



Advanced Impaired Driving Prevention Technology Provision - Infrastructure Investment and Jobs Act

Background

- A bipartisan provision in the Infrastructure Investment and Jobs Act (Section 24220, Public Law 117-58, IIJA) signed into law on November 15, 2021 requires a new national safety standard for passive, advanced impaired driving prevention systems in new vehicles.
- Drunk driving kills 1,000 people every month in the U.S. and injures 25,000. Over the past three years, the U.S. has experienced double-digit increases in alcohol-related crash deaths, and a rising number of drivers in fatal and serious-injury crashes are testing positive for other drugs. Additionally, drunk driving is costing the U.S. economy \$58 billion a year.
- Implementation of this provision, known as the HALT Act – Honoring the Abbas Family Legacy to Terminate (HALT) Drunk Driving - will eliminate deaths, injuries and crashes caused by impaired driving.
- Research supports technological solutions to end impaired driving. More than 10,100 lives will be saved annually when all new cars have drunk driving prevention technology as standard equipment, according to the [Insurance Institute for Highway Safety](#).

Impaired Driving Prevention Technology, IIJA, Section 24220, Public Law 117-58

- The National Highway Traffic Safety Administration (NHTSA) is directed to complete a rulemaking process within three years of the November 2021 enactment of the IIJA. Automakers will then have two to three years to implement the new standard.
- The HALT Act, named in honor of Issam and Rima Abbas and their children Ali, Isabella and Giselle, a Michigan family killed by a wrong-way drunk driver in Lexington, KY, was championed by Reps. Debbie Dingell (D-MI), David McKinley (R-WV) and Kathleen Rice (D-NY). The Senate bill was led by Senators Ben Ray Lujan (D-NM), Rick Scott (R-FL), Gary Peters (D-MI), and Shelley Moore Capito (R-WV).
- The law is technology-neutral and allows for NHTSA to consider technologies that already exist or are in development. For example:
 - Driving assistance systems such as lane assist and collision avoidance

- Driver monitoring systems that monitor the driver's ability to safely operate a vehicle
- Passive alcohol detection systems
- The law requires passive impaired driving prevention systems. These are not breathalyzers or ignition interlock devices. This smart technology has **NO** relation to police breathalyzers or to ignition interlock devices that require a motorist to actively blow into a device. Advanced impaired driving prevention systems use sensors integrated into a car that passively determine if the person behind the wheel is illegally impaired.
- The timeline of completing a rulemaking within three years (November 2024), with implementation in new cars two to three years later, is reasonable and the cost to auto manufacturers is minimal.
 - One technology entity that is pursuing DUI prevention technology, The [Driver Alcohol Detection System for Safety \(DADSS\)](#), estimates it will cost auto manufacturers \$200 per vehicle to add their technology and states that their current timeline for use in consumer vehicles is by 2024 for the breath system and 2025 for the touch system. This timetable for installation in cars is well within the statutory and regulatory timeline specified in the Congressional mandate.

Privacy

- The vehicle technology standard must protect driver privacy and should not make consumers vulnerable to privacy invasions or allow the collection, storage or use of their data for commercial or malicious purposes.
- Impaired driving prevention technology should only use data to determine whether a driver is illegally and dangerously operating a vehicle.
- No one outside the car will have the ability to operate or disable the vehicle.

Support

- American consumers strongly support the Congressional technology mandate. According to two nationwide polls conducted by Ipsos for MADD, 9 out of 10 Americans said technology that is integrated into a car's electronics to prevent impaired driving is a good or very good idea.
- Another [study](#) published in the Journal of the American Medical Association found nearly two-thirds of respondents either agreed or strongly agreed with the mandate for vehicle impairment prevention technology on all new vehicles.

- Implementation of the bipartisan provision in the IIJA is supported by [dozens](#) of traffic safety and public health organizations, representatives from the insurance industry, alcohol industry and thousands of victims and survivors of impaired driving crashes.

***About The Survey**

The poll was conducted October 28-30, 2022, by [Ipsos](#) using its KnowledgePanel®. This poll is based on a nationally representative probability sample of 1,030 general population adults age 18 or older, with a margin of sampling error of +/- 3.1 percentage points at the 95% confidence level.

Technology in Development

The auto industry has the resources and expertise to make safety advancements like impaired driving prevention a reality, much the same way it has used its R&D prowess for self-driving vehicles, electrification and many safety innovations. Some examples:

Magna

- [Magna is working on a system](#) that the company demonstrated at an auto technology showcase in September 2023 in Washington, D.C.
 - From Magna's Website: "Magna's Impaired Driving Prevention Technology combines our Driver Monitoring System technology with a non-dispersive infrared ethanol sensor developed by our industry partner into a single safety system. The combined system supports a robust determination of a driver's fitness to perform the driving task, including an assessment of their breath alcohol concentration, with the goal of reversing impaired driving trends."

Hyundai MOBIS

- According to an [announcement](#) in 2022, the Hyundai MOBIS cabin monitoring system includes passive alcohol detection technology.
 - "Hyundai MOBIS' breathalyzer technology is a non-contact type that can measure just by exhaling a little. It uses optical sensor technology to detect the alcohol content in the driver's breath to determine the blood alcohol level."
 - Hyundai MOBIS sent a letter to the National Highway Traffic Safety Administration (NHTSA) answering questions regarding new safety technologies.
 - Please take a look at questions 62, 64 – 66, and 70 – 72 that discuss driver impairment and intoxication. <https://lindseyresearch.com/wp-content/uploads/2022/06/NHTSA-2021-0002-4069-Hyundai-MOBIS-%E2%80%93-Comments-to-New-Car-Assessment-Program.pdf>

Volvo

- Volvo has been adding in-car sensors and cameras to its vehicles, aimed at enhancing safety by monitoring for [signs of intoxication](#) and distraction, then intervening to prevent crashes, as [announced](#) in March 2019.
- Volvo will introduce and standardize driver monitoring software (DMS) in its new fully-electric EX90 [developed by Smart Eye](#), an artificial intelligence (AI)-based driver monitoring technology. The technology combines dual driver understanding system with a sensing system to ensure hands are on the steering

wheel. Smart Eye AI algorithms analyze driver eye, face, head, and body movements to more effectively identify the behaviors of those inside a vehicle.

Bosch

- **Interior Monitoring Systems:** Highlighting some of Bosch's [most innovative technology](#), Motor Trend highlights interior monitoring sensors and Bosch is optimistic that these sensors can reliably detect an impaired driver.

DADSS

- [The Driver Alcohol Detection System for Safety \(DADSS\)](#), is a public-private partnership between NHTSA and the Automotive Coalition for Traffic Safety (ACTS) that began in 2008. ACTS estimates it will cost auto manufacturers [\\$150-\\$200 per vehicle](#) to add their technology, and reports it has tested an initial version, aiming to have a device that [would comply with the law by the end of 2025](#).

Nissan

- Nissan [unveiled](#) a new concept car in 2007 with multiple preventive features against impaired driving. It used alcohol sensors, facial monitoring and vehicle operational behavior to detect driver impairment.

Toyota

- Toyota [announced](#) a drunk driving prevention system in 2007 with hopes of having it in cars by the end of 2009. The technology [was described](#) as a fail-safe system using sensors to detect the presence of alcohol or impaired driving.