



February 28, 2022

**By Electronic Filing at [www.regulations.gov/commenton/NHTSA-2021-0085](http://www.regulations.gov/commenton/NHTSA-2021-0085)**

Dr. Steven Cliff  
Deputy Administrator  
National Highway Traffic Safety Administration  
1200 New Jersey Avenue SE  
Washington, D.C. 20590

**RE: Agency Information Collection Activities; Notice and Request for Comment; Driver Alcohol Detection System for Safety Field Operational Test; Docket No. NHTSA-2021-0085; [86 FR 74427]**

Dear Deputy Administrator Cliff,

The Alliance for Automotive Innovation (“Auto Innovators”) appreciates this opportunity to comment on the information collection extension approval request to the Office of Management and Budget (OMB) from the National Highway Traffic Safety Administration (“NHTSA”) for field operational testing of the Driver Alcohol Detection System for Safety (DADSS). Auto Innovators is the singular, authoritative, and respected voice of the automotive industry, representing motor vehicle manufacturers responsible for nearly 99 percent of cars and light trucks sold in the U.S., original equipment suppliers, technology companies, and others within the automotive ecosystem.

Drunk Driving is the number one cause of motor vehicle-related fatalities in the United States, resulting in about 10,000 deaths per year<sup>1</sup>. In the past, consumer education, traffic laws, and high visibility enforcement programs have all been successful in reducing the occurrence of drunk driving, but we have reached a plateau in the last 10 years or so. Vehicle-based technologies, such as DADSS, show significant promise in passively detecting drivers with a Blood Alcohol Concentration (BAC) over the legal limit. A study done by the Insurance Institute for Highway Safety estimates that systems that restrict drivers with any BAC could prevent nearly 12,000 deaths annually and systems that restrict BAC to less than 0.08 g/dl could prevent more than 9,000 deaths annually in the U.S. alone<sup>2</sup>.

The Safe Systems approach to roadway safety<sup>3</sup> encourages design that anticipates and mitigates human error. U.S. DOT’s recently released National Roadway Safety Strategy (NRSS)<sup>4</sup> highlights the principles of a Safe Systems Approach. One of them is that “Redundancy is Crucial.” In the same respect that roadway safety is a shared responsibility, there is no one countermeasure that should be expected to work on its

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<sup>1</sup> Source: FARS 2019 Final File

<sup>2</sup> Farmer, Charles M., “Potential Lives Saved by In-Vehicle Alcohol Detection Systems,” Traffic Injury Prevention, January 2021.

<sup>3</sup> Tingvall, Claes, and Haworth, Narelle, “Vision Zero – An Ethical Approach to Safety and Mobility,” Paper presented to the 6<sup>th</sup> ITE International Conference Road Safety and Traffic Enforcement: Beyond 2000, Melbourne, September 1999.

<sup>4</sup> “National Roadway Safety Strategy,” United States Department of Transportation, January 2022.



own. As the NRSS states, the purpose of its “adoption of the Safe Systems Approach is to address contributing factors from all angles and build layers of prevention, protection, and mitigation.” (NRSS, p. 11). In support of this philosophy, the auto industry is developing and testing in-vehicle technologies to detect drunk driving.

Since 2008, the DADSS program has proven to be one of the most successful public-private partnerships working to develop a sustainable and data driven technology. The DADSS research program brings together the Automotive Coalition for Traffic Safety (ACTS), which represents the world’s leading automakers, that are also members of the Alliance for Automotive Innovation, and the United States Department of Transportation’s National Highway Traffic Safety Administration (NHTSA).

The overarching objective of the DADSS program is to develop and deploy in-vehicle technology that will be fast, accurate, reliable, and affordable.

User acceptance is a critical consideration of any technology that is intended to passively detect drivers with a BAC over the legal limit. Elements of a system required for user acceptance include:

1. Passive detection – the system should not require extensive user interaction, nor should the system delay or otherwise affect normal operation of the vehicle for an unimpaired driver.
2. Accuracy – false positives will not be tolerated by the general public.
3. System response – If impairment is detected, the driver should not be inconvenienced in such a way that they are stranded on a roadside without alternative means of transportation, nor should they be left without power to provide temperature control. A system that detects impairment after a vehicle is in motion could leave the vehicle and driver in a vulnerable situation. Users are more likely to accept a technology that indicates impairment before they leave their starting point.

Initial DADSS program objectives were to design a passive alcohol detection system that would be made available as optional equipment for passenger vehicles. This would be especially appealing for parents of teens, fleet operators, and others. As research progresses and public acceptance evolves, DADSS intends to make the technology available for commercial licensing.

Though any reduction in alcohol impaired driving would be a welcome advancement, any system that may have unintended safety consequences should be evaluated further. Examples of unintended consequences include:

1. False negatives – these could give an impaired driver a false sense of security and be assumed “permission to drive.”
2. Delays in detection – any system that makes an impairment determination after a certain distance and/or period of time driving, puts drivers, occupants, and other road users at risk.
3. (Un)Safe State – If a driver is determined to be impaired, the action (or inaction) of the vehicle should not place the driver in a vulnerable position, such as on the side of a roadway between origin and destination points.

And finally, before deployment, the technology must be thoroughly tested and evaluated in both laboratory and real-world driving conditions.



In the present notice, NHTSA states the objectives of the DADSS FOT:

- Determine the effectiveness, as compared to the standardized breathalyzer, of the DADSS sensors in a real-world driving environment.
- Analyze DADSS touch- and breath-based sensors in real-world driving scenarios.
- Obtain technical data to further refine the DADSS Performance Specifications for the DADSS System that will ultimately be used for vehicle design and development.

Auto Innovators is supportive of these test objectives and agrees the data that is to be collected is essential for ensuring a more informed, data-driven rulemaking process. This data will also provide a benchmark for comparing the relative effectiveness of other technologies designed to monitor driving performance in determining driver alcohol impairment.

We are supportive of the section of the Infrastructure Investment and Jobs Act<sup>5</sup> that directs NHTSA to evaluate technologies to detect impaired driving and provides funding to continue DADSS research. DADSS is the most promising technology to meet the objective of detecting alcohol-impaired driving and the completion of the field operational testing is a necessary step in the process.

The present notice indicates that the request for an extension to complete testing was due to the COVID pandemic. Auto Innovators is supportive of the updated timeline, as well as the additional safety measures put into place for study participants as well as researchers. The agency should explore opportunities for increasing participation.

Continuing research support is required to complete the development of a publicly acceptable system that will passively and reliably indicate driver impairment due to alcohol, and result in vehicle action that does not put the driver in a more vulnerable situation.

As stated in Auto Innovators' response to NHTSA's Request for Information on Impaired Driving Technologies<sup>6</sup>, we believe that DADSS research should be supported and completed as an Agency priority.<sup>7</sup>

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Auto Innovators appreciates the opportunity to provide comment to this notice and should you have any questions, please contact me at (202) 326-5545.

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<sup>5</sup> 117<sup>th</sup> Congress of the United States of America, (2021). *H.R. 3684 – Infrastructure Investment and Jobs Act, Section 24220. Advanced Impaired Driving Technology.*

<sup>6</sup> <https://www.regulations.gov/docket/NHTSA-2020-0102/document>

<sup>7</sup> <https://www.regulations.gov/comment/NHTSA-2020-0102-0011>



Sincerely,

A handwritten signature in black ink, appearing to read "Scott Schmidt". The signature is fluid and cursive, with a large initial "S" and a long, sweeping tail.

Scott Schmidt  
Vice President, Safety Policy  
Alliance for Automotive Innovation