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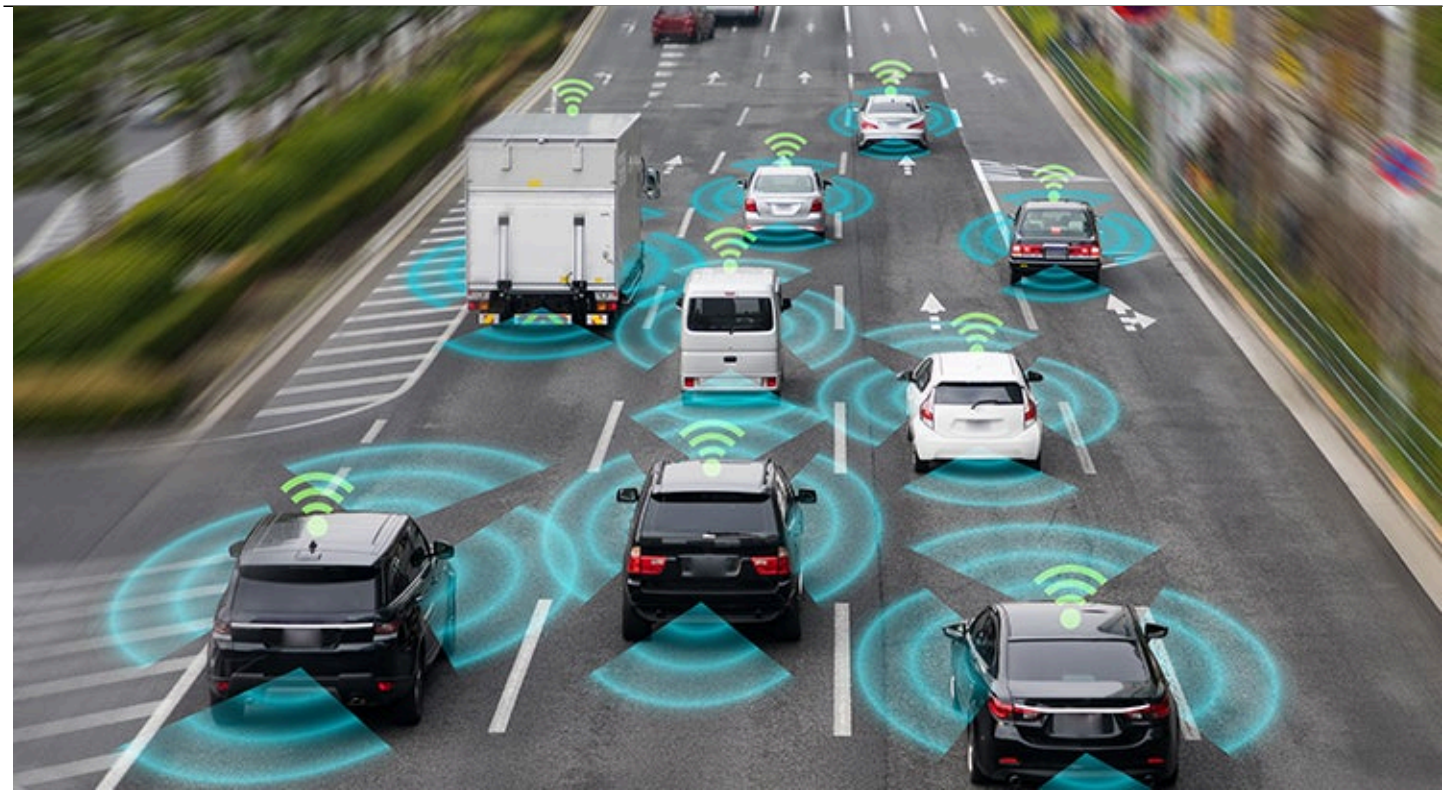
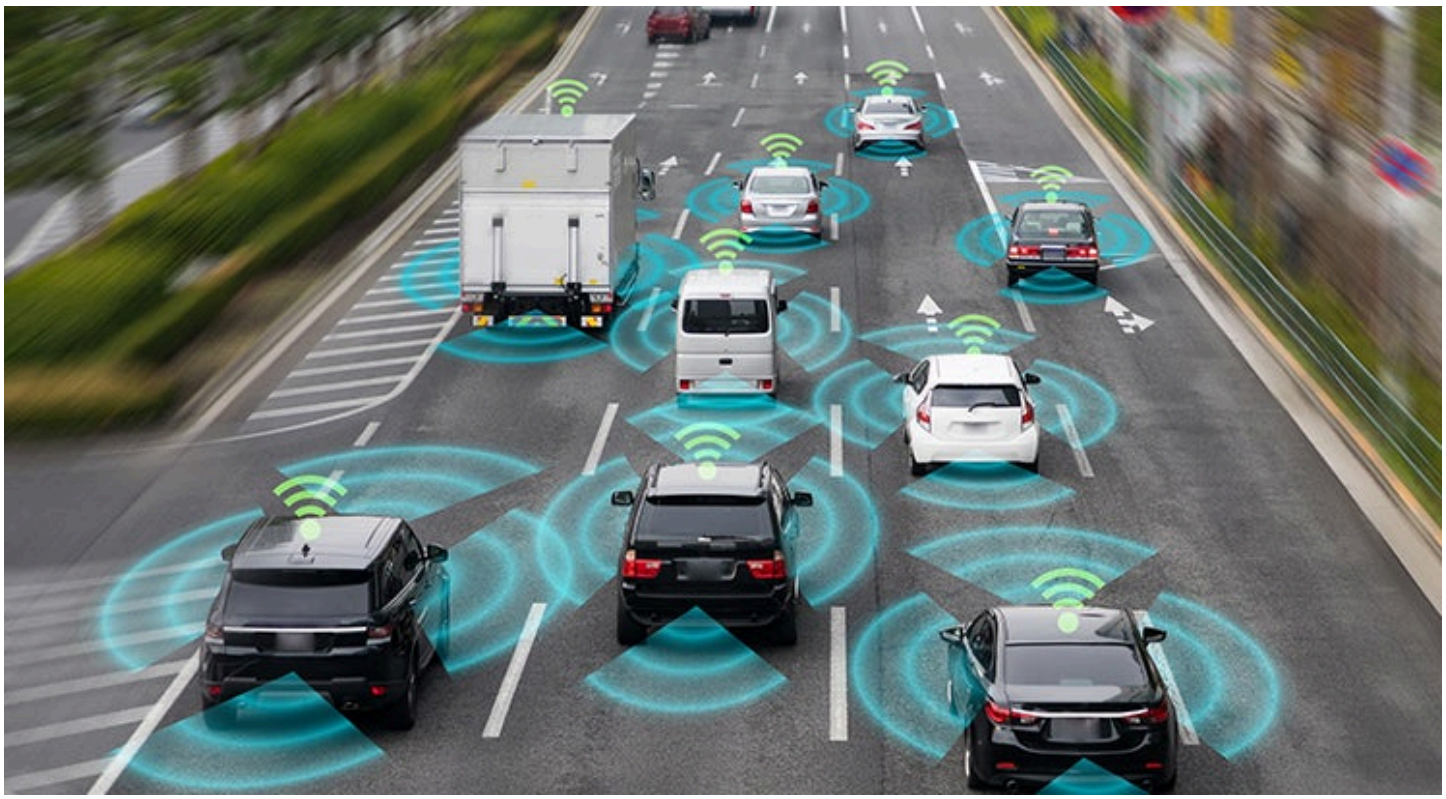
Autonomous Vehicles – Future Risks Come to Roost

Litigation and Dispute Resolution





A World Health Organization (WHO) 2018 global status report on road safety pegged the number of annual road traffic deaths worldwide at 1.35 million, making road traffic injuries the leading killer of people aged five to 29 years. This is in addition to the tens of millions of people injured or disabled in

traffic accidents annually.

The US National Highway Traffic Safety Administration (NHTSA) published a survey involving a weighted sample of 5,470 car crashes between 2005 and 2007. Accidents were attributed to driver error in 94 percent of the crashes, with vehicle component failure playing a role approximately two percent of the time, and environment (weather, hazardous road conditions, etc.) playing a role another two percent of the time.

One McKinsey report estimates that self-driving cars or autonomous vehicles (AVs) can reduce accident rates by up to 90 percent, saving more than 30,000 lives and avoiding millions of injuries.

> *"The autonomous car doesn't drink, doesn't do drugs, doesn't text while driving, and doesn't get road rage. Autonomous cars don't race other autonomous cars, and they don't go to sleep."*
>
> – Bob Lutz, Chairman at General Motors

Japan and South Korea are investing heavily in the development of AVs, while China expects that 10 percent of all cars sold in 2030 will be fully autonomous. Notwithstanding projections of safer roadways, it is unlikely that AVs will eliminate all accidents.

A few accidents already

While there appears to be no global report on the total number of accidents involving AVs, some cases have made headlines, involving Tesla vehicles and others. For example, in the first California lawsuit involving an AV, Nilsson v. General Motors, a Chevrolet Bolt in cruise automation mode collided with a motorcycle.

The plaintiff alleged negligence, claiming the AV veered into his lane. The Chevy Bolt began merging into the left lane but stopped and moved back into its original lane, colliding with Nilsson. General Motors settled the lawsuit for an undisclosed amount. The vehicle was manned by an employee, who was not holding the steering wheel while the AV was in autonomous mode.

Some automakers advocate transitioning directly to fully autonomous cars to avoid the "hand-off" problem where human drivers become less attentive and fail to respond when necessary. For example, the first recorded case of a pedestrian fatality involving an AV occurred in Tempe, Arizona, in 2018, when Elaine Herzberg died after an Uber test vehicle struck her as she was pushing a bicycle across a four-lane road. The vehicle was operating in self-drive mode with a human safety backup driver sitting in the driving seat.

The car's event data recorders showed that when the AV first detected Herzberg six seconds before impact, it did not infer that emergency braking was needed. The police released video showing that the safety driver was not watching the road moments before the vehicle struck Herzberg. Had she been paying attention (rather than streaming the television show *The Voice*, according to her Hulu account), the accident might have been avoided.

Who is liable now?

The NHTSA recently recognized Google software as the "driver" in the company's self-driving cars. Nonetheless, many unanswered questions remain:

- In an accident, how is fault apportioned between the driver (who may not have had control of the vehicle at all), the auto manufacturer, and the developer of the driving software?
- How do insurers underwrite AVs, and how much does the driver's record really matter?
- Under what circumstances is it legal or appropriate for the driver to remove their hands from the wheel, and how inattentive can the driver be?
- To what extent is the driver absolved of negligence if the AV's systems fail?
- If a dealer loans an AV to a customer unfamiliar with its systems and an accident occurs, is the dealer liable?
- If the AV's artificial intelligence must decide between saving its driver or a bus filled with passengers in a collision situation, whose programming prevails, and how is that decision made?

Emerging law

Liability concerns have figured prominently in legislative initiatives related to autonomous vehicles. In the United States, 29 states have enacted legislation related to autonomous vehicles, including California, Florida, Nevada, and the District of Columbia. The California and Nevada statutes are silent on liability. By contrast, the DC, Florida, and Michigan statutes contain language protecting original manufacturers from liability for aftermarket by third parties to convert a non-autonomous vehicle into an autonomous vehicle.

The United Nations Economic Commission for Europe approved amendments to the Vienna Convention on Road Traffic to allow automated driving if the driver can override the technologies. The German Federal Ministry of Transport and Digital Infrastructure issued the world's first ethical guidelines for partly and fully automated vehicles. Included are high-level considerations valuing human life over property damage, and more complex issues in weighing one human life over another.

Claims of negligence are traditionally common in assessing liability for vehicular accidents with product liability claims arising where potential defects are a factor. Manufacturers have never been required to design fool-proof vehicles, although the performance expectations for AVs may increase potential liability for manufacturers and software designers as plaintiffs attempt to reach the deeper pockets behind individual drivers.

Conclusion

The area of autonomous vehicle liability will continue to evolve for years to come. Notwithstanding technological novelty, it is unlikely that the existing body of law governing litigated claims will be swept away by sensors and batteries. More likely, new elements will be developed that build on and perhaps morph the laws we currently have.

Furnishing adequate warnings and managing consumer expectations will be critical for auto and software manufacturers. Just as human error will remain a factor, no technology is completely failsafe, and glitches should be expected. Lawyers involved in this field will be increasingly

challenged to stay abreast of developments and gain a more sophisticated grasp of the algorithms, analytics, and other technology embedded in AVs.

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Spiwe Jefferson leads global legal and integrity functions across international operations for ABB's Electrification Service division. A sought-after speaker and thought leader on AI enterprise adoption, she has achieved over 710 hours (18 weeks) of AI-driven efficiency gains on one platform alone. Spiwe authors the *Mindful in 5* book series and podcast, providing leaders with actionable strategies for resilience and growth.