

Most automated driving systems are lousy at making sure drivers pay attention, insurance group says

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Car lights are reflected in the wet street as commuters line up in traffic to enter the I-110 Harbor freeway in the rain in downtown Los Angeles, March 6, 2024. Most electronic systems that take on some driving tasks for humans don't adequately make sure drivers are paying attention, and they don't issue strong enough warnings to make drivers behave. That's according to an insurance industry study published Tuesday, March 12, 2024. Credit: AP Photo/Damian

Dovarganes, File

Most electronic systems that take on some driving tasks for humans don't adequately make sure drivers are paying attention, and they don't issue strong enough warnings or take other actions to make drivers behave, according to an insurance industry study published Tuesday.

Only one of 14 partially automated systems tested by the Insurance Institute for Highway Safety performed well enough to get an overall "acceptable" rating. Two others were rated "marginal," while the rest were rated "poor." No system received the top rating of "good."

"Most of them don't include adequate measures to prevent misuse and keep drivers from losing focus on what's happening on the road," said IIHS President David Harkey.

The institute, Harkey said, came up with the new ratings to get automakers to follow standards, including how closely they watch drivers and how fast the cars issue warnings if drivers aren't paying attention.

It also says it is trying to fill a "regulatory void" left by inaction on the systems from the U.S. National Highway Traffic Safety Administration. Harkey said the agency needs to do more to set standards for the systems, which are not able to drive vehicles themselves.

The agency said Tuesday that it welcomes the IIHS research and will review the report.

IIHS safety ratings are closely followed by automakers, which often make changes to comply with them.

The 14 systems, which include several variations from single automakers, are among the most sophisticated now on the market, Harkey said.

Only one of the systems, Teammate in the Lexus LS, earned the adequate rating. General Motors' Super Cruise in the GMC Sierra and Nissan's Pro-Pilot Assist with Navi-Link in the Ariya electric vehicle were rated marginal.

Other systems from Nissan, Tesla, BMW, Ford, Genesis, Mercedes-Benz and Volvo were rated poor.

Harkey said the driving systems initially were combinations of safety features such as automatic emergency braking, lane departure warnings, lane centering and blind-spot detection. But now they give drivers the chance to not pay attention for some period of time, raising safety risks, he said in an interview.

"That's why the focus is on how do we make sure that the driver remains focused on the driving task," Harkey said.

Some automakers, he said, market the systems in a way that drivers could think they are fully autonomous. "The one thing we do not want is for drivers to misinterpret what these things can or cannot do," he said.

The systems, IIHS said, should be able to see if a driver's head or eyes are not directed on the road, and whether their hands are on the wheel or ready to grab it if necessary.

The institute also said if a system doesn't see a driver's eyes on the road or hands aren't ready to steer, there should be audible and visual alerts within 10 seconds. Before 20 seconds, the system should add a third alert or start an emergency procedure to slow down the vehicle, the institute

said.

Automakers should also make sure safety systems such as seat belts and automatic emergency braking are activated before the driving systems can be used, it said.

None of the 14 systems met all the driver monitoring requirements in the test, but Ford's came close, the group said.

Lexus' Teammate system and GM's Super Cruise met the warning requirements, while systems from Nissan and Tesla were close.

Harkey said automakers already are responding to the tests and preparing changes, many of which can be accomplished with software updates.

Toyota, which makes Lexus vehicles, said it considers IIHS ratings in setting up safety standards, while GM said the IIHS ratings are important. Nissan said it will work with the institute.

Mercedes said the company said it takes the findings seriously, and it relies on the system collaborating with the driver, while Hyundai luxury brand Genesis said it is quickly improving its system, including the addition of an in-cabin camera. Volvo said it supports IIHS efforts to reduce misuse of driver assist systems

BMW said it respects IIHS's efforts, but it differs philosophically about how systems should monitor drivers. One BMW system evaluated by IIHS is not intended for drivers to take their hands off the wheel and only considers input from steering wheel sensors. BMW tests have not found a clear advantage in turning on the driver monitoring camera, the company said. Another more sophisticated system intended for drivers to take hands off the steering wheel uses a camera to watch drivers, the company said.

Ford said its Blue Cruise system monitors drivers and sends repeated warnings. The company said it disagrees with IIHS' findings but will consider its feedback in updates.

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