



Driver Alcohol Detection System for Safety (DADSS)

The National Highway Traffic Safety Administration (NHTSA) and the Automotive Coalition for Traffic Safety (ACTS) have been working in a cooperative agreement to create the Driver Alcohol Detection System for Safety (DADSS) – a non-invasive technology that will prevent a person from starting a DADSS-equipped vehicle if the driver has an illegal BAC limit of .08 or above.

The effort was launched in 2008 to explore the feasibility of this technology, its benefits, and potential barriers. In 2013, the project entered a new phase that will enable further refinement of the technology to the point where it can be seamlessly integrated into vehicles.



The DADSS program is exploring two different technologies: a breath-based system and a touch-based system.

- The touch-based system uses spectrometry to measure alcohol concentration in the driver's skin tissue. The technology is likely to be included in the push start button of newer vehicles and the reading will be taken once the driver's fingertip comes in contact with the optical touch pad.
- The breath-based system also uses spectrometry but it measures alcohol concentration in the driver's exhaled breath. Possible locations within the vehicle for these sensors including the steering column and the driver's side door as well as other places within the vehicle cabin.

Once developed, this first-of-its-kind technology will be made available as another safety option in new vehicles. Deployments of DADSS technology have begun in Virginia and Maryland. Virginia was the first state to pilot the DADSS technology and instituted the [Driven to Protect](#) partnership. Highway safety grant funds were used to support this initiative which involves a partnership between the Virginia DMV and the James River

Transportation company to deploy DADSS in fleet vehicles. Data and feedback collected from the vehicles and operators will enhance and improve the technology. In 2019, Maryland followed Virginia's lead and established its own [Driven to Protect](#) initiative. These efforts are ongoing and in conjunction with the piloting of the technology, campaigns are underway to educate the public about

the importance and life-saving potential of DADSS. The goal is to create public acceptance and have DADSS viewed as a necessary safety feature for vehicles much like seat belts and airbags.

The Insurance Institute for Highway Safety (IIHS) conducted a survey in 2009 that found that 40% of participants would want DADSS in their vehicles. IIHS estimates that if DADSS were installed in every vehicle in 2015, a total of 7,000 lives could have been saved.

Responsibility.org position:

Responsibility.org supports DADSS research and views this initiative as promising prevention technology that has the potential to save countless lives. Responsibility.org believes this technology must be reliable, accurate, affordable, precise, tamper-resistant, durable under extreme environmental conditions, and require minimal maintenance. Additionally, this technology must be set at the legal limit of .08 BAC and be unobtrusive,

especially to those drivers who do not consume alcohol. Technologies developed under this project are envisioned to be voluntarily installed as an option on new vehicles.

Additional Resources:

Learn more about the DADSS technology, state-level initiatives, supporting partners, and ongoing developments at the official DADSS website: <https://www.dadss.org/>