

# Autonomous Driving Technology

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Autonomous driving technology has been a topic of interest in the tech industry for years. In 2015, there were predictions that by 2020, everyone would be a backseat driver with the emergence of autonomous driving technology. Those predictions have proven premature, but the industry continues to move in this direction at a rapid pace. Autonomy of a vehicle is based on levels, which are scaled from zero to five. Zero means no automation whereas five denotes full automation, and two to four indicates that the vehicle has some automated functions like acceleration and steering. The National Highway Traffic Safety Administration (NHTSA) estimates that cars will have fully automated safety features and highway autopilot by 2025. Plans for the trucking industry include Level 4 autonomy (i.e., high automation where even if a human driver does not respond appropriately to a request to intervene, the vehicle can pull over safely by a guiding system) as early as 2024.

While the technology included in the design of the self-driving vehicles varies, it generally includes a system that maintains an internal map based on sensors such as radar. Issues with self-driving cars involve programming the cars to encompass human responses to driving such as reacting to weather conditions and confirming with other drivers who has the right of way. Additional problems arise with trucks, as they will require the ability to sense conditions farther in advance to allow for a truck's longer stopping distance.

One of the many benefits of having self-driving vehicles includes fewer accidents. The NHTSA states that 94% of serious crashes are due to human error. AV technology may reduce this number by supplying electronic supports for tasks such as emergency braking, blind spot detection, lane-keeping assistance, and adaptive cruise control.

However, AV technology development has been delayed given the plaintiffs' bar's successful lobbying efforts. The technology developers are waiting for the enactment of proposed federal legislation, such as the AV START Act and the SELF DRIVE Act, before committing even more resources to research and development. They are seeking legislative protection in the form of immunity and damages caps as the technology becomes ready for "on the road implementation." This is because they anticipate that AV technology will become a focus of recovery for personal injury auto accident plaintiffs. In short, parties involved in automobile mishaps where AV technology is in use will argue that the technology failed, causing ultra-hazardous driving conditions, and therefore, are entitled to punitive damages in addition to recovering their compensatory losses.

It is a fact that more and more carriers are incorporating various levels of automation into their businesses each day. For example, Volvo announced a partnership with Aurora Innovation to make autonomous trucks. The project includes a human driver who will drive a load to a highway-adjacent hub. The truck then hauls the load to a more distant hub where another human takes control of the truck to reach its final destination—all to prevent trucks from driving in heavily congested areas. Absent congressional action, however, each layer of automation a business adopts may expose a carrier to heightened litigation risks as they may be held liable for the technology loaded onto their trucks. This is why it is critical that before integrating AV technology into their fleets, carriers comprehensively assess the technology's safety record and performance. Carriers also should look for opportunities for risk transfer by, if possible, entering into indemnity agreements with prospective AV tech companies. That is, in exchange for carriers outfitting or purchasing autonomous equipment, the AV tech sellers commit to contractually indemnifying and defending the carriers in the event that the AV tech fails or is deemed a cause of an accident.

Concerns regarding safety and mistrust towards nonhuman drivers seem to be the greatest setbacks for fully autonomous vehicles. Technology can assist the trucking and transportation industry, however, it is clear that that human drivers offer an intangible quality that the tech industry has trouble duplicating. It is equally clear that the

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technology is coming. The present challenge for motor carriers concerning AV tech is balancing the rewards of implementing autonomous assistance across their fleets with the risks associated with the new technology.