



DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA- 2025-0021]

Agency Information Collection Activities; Notice and Request for Comment; Drivers' Use of Camera-Based Rear Visibility Systems Versus Traditional Mirrors

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

ACTION: Notice and request for comments on revision of a currently approved collection of information.

SUMMARY: The National Highway Traffic Safety Administration (NHTSA) invites public comments about our intention to request approval from the Office of Management and Budget (OMB) for an extension of a currently approved information collection. Before a Federal agency can collect certain information from the public, it must receive approval from OMB. Under procedures established by the Paperwork Reduction Act of 1995, before seeking OMB approval, Federal agencies must solicit public comment on proposed collections of information, including extensions and reinstatement of previously approved collections. This document describes a collection of information for which NHTSA intends to seek a revision to an OMB-approved collection titled "Drivers' Use of Camera-Based Rear Visibility Systems Versus Traditional Mirrors" identified by OMB Control Number 2127-0756. The collection is currently approved through July 31, 2025, and supports research addressing safety-related aspects of drivers' use of camera-based rear visibility systems designed to replace or supplement vehicle rearview mirrors. This collection is necessary to inform next steps on an advance notice of proposed rulemaking (ANPRM) NHTSA published in response to two petitions requesting revision of FMVSS No. 111 to permit such camera-based systems as an alternative compliance option for certain current

requirements specifying rearview mirrors. This revision includes changes in respondents and thus a change in burden hours and requests an extension to continue data collection.

DATES: Comments must be received on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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

- *Federal eRulemaking Portal:* Go to <https://www.regulations.gov>. Follow the instructions for submitting comments on the electronic docket site by clicking on “Help” or “FAQ”.
- *Fax:* 202-493-2251.
- *Mail or Hand Delivery:* Docket Management, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Room W12-140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except on Federal holidays. To be sure someone is there to help you, please call (202) 366-9322 before coming.

Instructions: Each submission must include the Agency name and the Docket number for this Notice. Note that all comments received will be posted without change to www.regulations.gov, including any personal information provided. Please see the Privacy heading below.

Privacy Act: Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, *etc.*). You may review DOT’s complete Privacy Act Statement in the *Federal Register* published on April 11, 2000 (65 FR 19477–78) or you may visit <https://www.dot.gov/privacy.html>.

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

FOR FURTHER INFORMATION CONTACT: Elizabeth Mazzae, Applied Crash Avoidance Research Division, Vehicle Research and Test Center, NHTSA, 10820 State Route 347—Bldg.

60, East Liberty, Ohio 43319; Telephone (937) 666-4511; Facsimile: (937) 666-3590; e-mail address: elizabeth.mazzae@dot.gov.

SUPPLEMENTARY INFORMATION: Under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520), before an agency submits a proposed collection of information to OMB for approval, it must first publish a document in the Federal Register providing a 60-day comment period and otherwise consult with members of the public and affected agencies concerning each proposed collection of information. The OMB has promulgated regulations describing what must be included in such a document. Under OMB’s regulation (at 5 CFR 1320.8(d)), an agency must ask for public comment on the following: (i) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (ii) the accuracy of the agency’s estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (iii) how to enhance the quality, utility, and clarity of the information to be collected; (iv) how to minimize the burden of the collection of information on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses. In compliance with these requirements, NHTSA asks for public comments on the following proposed collection of information:

Title: Drivers’ Use of Camera-Based Rear Visibility Systems Versus Traditional Mirrors

OMB Control Number: 2127-0756

Form Numbers: NHTSA forms 1553, 1554, 2044, 1556, 1557, 1558

Type of Request: Revision of a currently approved information collection

Type of Review Requested: Regular

Requested Expiration Date of Approval: Three years from date of approval

Summary of the Collection of Information:

This information collection is a revision of a currently approved information collection, OMB Control Number 2127-0756, “Drivers’ Use of Camera-Based Rear Visibility Systems Versus Traditional Mirrors.” NHTSA is conducting research as part of a multiyear effort to gather information to aid in determining whether camera-based rear visibility systems can provide the same level of safety as the rearview mirrors currently required under FMVSS No. 111, Rear Visibility. NHTSA published an ANPRM (RIN 2127–AM02) responding to two petitions received from vehicle manufacturers seeking permission to install camera-based rear visibility systems (sometimes referred to as camera monitor systems, CMS), instead of outside rearview mirrors, on both light vehicles and heavy trucks. In the ANPRM, NHTSA outlined a list of issues and related questions “on which the agency requests additional information to adequately evaluate the safety of permitting CMS as an alternative compliance option to rearview mirrors.”¹ This research will help answer important safety questions posed in the ANPRM and inform NHTSA’s response to the petitions by aiding in determining whether CMS can provide at least the same level of safety as the currently required mirrors.

The research examines the use of camera-based visibility systems versus rearview mirrors for both light vehicles and heavy trucks. Research participants are volunteers who are members of the general public, who are licensed car and/or commercial truck drivers aged 25 to 65, and who are healthy and able to drive without assistive devices. Research participants experience a vehicle equipped with a production or prototype camera-based visibility system and/or an FMVSS No. 111-compliant rearview mirror system. The research uses stationary, track-based, and on-road, semi-naturalistic driving experimentation as a means of collecting data needed to support the rulemaking effort. Experimental data collection includes variables pertaining to driver eye glance behavior and driving performance. This collection provides

¹ 84 FR 54533. Docket No. NHTSA-2018-0021. Federal Motor Vehicle Safety Standard No. 111, Rear Visibility; Advance notice of proposed rulemaking (ANPRM).

flexibility to collect additional information to address critical research questions raised during the course of this research that are deemed necessary to support rulemaking.

This is a revision of a currently approved information collection (IC) to extend the approval period, adjust the number of respondents annually, and revise the burden calculations based on data collection completed as of March 14, 2025. The currently approved collection permitted 200 respondents annually across multiple complementary studies within the research taking place over the original approved period. In this extension request, NHTSA is requesting 156 respondents annually over the three-year approval period. This notice provides changes from the current collection to this revision in the number of respondents for some individual ICs, the time for completion of some individual ICs, wages, and federal wage rates. Additionally, NHTSA has included contractor costs that were unintentionally excluded from the original collection.

Description of the Need for the Information and Proposed Use of the Information:

The National Highway Traffic Safety Administration's (NHTSA) mission is to save lives, prevent injuries, and reduce economic costs associated with motor vehicle crashes. As new vehicle technologies are developed, it is prudent to ensure that they do not create any unintended decrease in safety. The safety of passive camera-based visibility technologies depends on both the performance of the systems and on drivers' ability to use the systems effectively and comfortably. Information regarding this safety question is needed to aid NHTSA's rulemaking activities (RIN 2127-AM02) responding to two petitions received from vehicle manufacturers seeking permission to install camera-based systems, instead of outside rearview mirrors, as a means of meeting certain FMVSS No. 111 rear visibility requirements on both light vehicles and heavy trucks. This work seeks to examine and compare drivers' eye glance behavior and aspects of driving performance with rearview mirrors and camera-based systems intended to replace or supplement rearview mirrors.

The full information collection request includes six information collections:

1. **Interest Response Form** determines individuals' willingness to participate in the study and their initial suitability for study participation based primarily on demographics and driving qualifications (e.g., annual mileage driven).
2. **Candidate Screening Questions** are primarily used to ensure that participants meet driving record requirements of the contractor's insurance company, are free of recent criminal convictions, meet specific minimum health qualifications, and have reasonable availability to participate in the study. Health screening questions aim to identify candidate participants whose physical and health conditions and driving experience may be deemed generally "average" and to determine if they can understand study documents.
 - a. Have no more than 2 points on current driving record
 - b. Have no criminal convictions in the past 3 years, including criminal driving offenses
 - c. Have no uncorrected vision or hearing problems
 - d. Are in good general health and able to drive continuously and safely for a period of 3 hours without the need for assistive devices
 - e. Self-report that they are able to read, write, speak, and understand English
 - f. Are willing to drive to NHTSA's Vehicle Research and Test Center and spend up to approximately 4 hours participating in a research study
3. **Experimental Data Collection** includes a pre-briefing (consisting of a greeting, *Participant Informed Consent Form* administration, and presentation of experimental protocol instructions) and data collection via stationary, track-based, and on-road, semi-naturalistic driving experimentation. Participants' eye glance behavior and driving and/or other performance data are recorded for later analysis that will compare these data for rearview mirrors versus CMS.

4. **Post-Drive Questionnaire: Drive with Camera Monitor System** gathers information about participants' experiences during the experimental protocol when using a CMS.
5. **Post-Drive Questionnaire: Drive with Traditional Mirrors** gathers information about participants' experiences during the experimental protocol when using mirrors.
6. **Post-Drive Questionnaire Final Opinions** gathers information about participants' opinions regarding preference for using CMS or mirrors, as well as assessing specific, open-ended opinions regarding CMS ease of use and perceived safety.

Affected Public:

Research participants are paid volunteers from the Columbus, OH, regional area who are licensed drivers aged 25-65 years (inclusive), who drive at least an average number of miles (e.g., 11,000) annually, are in good health and do not require assistive devices to safely operate a vehicle, and can drive continuously for a period of up to 3 hours.

Estimated Number of Respondents:

Candidate participant recruitment information is collected in an incremental fashion to permit the determination of which individuals meet the criteria for research participation. All interested candidates (estimate: 792) complete the Interest Response Form. A subset of individuals (estimate: 578) are then asked to complete Candidate Screening Questions. Those who complete the questions and are eligible are contacted for participation, with a goal of 156 participants annually.

Frequency of Collection: Once

Number of Responses: 1,994

Estimated Total Annual Burden Hours: 835 hours

Burden has been adjusted from the currently approved collection using the response/eligibility rates for the most recent experiment in this research. The table below shows

completion numbers and rates for different stages of collection for that particular experiment. Notice that the last row of the table shows the number of respondents who completed the experiment and for which data were usable. Some respondents' data were identified as not usable after the conclusion of the experiment due to issues such as technical difficulties with the data acquisition equipment. As the final, usable, and verified data will be the basis on which research conclusions are drawn, this collection extension and revision requests an increase in the number of respondents in order to complete the research with enough usable data.

Table 1. Response/Eligibility Rate Data

Information Collection	Completed	Response/Eligibility Rate
Interest Response Form	275	-
Candidate Screening Questionnaire	200	73%
Experimental Data Collection	53	27%
Usable Data	24	45%

The *Interest Response Form* is the initial information collection for an experiment and is a response to the solicitation for candidate research participants. Interested individuals respond to a study recruitment advertisement by completing this *Interest Response Form*. This is a one-time electronic collection for each experiment and is estimated to take approximately 5 minutes to complete. Using the most recent experiment associated with this IC and calculating response rates, NHTSA requests approval for 792 respondents annually for this collection.

The *Interest Response Form* submissions are reviewed manually by research staff to select eligible participants. Individuals whose responses meet participation requirements (recent eligibility rate was calculated to be 73%) are selected to complete the *Candidate Screening Questions*. Candidate participants are e-mailed a link to the electronically presented question set hosted on a secure website. NHTSA estimates that 578 individuals will receive the *Candidate*

Screening Questions. This information is collected once for each experiment and takes approximately 7 minutes to complete.

Upon review and determination that the candidate is eligible, that candidate is contacted by e-mail or phone to schedule their participation. Individuals scheduled for study participation are asked to appear at NHTSA's Vehicle Research and Test Center in East Liberty, OH, for the *Experimental Data Collection*. The *Experimental Data Collection* includes a pre-briefing and data collection during execution of the study protocol. The pre-briefing consists of a greeting, *Participant Informed Consent Form* administration, and presentation of experimental protocol instructions. The *Participant Informed Consent Form* is administered via both pre-recorded audio and a printed hard copy. After presentation of the consent form, the participant is given the opportunity to ask questions and then asked to sign an electronic version of the consent form on a computer. Following consent, the participant receives instructions on the experimental protocol. For *Experimental Data Collection*, the participant is shown the vehicle, seated in the driver seat, and equipment calibration is performed. Data collection per the study protocol is then conducted through stationary, track-based, or on-road, semi-naturalistic driving experimentation. Data are recorded to document driver eye glance behavior and driving or other protocol-related performance. This *Experimental Data Collection* is conducted once per study and is estimated to take approximately 245 minutes. This estimate includes scheduling, instruction, and the drive. From the data collected thus far, 245 minutes is an appropriate maximum time. Using the recent response rate of 27 percent, NHTSA estimates 156 respondents annually will participate in the *Experimental Data Collection*.

Respondents complete the *Post-drive Questionnaire: Drive with Camera Monitor System* and/or the *Post-drive Questionnaire: Drive with Traditional Mirrors* depending on which system or systems are used in the respective experiment. While some respondents may only complete one of these questionnaires based on the study design, NHTSA has included both questionnaires for each participant in the burden calculation to develop a maximum burden estimate. This

electronic collection is estimated to take 10 minutes per questionnaire. As the same number of respondents that participate in the *Experimental Data Collection* will complete these questionnaires, NHTSA estimates 156 respondents will complete each of these annually.

Each respondent completes the *Post-Drive Questionnaire: Final Opinions*. This electronic collection will be administered once to each participant and is estimated to take 5 minutes to complete. All 156 respondents are expected to complete this questionnaire.

Table 2 shows the annual burden hours for the research.

Table 2. Annual Burden Hours and Opportunity Cost

Information Collection	Annual Number of Respondents	Frequency of Response	Annual Responses	Time per Response (min)	Annual Estimated Burden Hours (Rounded)
Interest Response Form	792	1	792	5	66
Candidate Screening Questions	578	1	578	7	67
Experimental Data Collection	156	1	156	245	637
Post-drive Questionnaire: Drive with Camera Monitor System	156	1	156	10	26
Post-drive Questionnaire: Drive with Traditional Mirrors	156	1	156	10	26
Post-Drive Questionnaire: Final Opinions	156	1	156	5	13
Total					835 hours

The change reflected in this revision is a reduction in annual burden from 890 hours per year to 835 hours per year.

Estimated Total Annual Burden Cost: \$0

There are no additional costs to respondents beyond the time spent participating in the study, completing the questionnaires, and travel costs for the visit to the study site.

Respondents for the *Interest Response Form* and the *Candidate Screening Questions* use their own electronic device to complete the questionnaires. They are not responsible for purchasing additional equipment nor software for this completion. Any e-mail messages or phone calls made for the purposes of scheduling their participation are handled through personal devices as well.

PUBLIC COMMENTS INVITED: You are invited to comment on any aspect 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.

Authority: The Paperwork Reduction Act of 1995; 44 U.S.C. chapter 35, as amended; and 49 CFR 1.95.

Issued in Washington D.C.

Cem Hatipoglu,
Associate Administrator,
Office of Vehicle Safety Research.

