# Clains

COVERING THE BUSINESS OF LOSS

May 2019

Volume 67 . Number 4 PropertyCasualty360.com

THE FUTURE OF AUTONOMOUS VEHICLES

P. 22

Rear-end claims
P. 26

Autonomous technology

Total lost costs

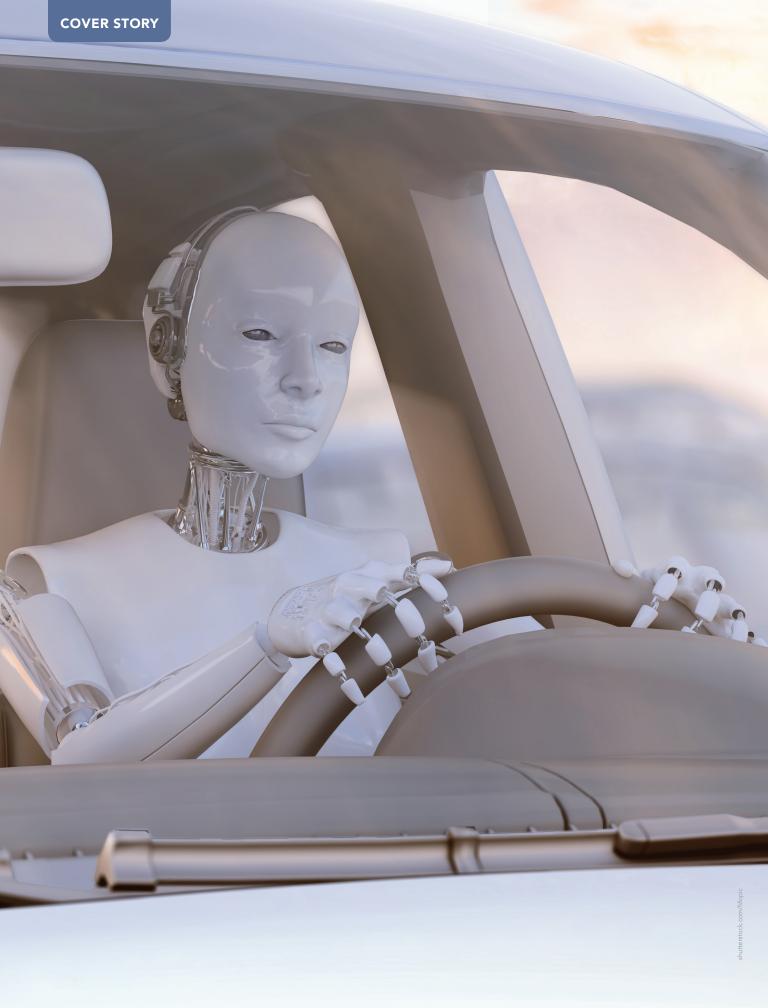
Replace or restore?

P. 38

Reprinted with permission from the May 2019 issue of *Claims* magazine

The National Underwriter Company

An **ALM** Publication



# CHANGING GEARS: SHIFTING AUTONOMOUS VEHICLE LIABILITY

By John Gardella, Esq.

elf-driving cars" have long been touted as the transportation future. Investments by automotive manufacturers in technology to test the limits of the theory of autonomous vehicles and the slow introduction of self-driving vehicle features in mainstream vehicles have both made science fiction more of a reality than ever before.

Any discussion regarding insurance coverage and autonomous vehicles needs to recognize the fact that autonomous vehicles will considerably expand lines of coverage that insurers will be able to offer. By fully understanding the evolution of vehicles and preparing tailored policies now for future use, insurers can be at the forefront and gain a competitive advantage in the world of autonomous vehicle coverage.

#### What is an autonomous vehicle?

Many safety features found in cars today represent the infancy stages of autonomous vehicles, including blind spot monitoring, lane control technology, self-parking features and drowsiness detection. These features are touted through marketing as "self-driving vehicles." Yet, not all cars sold today contain all of these features, leading to confusion as to what is a truly autonomous vehicle.

Fortunately, the Society for Automotive Engineers International (SAE) standard defines the various stages of autonomy in six stages:

- Stage 0 (No Automation): Driver performs all driving tasks;
- Stage 1 (Driver Assistance): Driver controls the vehicle, but some assistance features may be available;
- Stage 2 (Partial Automation): Some automated features exist, but driver must remain engaged in driving tasks and monitor environment at all times;
- Stage 3 (Conditional Automation): Driver is needed, but not required, to monitor the environment and must be ready to take control of the vehicle at all times;

- Stage 4 (High Automation): Vehicle can perform all driving functions under certain conditions. Driver may have the option to control the vehicle; and
- Stage 5 (Full Automation): Vehicle can perform all driving functions under certain conditions. Driver may have the option to control the vehicle.

To give these stages context, the most advanced "autonomous" vehicle currently on the market is only a Stage 2 autonomous vehicle. Audi recently introduced a vehicle that was touted as a Stage 3 autonomous vehicle, yet it encountered roadblocks in the United States given that regulations for advanced autonomy vehicles are currently determined at the state level on a state-by-state basis.

It is important for any insurance professional to understand the above distinctions and closely examine where on the spectrum certain vehicles on the market fall. If a "one size fits all" approach does not work for defining autonomous vehicles, such an approach should not be taken towards coverage for the array of vehicles on the market. Given that Stage 5 autonomy vehicles are not expected to be available to consumers until 2030, it is important that in the interim, insurers consider tailoring policies to maximize coverage opportunities for consumers and limit liability due to policies that do not fully address existing technology or differences in technology across various makes and models.

### Insurance policy evolution with autonomous vehicles

While existing insurance policy terms must adapt to the evolution of autonomous vehicles in differing stages of autonomy, insurers must also start to develop new types of policies that cover claims that will arise as vehicles become more autonomous.

Product liability policies

As vehicle autonomy moves more towards stages 4 and 5 on the SAE spectrum, traffic accidents will certainly decrease



### **AUTONOMOUS VEHICLES OF**

## THE FUTURE WILL REQUIRE MORE ADVANCED COMMUNICATION TECHNOLOGY TO INTERACT WITH OTHER AUTONOMOUS VEHICLES...

considerably; however, they are unlikely to disappear entirely. Any notion that autonomous vehicle technology will execute flawlessly is a fallacy. Failure of any of the following components in autonomous vehicles could lead to accidents, injuries and claims:

- 1. Failure of communication equipment embedded in the vehicle e.g., the device in the vehicle that "speaks to" other vehicles or sensor equipment in infrastructure;
- 2. Software errors for programs in autonomous vehicles (programming bugs, memory overflow issues, program defects); and
- 3. Hardware failures, including sensory circuit failures, camera vision loss and radar failure.
  - Security policies

Autonomous vehicles of the future will require more advanced communication technology to interact with other autonomous vehicles, signal devices embedded in streets, or other communication beacons that municipalities utilize to ensure that autonomous vehicles are able to function. Device-to-device communication leads to concerns involving security breaches. There are several types of potential security breaches that autonomous vehicles will face in the future, including:

• Unauthorized entry to vehicles and resulting vehicle theft or property damage;

- Remote hijacking of vehicle controls for theft or other nefarious reasons:
- Ransomware issues for autonomous vehicle software; and
- Identity theft or privacy breaches resulting from theft of personal information necessary to access the controls of the vehicles.
- Policies for municipalities

Autonomous vehicles of the future will rely on infrastructure sensor technology (roads, telephone poles, etc.) to function properly. Cities outside of the United States are currently testing such technology for autonomous vehicles. Discussions thus far envision municipalities bearing the responsibility for installing, maintaining and repairing infrastructure sensor technology for autonomous vehicles.

With such responsibility, though, comes potential liability for failure to properly install, maintain or repair sensor equipment, which could result in malfunctions in autonomous vehicles and accidents. Claims will, therefore, arise against municipalities, which is another avenue of expansion of the scope of coverage for insurers.

• Continuation of personal/driver insurance policies

The need for insurance policies for drivers will continue even after the United States has reached full Stage 5 vehicle autonomy, primarily to cover claims resulting from vehicle owner negligence — for example, the failure of the owner to update software for an autonomous vehicle, which could result in accidents on the road. In addition, coverage will still be needed for claims stemming from theft or weather damage, just as they do today for non-autonomous vehicles.

#### Preparing for the future

As technology advances and companies develop more truly autonomous vehicles for consumer use, it is imperative that insurers adapt to the changes and offer insureds the most comprehensive and accurate coverage possible. Some tips for insurers with respect to preparing for the autonomous vehicle future include:

• Stay attuned to all technology changes

It is imperative to keep abreast of the changes in the autonomous vehicle world. How quickly are manufacturers developing autonomous vehicle technology? What are the differences between the types of technology that are incrementally introduced to consumers to make vehicles more autonomous? In the transition years before all vehicles achieve Stage 5 autonomous status, there should not be "one-stop shopping" for insurance policies and insurers must be prepared to offer the right policy to protect themselves based on the specific make/model of the vehicle to be insured.

• Pay attention to legislative initiatives

At both the federal and state levels, discussions have already begun regarding regulations that will be needed for autonomous vehicles. These regulations may very well impact the way in which policies are written; however, attention should also be paid to considerations offering protections to manufacturers of autonomous vehicles to shield them from liability. The belief is that by creating such protections, it will incentivize companies to rapidly research and develop autonomous vehicles. Any such legislation, however, would shift the focus of claims in the ways discussed earlier.

• Consider hiring industry voices

The automotive industry will have a significant voice during the legislative initiatives that are to come for autonomous vehicles. The insurance industry should not take a back seat in these discussions, and insurers should consider hiring consultants or lobbyists now to ensure that the insurance industry's voice is heard during the legislative process.

• Use technology to your advantage

Many believe that the information regarding existing autonomous technology is shrouded in secrecy so that auto manufacturers can maintain competitive advantages. However, the information is more readily available than you may think. Not only are there numerous technophile websites that compare and contrast the available technology among manufacturers, but the auto industry markets its latest developments through press

releases, commercials or at trade shows. Advertising for the "next new thing" often starts two years before the vehicle actually hits the market, providing ample time to investigate and request information directly from the manufacturers.

Truly autonomous vehicles are not a reality — yet. Nor will they suddenly appear overnight as a consumer offering. The development of truly autonomous vehicles will be an evolution — one that will require not only technological advancement, but also infrastructure development, regulatory decisions, and consumer acceptance of a sea of fully autonomous vehicles.

Insurers, though, cannot wait until the cusp of true autonomy in vehicles to prepare for the many new facets of coverage that autonomous vehicles will afford. Prepare now for what is inevitable and establish yourself as a knowledgeable industry leader for autonomous vehicles. Doing so will allow you to provide the most enticing coverage options to all parties that will need coverage for the autonomous vehicle wave.

John Gardella (JGardella@cmbg3.com) is a founding partner of CMBG3 Law. He has practiced for over a decade in the areas of insurance, environmental, products liability and toxic torts litigation.

