

Overview

Advanced Driver Assistance Systems, or ADAS, encapsulate a number of different technologies and features that should be understood to best handle claims, or litigation, involving these systems. These features and technologies will be discussed first beginning with the common terminology and definitions. For instance, adaptive cruise control, forward collision warning and automatic emergency braking functions rely mostly on the forward-looking radar installed near the front bumper of the vehicle. Adaptive cruise control identifies an object and maintains a certain following distance from it by applying the brakes, or accelerating, when needed. Should the object track too close to the vehicle, a forward collision alert is issued. Emergency braking will automatically be applied if the system detects a collision with the tracked object is likely and the driver has not acted. Early versions of these systems had a limited range and struggled to identify stationary objects. Current generation systems can not only detect stationary objects, but also pedestrians and have an increased detection range.

Lane departure warning systems utilize a camera mounted on the windshield to identify the appropriate demarcations on the roadway. When the vehicle's drive tire travels onto the lane line, an audible, or haptic, warning will be issued to the driver. More advanced systems, although not yet popular, also have the ability to steer the vehicle back into its travel lane.

ADAS systems provided by tier 1 suppliers will be discussed along with the subtle differences between them. These suppliers are Bendix, Wabco and Detroit. Not only will the particular features of each system be discussed, but the data available from each will be covered and how that data is obtained. While we historically retrieved electronic data from an Engine Control Module (ECM) of a CMV, the data we obtain from ADAS systems can be far more voluminous and may even include video.

This portion of the presentation will conclude with viewing the results from testing one such ADAS system on a commercial motor vehicle. Three scenarios including approaching a stopped vehicle, approaching a slower moving vehicle, and following a vehicle that suddenly decelerates are considered. Warnings given to the driver via the instrument cluster, the audible alerts and intervention of the system to prevent a collision will be shown for each of the test scenarios.

Perspectives from Manufacturers

Viewpoints regarding ADAS litigation will be provided from the perspective of a Class 8 heavy truck manufacturer. As a threshold matter, it must be appreciated that heavy trucks are much different than passenger vehicles, as the uses, applications, duty cycles, and geographic operations are varied and differ greatly. For these and other reasons, the equipment choices that exist for heavy trucks is extensive and extends to virtually all aspects of the heavy truck, including engines, transmissions, axles, brakes, wheels and tires, cab configuration, etc. Choices also exist as to certain safety equipment, including ADAS, as such equipment can be optional or, if standard, de-selected by the purchasing customer.

Against this backdrop, ADAS claims against heavy truck manufacturers typically fall into two categories: (1) failure to equip; and (2) failure to perform. A failure to equip case involves claims

that the heavy truck should have been equipped with certain types of ADAS but was not. Multiple variants of these cases exist, as the at-issue ADAS may not be available, may be an optional feature and not ordered, or may be a standard feature but de-selected by the purchasing customer. The specific failure to equip variant affects how the case is defended.

On the other hand, a failure to perform case involves claims that the heavy truck's ADAS system(s) malfunctioned or did not perform in the expected or appropriate manner. Such cases are typically fact-specific and depend on the type of ADAS at issue; however, the core allegation typically involves the failure of an ADAS to mitigate or prevent an accident.

Regardless of the category, ADAS lawsuits can encompass all forms of ADAS, such as automatic emergency braking or forward collision warning, lane departure warning, blind spot warning, etc. The cases also involve single-vehicle incidents, vehicle-to-vehicle crashes, pedestrian incidents, and others.

Like most automotive cases, the facts of the accident are critical in defending heavy truck ADAS cases. For example, certain accidents may exceed the performance capabilities of the at-issue ADAS. Human factors considerations also play a central role. A critical question is this: would the ADAS system have made a difference in the accident scenario and, if so, what difference?

Further, the role of the CDL-licensed driver cannot be overstated. Even with an ADAS system, "the driver is **fully responsible** for driving the vehicle while the system provides ... assistance." See NHTSA Levels of Automation, available at [ADAS Levels \(nhtsa.gov\)](https://www.nhtsa.gov/vehiclesafety/levels-of-automation) (emphasis added). To this point, it must be emphasized that ADAS are **assistance** systems, and the driver must remain alert and attentive to the driving task.

Governmental and regulatory considerations also factor into defending heavy truck ADAS cases. Over the years, the National Transportation Safety Board ("NTSB") has recommended that heavy trucks be equipped with various forms of ADAS, and these recommendations may play a role in the theories asserted against the heavy truck manufacturer. The NTSB, however, does not have enforcement authority, and its recommendations are not law. The entity that can enact law, and has enforcement capability, is the National Highway Traffic Safety Administration ("NHTSA"). In July 2023, NHTSA issued a notice of proposed rulemaking that would mandate the installation of automatic emergency braking systems in heavy trucks. See 88 Fed. Reg. 43174. Thus, most forms of ADAS are not mandated or required in heavy trucks.

Lastly, a case study will be provided from *Butler, et al. v. Daimler Trucks North America LLC, et al.* ("Butler"). Butler involved an accident that occurred on Interstate 70 in Eastern Kansas. Traffic had backed up due to construction, and the driver of a heavy truck did not observe the stopped traffic and crashed into multiple vehicles, killing five. Families of the deceased filed suit against Daimler Truck North America ("DTNA"), alleging the heavy truck should have been equipped with automatic emergency braking or forward collision warning systems as standard, rather than optional, features. DTNA moved for summary judgment, contending that a heavy truck with a functioning air brake system is capable of being safely operated and is not defective as a matter of law. The trial court agreed and entered summary judgment in favor of DTNA. See *Butler v. Daimler Trucks N. Am., LLC*, No. 19-CV-2377-JAR, 2022 WL 2191755 (D. Kan. June 16,

2022). Plaintiffs appealed to the Tenth Circuit Court of Appeals, which affirmed the summary judgment in favor of DTNA. *See* 74 F.4th 1131 (10th Cir. July 2023).

Perspectives from Lessors

In our final segment, we will be focusing on litigation strategies from the perspective a downstream market segment who often face similar “failure to equip” claims as manufacturers – purchasers of heavy trucks such as lessors.

For lessors, the Graves Amendment because it provides important context for how ADAS claims are asserted against leasing companies in the first place. Unlike manufacturers, leasing and rental companies do not develop, test, or design these systems. Instead, they are purchasers of vehicles where the systems are options.

The Graves Amendment provides that a company in the business of leasing or renting motor vehicles “shall not be liable under the law of any State or political subdivision thereof, by reason of being the owner of the vehicle, for harm to persons or property that results or arises out of the use, operation, or possession of the vehicle during the period of the rental or lease,” unless the company is negligent or engaged in criminal conduct. 49 U.S.C. § 30106(a). Courts across the country have held that the Graves Amendment preempts claims that seek to impose vicarious liability on leasing or rental companies for the acts or omissions of lease or rental customers.

The Graves Amendment contains a narrow “savings clause” that allows for potential liability only in the case of negligence or criminal wrongdoing by the owner. 49 U.S.C. § 30106(a). Courts have recognized that the savings clause “is rarely applicable and should be cautiously applied in light of Congress’ clear intent to forestall suits against vehicle leasing companies.” *Dubose v. Transport Enterprise Leasing, LLC*, 2009 WL 210724 at *4 (M.D. Fla. Jan. 27, 2009). Put differently, while a rental company cannot be subject to liability for the acts of rental drivers, it can face liability for its own negligence *only* where a duty exists under to state law.

Plaintiffs who target lessors with ADAS claims attempt to impose a state law duty on the lessor under a direct negligence theory. These claims can be attractive for Plaintiffs because they attempt to target corporate decision-making and invoke reptile arguments about corporate safety priorities.

There are several legal defenses available to lessors when faced with these claims. They are substantially similar to those asserted by manufacturers – preemption, the lack of any legal duty, compliance with government standards, or the optional equipment doctrine. In 2022, West Virginia court granted a motion to dismiss after finding that federal law preempted ADAS claims. The Court dismissed claims against both the manufacturer and the lessor of the vehicle, holding that the imposition of state tort liability for failing to require ADAS would disrupt NHTSA’s measured steps toward determining the proper technologies in medium and heavy trucks. *See Betts v. Penske Truck Leasing*, No. CC-35-2022-C-10 at ¶ 15 (W.Va. Cir. Ct. Apr. 4, 2022).

The “optional equipment” doctrine offers both potential benefits and drawbacks for lessors or fleet purchasers. On one hand, the “optional equipment doctrine” puts the duty on the buyer when “(1) the buyer is thoroughly knowledgeable regarding the product and its use and is actually aware that the safety feature is available; (2) there exist normal circumstances of use in which the product is

not unreasonably dangerous without the optional equipment; and (3) the buyer is in a position, given the range of use of the product, to balance the benefits and the risks of not having the safety device in the specifically contemplated circumstances of the buyer's use of the product."¹ Sophisticated purchasers, lessors, or renters of vehicles should therefore be aware of the risks of being offered certain "optional" features, but declining to implement them. The best way to do this is to present facts on the purchaser's careful consideration of the options. On the other hand, the lessor may have a defense under this doctrine when the lessor was simply acting as an intermediary and making a purchase of a vehicle on behalf of its customer – the lessee. When a sophisticated lessee declines an option and the lessor simply processes that order as part of a lease arrangement, the lessor will likewise have an opportunity to raise the optional equipment defense.

There have been legislative efforts to control ADAS claims against lessors and fleet purchasers. In Texas, there was legislation passed in 2023 that codified the lack of any legal duty for a lessor to select an optional safety system, provided that the vehicle otherwise complied with all Federal Motor Vehicle Safety Standards in effect at the time of purchase. See Tex. Civil Practice and Remedies Code 82.009 (limited liability for failure to retrofit certain leased / rented vehicles). The legislation was an amendment to the Texas Products' Liability Act and was the result of extensive negotiation between the Plaintiff's bar in Texas and the Truck Rental and Leasing Association, one of the main supporters of the bill. There are other legislative efforts underway in other states.

Apart from legal defenses, there are re-occurring factual defenses to consider in these cases for lessors. First among them is the company's story relating to the consideration of ADAS as a vehicle option. As detailed above, ADAS is a relatively new and evolving technology. It is not federally mandated and has been under study and evaluation by the federal government for years. Any defense of the company's decision not to select ADAS should be presented along with facts showing that the National Highway Traffic Safety Administration (NHTSA) has studied the technology for years but has yet to mandate it in medium or heavy trucks.

Additionally, like any new technology, early forms of ADAS experienced reliability issues. There is a delicate balance to strike in these cases between the benefits of the technology and some of its limitations. Many fleet operators, while optimistic about the technology, elected to study various iterations and versions of the technology before making it "standard" in their vehicles. The reasons for this included technological upgrades, lack of demand in the market, limited options, the need for time for driver training/education, and the desire for consistency and uniformity in fleets. Thus, to the extent possible, the defense of the company should include emphasis on the company's evaluation, consideration, and study of the technology – both in terms of its potential benefits and challenges. Where possible, this defense should be presented cooperatively with the manufacturer.

When the facts support it, there are viable arguments that the vehicle is not defective under a consumer expectation or risk utility standards. This defense is largely fact intensive and will

¹ *Scarangella v. Thomas Built Buses, Inc.*, 93 N.Y.2d 655, 660 (N.Y. 1999); see also *Cook v. Caterpillar, Inc.*, 849 S.W.2d 434, 440 (Tex. 1999); *Anderson v. P.A. Radocy & Sons*, 865 F.Supp. 522, 531 (N.D. Ind. 1994) (finding manufacturer cannot be held liable for not equipping safety feature when purchaser "did not opt to do so").

depend on the strength of the record developed during discovery. To that end, it can be helpful to be prepared to question the ultimate purchaser or user on their expectations with respect to the vehicle and whether they believed that a vehicle could be operated safely without ADAS.

Lastly, while having a strong company witness is important, experts can help on this issue as well as general juror education about the positives and limitations to this technology. Experts are also vital to address causation and the critical question of whether the accident could have been avoided, or even mitigated, if ADAS had been selected. In our experience, many of the most significant rear-end events that lead to claims for failure to equip involve clear instances of driver error or inattentiveness.