Headline: Drivers learning to use safety technology

Deckhead: AAA research examines motorists’ use of ADAS features

New research by the AAA Foundation for Traffic Safety found that drivers who use advanced driver assistance systems (ADAS) grow more comfortable over time. Sometimes, however, too comfortable.

Attention to driving tended to stop weeks after using ADAS. These drivers also used ADAS more often when highway demands were lower.

The study involved 30 drivers who operated a vehicle with ADAS features, including Adaptive Cruise Control and Lane Keeping Assistance. Study participants drove the ADAS-equipped vehicle for six-to-eight weeks on highways and were assessed before, during and after on their behavior and attitudes toward the driving assistance.

Key takeaways from the study included:

* Drivers can become comfortable with ADAS over time but are less likely to use the technologies in high-demand situations, preferring to use driver assistance on roads with lower traffic and better weather conditions.
* Drivers who used their vehicle’s ADAS reported lower stress levels and greater driving enjoyment.
* Over six-to-eight weeks, there was an increase in frequency of system warnings reminding the drivers to pay attention. This suggests that drivers became more comfortable engaging in nondriving activities as they gained familiarity with ADAS.

The research found that drivers initially paid more attention to the driving task when using ADAS than when driving manually. However, drivers began to relax and multitask more often while the vehicle was in partial control after a few weeks of experience.

These findings suggest drivers can learn to trust and rely on ADAS over time. But drivers must be aware of the technology’s limitations and be prepared to take over in an emergency.

ADAS is widely available. Technologies combine vehicle acceleration with braking and steering. Since the introductions of these features, there have been numerous newsworthy instances of drivers misusing the systems by watching videos, working, sleeping or climbing into the backseat.

To prevent such activities, some vehicles equipped with this technology monitor drivers by using a camera-based system that watches their faces or a system that tracks steering-wheel movements. Recent AAA automotive research testing found the camera-based system to be superior.

The AAA Foundation’s research reinforces the importance of the Safe System Approach (SSA). ADAS systems provide a safety benefit to drivers and other road users like cyclists and pedestrians, by alerting the driver to their presence. The SSA is a strategic way of leveraging the engineering and behavioral countermeasures proven effective at preventing traffic crashes and the injuries that can result from them.

The study’s findings suggest that drivers are willing to use driver-assistance systems but are still cautious about relying too heavily on them. This is essential information for automakers and regulators as they work to develop and deploy safe and effective automated vehicles.

The findings of this study suggest that ADAS-equipped vehicles have the potential to be a safe and efficient way to travel. A [Foundation report released last August](https://newsroom.aaa.com/2023/08/your-autos-safety-net-the-lifesaving-potential-of-driving-assistance-tech/) estimates that available ADAS technologies could prevent approximately 37 million crashes, 14 million injuries and nearly 250,000 deaths during the next 30 years. However, automakers and regulators must consider that drivers must retake complete control of their vehicles in certain situations. Vehicle automation must have safety features, allowing drivers to intervene quickly and easily.

Cutline: SAFE TRAVELS – More drivers are using their vehicles’ advanced driver assistance system technologies. Image: Imaginarium\_photos. Adobe Stock.