



DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA-2019-0102]

[RIN 2127-ZRIN]

Advanced Driver Assistance Systems Draft Research Test Procedures

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

ACTION: Request for comments (RFC).

SUMMARY: NHTSA seeks public comment on a series of nine draft research test procedures developed by the agency to assess the performance of certain types of Advanced Driver Assistance Systems (ADAS) available to consumers. NHTSA is specifically requesting comment on whether these draft research test procedures adequately, objectively, and practically assess the system performance of the underlying ADAS in a test track environment. NHTSA intends to use these draft research test procedures to further its research goals by using the output from clearly defined test methods to help better understand system operation, performance, and potential limitations.

DATES: Comments must be received no later than [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

Documents: The draft research test procedures described in this RFC are available for viewing in PDF format in Docket No. NHTSA-2019-0102.

Comments: You may submit comments, identified by Docket No. NHTSA-2019-0102, by any of the following methods:

- *Internet:* To submit comments electronically, go to the U.S. Government regulations website at <http://www.regulations.gov>. Follow the online instructions

for submitting comments.

- *Fax:* Written comments may be faxed to 202-493-2251.
- *Mail:* Send comments to Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue S.E., West Building Ground Floor, Room W12-140, Washington, D.C. 20590-0001.
- *Hand Delivery:* If you submit written comments by hand or courier, please do so at 1200 New Jersey Avenue S.E., West Building Ground Floor, Room W12-140, Washington D.C. between 9 a.m. and 5 p.m. Eastern Time, Monday through Friday, except Federal holidays.
- You may call Docket Management at 1-800-647-5527.

Instructions: For detailed instructions on submitting comments and additional information, 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.

Privacy Act: In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, to www.regulations.gov, as described in the system of records notice, DOT/ALL-14 FDMS, accessible through <https://www.transportation.gov/privacy>. To facilitate tracking and response, we encourage commenters to provide their name, or the name of their organization; however, submission of names is completely optional. All timely comments will be fully considered, regardless of whether commenters directly identify themselves. If you wish to provide comments containing proprietary or confidential information, please contact the agency for alternate submission instructions.

FOR FURTHER INFORMATION CONTACT: *For research issues:* Mr. Garrick Forkenbrock, Research Engineer, Vehicle Research and Test Center, National Highway Traffic

Safety Administration, 10820 SR 347, Bldg. 60, East Liberty, OH 43319. Telephone: 937-666-4511. Email: *garrick.forkenbrock@dot.gov*. For legal issues: Ms. Sara Bennett, Attorney-Advisor, Office of Chief Counsel, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. Telephone: 202-366-2992. Email: *sara.bennett@dot.gov*.

SUPPLEMENTARY INFORMATION: NHTSA seeks comment on the draft research test procedures listed below, which assess nine different ADAS technologies. As background, the agency develops different test procedures for different purposes. Most commonly, those test procedures are for rulemaking, New Car Assessment Program (NCAP), or research purposes. This RFC includes test procedures that have been developed for research purposes only. Research test procedures are used by the agency to evaluate a technology of interest and, when presented publicly, provide a basis from which gaps in test methodology or other specific deficiencies may be identified and resolved. In contrast, rulemaking test procedures are developed to support identified rulemaking efforts and, if a regulation is adopted, focus on ensuring that a technology meets the level of performance defined in the regulation and are used by the agency to determine compliance. Thus, the fact that NHTSA is researching a specific technology is not an indication that it will now or at any time initiate a rulemaking related to that technology or include that technology as part of NCAP. To the extent that research does inform future rulemaking efforts or revisions to NCAP, the agency will appropriately engage the public through public comment and other means during those processes.

NHTSA developed the draft test procedures made available today to research ways to objectively and practically assess the performance of ADAS technologies presently available to consumers on certain vehicles sold in the United States. NHTSA highlights that some of the research test procedures included in this RFC are in the early stages of development, while others are closer to being fully developed.

For light vehicles, these include:

- Active Parking Assist (APA)¹
- Blind Spot Detection (BSD)²
- Blind Spot Intervention (BSI)³
- Intersection Safety Assist (ISA)⁴
- Opposing Traffic Safety Assist (OTSA)⁵
- Pedestrian Automatic Emergency Braking (PAEB)⁶
- Rear Automatic Braking⁷
- Traffic Jam Assist (TJA)⁸

For heavy vehicles, this includes:

- Forward Collision Warning (FCW)⁹
- Automatic Emergency Braking (AEB)⁹

Each draft procedure includes test scenarios designed to emulate real-world crash-imminent situations, all performed within the controlled confines of a test track. To ensure these

¹ National Highway Traffic Safety Administration (2019, August). *Active park assist system confirmation test* (DOT HS 812 714). Washington, DC: National Highway Traffic Safety Administration.

² National Highway Traffic Safety Administration (2018, June). *Blind spot detection system confirmation test (working draft)*. Washington, DC: National Highway Traffic Safety Administration.

³ National Highway Traffic Safety Administration (2019, July). *Blind spot intervention system confirmation test (working draft)*. Washington, DC: National Highway Traffic Safety Administration.

⁴ National Highway Traffic Safety Administration (2019, September). *Intersection safety assist system confirmation test (working draft)*. Washington, DC: National Highway Traffic Safety Administration

⁵ National Highway Traffic Safety Administration (2019, September). *Opposing traffic safety assist system confirmation test (working draft)*. Washington, DC: National Highway Traffic Safety Administration.

⁶ National Highway Traffic Safety Administration (2019, April). *Pedestrian automatic emergency brake system confirmation test (working draft)*. Washington, DC: National Highway Traffic Safety Administration.

⁷ National Highway Traffic Safety Administration (2015, December). *Rear automatic braking feature confirmation test procedure*. Washington, DC: National Highway Traffic Safety Administration. www.regulations.gov, Docket No. NHTSA-2015-0119-0030.

⁸ National Highway Traffic Safety Administration (2019, June). *Traffic jam assist system confirmation test (working draft)*. Washington, DC: National Highway Traffic Safety Administration.

⁹ National Highway Traffic Safety Administration (2019, March). *Test track procedures for heavy vehicle forward collision warning and automatic emergency braking systems*. Washington, DC: National Highway Traffic Safety Administration.

tests are objective (i.e., clear about exactly how they should be executed), and can be accurately and repeatedly performed, each draft procedure contains detailed specifications pertaining to test conduct including, but not limited to, the equipment, facilities, instructions, and tolerances needed to perform them in the most objective and consistent manner possible. While the procedures include draft evaluation criteria, there are no pass/fail assessments provided because they have been assembled for research purposes only.

NHTSA invites public comment on each of its draft research ADAS test procedures. Specifically, the agency seeks information related to the following areas of interest. In your responses, please clearly specify to which test procedure(s) your comments apply.

1. Can the test procedures be expected to assess adequately for the purposes of research, within practical limitations, the performance of the underlying ADAS technologies? If not, please provide specific reasons why, and suggestions for how they may be improved.
2. Do any of the draft research test procedures contain elements that may potentially confound the system operation and/or test results (e.g., regarding test conduct)? If so, please indicate what those elements are and how they might be addressed and/or mitigated?
3. Are the draft research test procedures clearly written, understandable, and executable? If not, please provide specific areas for which clarification is necessary, and suggestions for how they may be improved.
4. Are the ranges of test speeds, speed combinations, and/or speed increments specified within each draft research test procedure reasonable? If not, please provide any data or evidence to support any claim of unreasonableness from a research perspective.
5. To reduce test burden for the assessment of some technologies for research purposes, the number of repeated trials per test condition is proposed to be less than or equal to

seven based on our experience from past test procedure design work. Is this adequate, or should another number of repeated trials be performed for all technology/condition combinations to support an assessment of whether differences in the test results, for a given condition, are statistically significant?

6. Are there additional ADAS technologies NHTSA should be evaluating for research purposes? If so, please indicate what they are.
7. Are there existing, alternative test procedures for the ADAS technologies identified in this notice that NHTSA should consider? If so, please identify them and provide any comparisons/contrasts that might be useful to the agency.

Public Participation

How can I be sure that my comments were received?

If you submit comments by hard copy and wish Docket Management 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, Docket Management will return the postcard by mail. If you submit comments electronically, your comments should appear automatically in Docket No. NHTSA–2019–0102 on *www.regulations.gov*. If they do not appear within two weeks of posting, NHTSA suggested that you call the Docket Management Facility at (202) 366-9826.

How do I submit confidential business information?

If you wish to submit any information under a claim of confidentiality, you should submit three copies of your complete submission, including the information you claim to be confidential business information, to the Office of Chief Counsel, NHTSA, U.S. Department of Transportation, 1200 New Jersey Avenue S.E., Washington, D.C. 20590. In addition, you should submit a copy, from which you have deleted the claimed confidential business information, to Docket Management at the address given above under **ADDRESSES**. When

you send a comment containing information claimed to be confidential business information, you should include a cover letter setting forth the information specified in our confidential business information regulation. (49 CFR part 512.)

Will the agency consider late comments?

In our response, we will consider all comments that Docket Management receives before the close of business on the comment closing date indicated above under **DATES**. To the extent possible, we will also consider comments that Docket Management receives after that date.

How can I read the comments submitted by other people?

You may read the comments received by Docket Management 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, at www.regulations.gov, identified by the docket number at the heading of this notice. Please note that, even after the comment closing date, NHTSA will continue to file relevant information in the docket as it becomes available. Further, some people may submit late comments. Accordingly, NHTSA recommends that you periodically check the docket for new material.

Issued in Washington, D.C., under authority delegated in 49 CFR 1.95 and 501.4.

James Clayton Owens
Acting Administrator

BILLING CODE 4910-59-P

[FR Doc. 2019-25217 Filed: 11/20/2019 8:45 am; Publication Date: 11/21/2019]