggregate, or by the private sector, of \$100 million or more (adjusted annually for inflation with base year of 1995) in any one year. This proposed rule does not contain Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local and Tribal governments, or the private sector of \$100 million or more in any one year (as adjusted for inflation). Thus, the rulemaking is not subject to the requirements of sections 202 and 205 of the UMRA.

Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments)

E.O. 13175, “Consultation and Coordination With Indian Tribal Governments” (65 FR 67249, November 6, 2000) requires Federal agencies to consult and coordinate with Tribes on a government-to-government basis on policies that have Tribal implications, including regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on one or more Indian Tribes, on the relationship between the Federal Government and Indian Tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes. NHTSA has assessed the impact of this proposed rule on Indian tribes and determined that this proposed rule would not have tribal implications that require consultation under E.O. 13175.

Privacy Act

In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to inform its rulemaking process. DOT posts these comments, without edit, to *www.regulations.gov*, as described in the system of records notice, DOT/ALL-14 FDMS, accessible through *www.dot.gov/privacy*. To facilitate comment tracking and response, we encourage commenters to provide their name, or the name of their organization; however, submission of names is completely optional. 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, or labor union.). 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).

Plain Language Requirement

E.O. 12866 and E.O. 13563 requires each agency to write all rules in plain language. Application of the principles of plain language includes consideration of the following questions:

- Have we organized the material to suit the public’s needs?
- Are the requirements in the rule clearly stated?
- Does the rule contain technical language or jargon that is not clear?

- Would a different format (grouping and order of sections, use of headings, paragraphing) make the rule easier to understand?
- Would more (but shorter) sections be better?
- Could we improve clarity by adding tables, lists, or diagrams?
- What else could we do to make the rule easier to understand?

If you have any responses to these questions, please include them in your comments on this proposal.

Regulation Identifier Number (RIN)

The Department of Transportation assigns a regulation identifier number (RIN) to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda twice a year. You may use the RIN contained in the heading at the beginning of this document to find this action in the Unified Agenda.

Public Participation

How do I prepare and submit comments?

Your comments must be written and in English. To ensure that your comments are correctly filed in the Docket, please include the docket number indicated in this document in your comments.

Your comments must not be more than 15 pages long. (49 CFR 553.21) NHTSA established this limit to encourage you to write your primary comments in a concise fashion. However, you may attach necessary additional documents to your comments. There is no limit on the length of the attachments.

If you are submitting comments electronically as a PDF (Adobe) file, NHTSA asks that the documents be submitted using the Optical Character Recognition (OCR) process, thus allowing NHTSA to search and copy certain portions of your submissions.

Please note that pursuant to the Data Quality Act, in order for substantive data to be relied upon and used by the agency, it must meet the information quality standards set forth in the OMB and DOT Data Quality Act guidelines. Accordingly, we encourage you to consult the guidelines in preparing your comments. OMB's guidelines may be accessed at <https://www.transportation.gov/regulations/dot-information-dissemination-quality-guidelines>.

How can I be sure that my comments were received?

If you wish the Docket to notify you upon its receipt of your comments, enclose a self-addressed, stamped postcard in the envelope containing your comments. Upon receiving your comments, the Docket will return the postcard by mail.

How do I submit confidential business information?

You should submit a redacted "public version" of your comment (including redacted versions of any additional documents or attachments) to the docket using any of the methods identified under ADDRESSES. This "public version" of your comment should contain only the portions for which no claim of confidential treatment is made and from which those portions for which confidential treatment is claimed has been redacted. See below for further instructions on how to do this.

You also need to submit a request for confidential treatment directly to the Office of Chief Counsel. Requests for confidential treatment are governed by 49 CFR Part 512. Your request must set forth the information specified in Part 512. This includes the materials for which confidentiality is being requested (as explained in more detail below); supporting information, pursuant to § 512.8; and a certificate, pursuant to § 512.4(b) and part 512, Appendix A.

You are required to submit to the Office of Chief Counsel one unredacted "confidential version" of the information for which you are seeking confidential treatment. Pursuant to § 512.6, the words "ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION" or "CONFIDENTIAL BUSINESS INFORMATION CONTAINED WITHIN BRACKETS" (as applicable) must appear at the top of each page containing information claimed to be

confidential. In the latter situation, where not all information on the page is claimed to be confidential, identify each item of information for which confidentiality is requested within brackets: “[].”

You are also required to submit to the Office of Chief Counsel one redacted “public version” of the information for which you are seeking confidential treatment. Pursuant to § 512.5(a)(2), the redacted “public version” should include redactions of any information for which you are seeking confidential treatment (*i.e.*, the only information that should be unredacted is information for which you are not seeking confidential treatment).

NHTSA is currently treating electronic submission as an acceptable method for submitting confidential business information to the agency under Part 512. Please do not send a hardcopy of a request for confidential treatment to NHTSA’s headquarters. The request should be sent to Dan Rabinovitz in the Office of the Chief Counsel at Daniel.Rabinovitz@dot.gov. You may either submit your request via email or request a secure file transfer link. If you are submitting the request via email, please also email a courtesy copy of the request to Eli Wachtel at eli.wachtel@dot.gov.

Will the agency consider late comments?

We will consider all comments received before the close of business on the comment closing date indicated above under DATES. To the extent possible, we will also consider comments that the docket receives after that date. If the docket receives a comment too late for us to consider in developing a final rule (assuming that one is issued), we will consider that comment as an informal suggestion for future rulemaking action.

How can I read the comments submitted by other people?

You may read the comments received by the docket at the address given above under ADDRESSES. The hours of the docket are indicated above in the same location. You may also see the comments on the Internet. To read the comments on the Internet, go to <https://www.regulations.gov>. Follow the online instructions for accessing the dockets.

Please note that even after the comment closing date, we will continue to file relevant information in the docket as it becomes available. Further, some people may submit late comments. Accordingly, we recommend that you periodically check the Docket for new material. You can arrange with the docket to be notified when others file comments in the docket. See www.regulations.gov for more information.

Rulemaking Summary, 5 U.S.C. 553(b)(4)

For NHTSA's December 2024 EDR final rule, this NPRM proposes to delay the compliance date from September 1, 2027, to September 1, 2028. This NPRM also proposes to implement a phase-in period for EDRs to meet the new requirements. As required by 5 U.S.C. 553(b)(4), a summary of this rule can be found at www.regulations.gov, Docket No. NHTSA-2025-0050, in the SUMMARY section of this proposed rule.

List of Subjects

49 CFR Part 563

Motor vehicle safety, Motor vehicles, Reporting and recordkeeping requirements.

49 CFR Part 585

Reporting and recordkeeping requirements

In consideration of the foregoing, NHTSA proposes to amend 49 CFR chapter V as follows:

PART 563 – EVENT DATA RECORDERS

1. The authority citation for Part 563 continues to read as follows:

Authority: 49 U.S.C. 322, 30101, 30111, 30115, 30117, 30166, 30168; delegation of authority at 49 CFR 1.95.

2. Add § 563.4 to read as follows:

§ 563.4 Certification for Phase-in.

(a) *Vehicle certification information.* At any time during the production years ending August 31, 2029, August 31, 2030, August 31, 2031, and August 31, 2032, each manufacturer shall, upon request from the Office of Vehicle Safety Compliance, provide information identifying the vehicles (by make, model and vehicle identification number) that have been equipped with EDRs meeting the requirements of § 563.7(a) and (b). The manufacturer's designation of a vehicle as equipped with an EDR meeting these requirements is irrevocable.

(b) *Vehicles produced by more than one manufacturer.* For the purpose of calculating average annual production of vehicles for each manufacturer and the number of vehicles manufactured by each manufacturer under § 563.4(a), a vehicle produced by more than one manufacturer shall be attributed to a single manufacturer as follows:

(1) A vehicle which is imported shall be attributed to the importer.

(2) A vehicle manufactured in the United States by more than one manufacturer, one of which also markets the vehicle, shall be attributed to the manufacturer which markets the vehicle.

(c) A vehicle produced by more than one manufacturer shall be attributed to any one of the vehicle's manufacturers specified by an express written contract, reported to the National Highway Traffic Safety Administration under 49 CFR Part 585, between the manufacturer so specified and the manufacturer to which the vehicle would otherwise be attributed under § 563.4(b).

(d) For the purposes of calculating average annual production of vehicles for each manufacturer and the number of vehicles manufactured by each manufacturer under § 563.4(a), only count

vehicles to which this regulation is applicable as specified §563.3 and are equipped with an EDR.

2. Revise § 563.7 to read as follows:

§ 563.7 Data elements.

(a) * * *

Table I to § 563.7(a) – Data Elements Required for All Vehicles Equipped With an EDR

Data element	Recording interval/time¹ (relative to time zero)	Data sample rate (samples per second)
Delta-V, longitudinal	0 to 250 ms or 0 to End of Event Time plus 30 ms, whichever is shorter	100
Maximum delta-V, longitudinal	0-300 ms or 0 to End of Event Time plus 30 ms, whichever is shorter	N/A
Time, maximum delta-V	0-300 ms or 0 to End of Event Time plus 30 ms, whichever is shorter	N/A
Speed, vehicle indicated	-20 to 0 sec ⁴	⁴ 10
Engine throttle, % full (or accelerator pedal, % full)	-20 to 0 sec ⁴	⁴ 10
Service brake, on/off	-20 to 0 sec ⁴	⁴ 10
Ignition cycle, crash	-1.0 sec	N/A
Ignition cycle, download	At time of download ³	N/A
Safety belt status, driver	-1.0 sec	N/A
Frontal air bag warning lamp, on/off ²	-1.0 sec	N/A
Frontal air bag deployment, time to deploy, in the case of a single stage air bag, or time to first stage deployment, in the case of a multi-stage air bag, driver	Event	N/A
Frontal air bag deployment, time to deploy, in the case of a single stage air bag, or time to first stage deployment, in the case of a multi-stage air bag, right front passenger	Event	N/A
Multi-event, number of event	Event	N/A
Time from event 1 to 2	As needed	N/A
Complete file recorded (yes, no)	Following other data	N/A

¹ Pre-crash data and crash data are asynchronous. The sample time accuracy requirement for pre-crash time is -0.1 to 1.0 sec (e.g., T = -1 would need to occur between -1.1 and 0 seconds.)

² The frontal air bag warning lamp is the readiness indicator specified in S4.5.2 of FMVSS No. 208, and may also illuminate to indicate a malfunction in another part of the deployable restraint system.

³ The ignition cycle at the time of download is not required to be recorded at the time of the crash, but shall be reported during the download process.

⁴ Except as provided in the following phase-in, for vehicles manufactured before September 1, 2031, the required recording interval is -5.0 to 0 sec relative to time zero and the required data sample rate is two samples per second. For vehicles manufactured on or after September 1, 2028 but before August 31, 2029, 25 percent of each manufacturer’s vehicle production must have the recording interval and data sample rate displayed in this table. For vehicles manufactured on or after September 1, 2029 but before August 31, 2030, 50 percent of each manufacturer’s vehicle production must have the recording interval and data sample rate displayed in this table. For vehicles manufactured on or after September 1, 2030 but before August 31, 2031, 75 percent of each manufacturer’s vehicle production must have the recording interval and data sample rate displayed in this table. For vehicles manufactured before September 1, 2032 by a small-volume manufacturer or limited-line manufacturer, the required recording interval is -5.0 to 0 sec relative to time zero and the required data sample rate is two samples per second. For vehicles manufactured before September 1, 2033 by manufacturers producing altered vehicles or vehicles in two or more stages, the required recording interval is -5.0 to 0 sec relative to time zero and the required data sample rate is two samples per second.

(b) * * *

Table II to § 563.7(b) - Data Elements Required for Vehicles Under Specified Minimum Conditions

Data element name	Condition for requirement	Recording interval/time¹ (relative to time zero)	Data sample rate (per second)
Lateral acceleration	If recorded ²	N/A	N/A
Longitudinal acceleration	If recorded	N/A	N/A
Normal acceleration	If recorded	N/A	N/A
Delta-V, lateral	If recorded	0-250 ms or 0 to End of Event Time plus 30 ms, whichever is shorter	100
Maximum delta-V, lateral	If recorded	0-300 ms or 0 to End of Event Time plus 30 ms, whichever is shorter	N/A
Time maximum delta-V, lateral	If recorded	0-300 ms or 0 to End of Event Time plus 30 ms, whichever is shorter	N/A
Time for maximum delta-V, resultant	If recorded	0-300 ms or 0 to End of Event Time plus 30 ms, whichever is shorter	N/A
Engine rpm	If recorded	-20 to 0 sec ⁵	⁵ 10

Vehicle roll angle	If recorded	-1.0 up to 5.0 sec ³	10
ABS activity (engaged, non-engaged)	If recorded	-20 to 0 sec ⁵	⁵ 10
Stability control (on, off, or engaged)	If recorded	-20 to 0 sec ⁵	⁵ 10
Steering input	If recorded	-20 to 0 sec ⁵	⁵ 10
Safety belt status, right front passenger (buckled, not buckled)	If recorded	-1.0 sec	N/A
Frontal air bag suppression switch status, right front passenger (on, off, or auto)	If recorded	-1.0 sec	N/A
Frontal air bag deployment, time to nth stage, driver ⁴	If equipped with a driver's frontal air bag with a multi-stage inflator	Event	N/A
Frontal air bag deployment, time to nth stage, right front passenger ⁴	If equipped with a right front passenger's frontal air bag with a multi-stage inflator	Event	N/A
Frontal air bag deployment, nth stage disposal, driver, Y/N (whether the nth stage deployment was for occupant restraint or propellant disposal purposes)	If recorded	Event	N/A
Frontal air bag deployment, nth stage disposal, right front passenger, Y/N (whether the nth stage deployment was for occupant restraint or propellant disposal purposes)	If recorded	Event	N/A
Side air bag deployment, time to deploy, driver	If recorded	Event	N/A
Side air bag deployment, time to deploy, right front passenger	If recorded	Event	N/A
Side curtain/tube air bag deployment, time to deploy, driver side	If recorded	Event	N/A
Side curtain/tube air bag deployment, time to deploy, right side	If recorded	Event	N/A
Pretensioner deployment, time to fire, driver	If recorded	Event	N/A
Pretensioner deployment, time to fire, right front passenger	If recorded	Event	N/A

Seat track position switch, foremost, status, driver	If recorded	-1.0 sec	N/A
Seat track position switch, foremost, status, right front passenger	If recorded	-1.0 sec	N/A
Occupant size classification, driver	If recorded	-1.0 sec	N/A
Occupant size classification, right front passenger	If recorded	-1.0 sec	N/A
Occupant position classification, driver	If recorded	-1.0 sec	N/A
Occupant position classification, right front passenger	If recorded	-1.0 sec	N/A

¹ Pre-crash data and crash data are asynchronous. The sample time accuracy requirement for pre-crash time is -0.1 to 1.0 sec (e.g., T = -1 would need to occur between -1.1 and 0 seconds.)

² “If recorded” means if the data is recorded in non-volatile memory for the purpose of subsequent downloading.

³ “vehicle roll angle” may be recorded in any time duration; -1.0 sec to 5.0 sec is suggested.

⁴ List this element n - 1 times, once for each stage of a multi-stage air bag system.

⁵ Except as provided in the following phase-in, for vehicles manufactured before September 1, 2031, the required recording interval is -5.0 to 0 sec relative to time zero and the required data sample rate is two samples per second. For vehicles manufactured on or after September 1, 2028 but before August 31, 2029, 25 percent of each manufacturer’s vehicle production must have the recording interval and data sample rate displayed in this table. For vehicles manufactured on or after September 1, 2029 but before August 31, 2030, 50 percent of each manufacturer’s vehicle production must have the recording interval and data sample rate displayed in this table. For vehicles manufactured on or after September 1, 2030 but before August 31, 2031, 75 percent of each manufacturer’s vehicle production must have the recording interval and data sample rate displayed in this table. For vehicles manufactured before September 1, 2032 by a small-volume manufacturer or limited-line manufacturer, the required recording interval is -5.0 to 0 sec relative to time zero and the required data sample rate is two samples per second. For vehicles manufactured before September 1, 2033 by manufacturers producing altered vehicles or vehicles in two or more stages, the required recording interval is -5.0 to 0 sec relative to time zero and the required data sample rate is two samples per second.

PART 585 – PHASE-IN REPORTING REQUIREMENTS

3. The authority citation for part 585 continues to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30117, and 30166; delegation of authority at 49 CFR

1.95.

4. Add Subpart P, consisting of § § 585.142 through 585.148, to read as follows:

Subpart P – Event Data Recorders Phase-In Reporting Requirements

Sec.

- 585.142 Scope
- 585.143 Purpose
- 585.144 Applicability
- 585.145 Definitions
- 585.146 Response to inquiries
- 585.147 Reporting requirements
- 585.148 Records

Subpart P – Event Data Recorders Phase-In Reporting Requirements

§ 585.142 Scope

This subpart establishes requirements for manufacturers of passenger cars, multipurpose passenger vehicles, trucks, and buses with a GVWR of 3,855 kg (8,500 pounds) or less and an unloaded vehicle weight of 2,495 kg (5,500 pounds) or less, except for walk-in van-type trucks or vehicles designed to be sold exclusively to the U.S. Postal Service, to submit a report per § 585.147, and maintain records related to the report according to § 585.148, concerning the number of such vehicles that meet the requirements of part 563, *Event data recorders* (49 CFR 563).

§ 585.143 Purpose

The purpose of these reporting requirements is to assist the National Highway Traffic Safety Administration in determining whether a manufacturer has complied with Part 563 (49 CFR 563).

§ 585.144 Applicability

This subpart applies to manufacturers of passenger cars, multipurpose passenger vehicles, trucks, and buses with a GVWR of 3,855 kg (8,500 pounds) or less and an unloaded vehicle weight of 2,495 kg (5,500 pounds) or less, except for walk-in van-type trucks or vehicles designed to be

sold exclusively to the U.S. Postal Service, for which Part 563 applies. However, this subpart does not apply to vehicles excluded by §563.3 from the requirements of that standard.

§ 585.145 Definitions

(a) *Event data recorder (EDR)* is used as defined in 49 CFR 563.5.

§ 585.146 Response to inquiries

At any time during the production years ending August 31, 2029, August 31, 2030, August 31, 2031, and August 31, 2032, each manufacturer shall, upon request from the Office of Vehicle Safety Compliance, provide information identifying the vehicles (by make, model and vehicle identification number) that have been certified as complying with part 563 (49 CFR 563). The manufacturer's designation of a vehicle as a certified vehicle is irrevocable.

§ 585.147 Reporting requirements

(a) *General reporting requirements.* Within 60 days after the end of the production years ending August 31, 2029, August 31, 2030, August 31, 2031, and August 31, 2032, each manufacturer shall submit a report to the National Highway Traffic Safety Administration concerning its compliance with the event data recorder requirements of part 563 (49 CFR 563) for applicable vehicles produced in that year. Each report shall:

- (1) Identify the manufacturer;
- (2) State the full name, title, and address of the official responsible for preparing the report;
- (3) Identify the production year being reported on;
- (4) Contain a statement regarding whether or not the manufacturer complied with the event data recorder data element capture requirements of part 563 (49 CFR 563) for the period covered by the report and the basis for that statement;
- (5) Provide the information specified in paragraph (b) of this section;
- (6) Be written in the English language; and
- (7) Be submitted to: Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave. S.E., West Building, Washington, D.C. 20590.

(b) *Report content* —(1) *Basis for phase-in production goals.* Each manufacturer must provide the number of passenger cars, multipurpose passenger vehicles, trucks, and buses with a GVWR of 3,855 kg (8,500 pounds) or less and an unloaded vehicle weight of 2,495 kg (5,500 pounds) or less, except for walk-in van-type trucks or vehicles designed to be sold exclusively to the U.S. Postal Service, manufactured for sale in the United States for each of the most recent three previous production years, or, at the manufacturer's option, for the most recently ended production year that are equipped with an EDR that meets the requirements in part 563. A new manufacturer that has not previously manufactured these vehicles for sale in the United States must submit a report at the end of the initial production year for the number of such vehicles manufactured during the initial production year.

(2) *Production.* Each manufacturer must report for the production year for which the report is filed: the number of passenger cars, multipurpose passenger vehicles, trucks, and buses with a GVWR of 3,855 kg (8,500 pounds) or less and an unloaded vehicle weight of 2,495 kg (5,500 pounds) or less, except for walk-in van-type trucks or vehicles designed to be sold exclusively to the U.S. Postal Service, that are equipped with an EDR and that do and do not meet §563.7 (49 CFR 563.7).

(3) *Vehicles produced by more than one manufacturer.* Each manufacturer whose reporting of information is affected by one or more of the express written contracts permitted by § 563.7(b)(5) must:

(i) Report the existence of each contract, including the names of all parties to the contract, and explain how the contract affects the report being submitted.

(ii) Report the actual number of vehicles covered by each contract.

§ 585.148 Records

Each manufacturer must maintain records of the Vehicle Identification Number for each vehicle for which information is reported under § 585.147 until December 31, 2033.

Issued under authority delegated in 49 CFR 1.95. The Paperwork Reduction Act of 1995; 44 U.S.C. Chapter 35, as amended; 49 CFR 1.49; and DOT Order 1351.29A.

Jonathan Morrison,

Administrator

Billing Code: 4910-59-P

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