



# Rethinking Insurance Coverage for Autonomous Vehicles

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# Rethinking Insurance Coverage for Autonomous Vehicles

The autonomous vehicle industry is pressing forward, full speed ahead. In addition to providing convenience, safety and cost-efficiency for passengers, these vehicles stand to completely transform the economic dynamics of the automotive industry. But while autonomous vehicles can lessen the costs of human error, they can also introduce new, potentially crippling technological risks. In turn, the rollout of these new vehicles – along with their concomitant risks – will require a significant revamp of the traditional functions of auto insurance and increase the role of other forms of insurance, such as product liability coverage, business interruption policies and cyber insurance options.

Many predict that vehicle automation will generate billions of dollars for automotive companies and spur a diversity of new entrants into the industry, including suppliers of new technologies, digital services and infrastructure developers. Car manufacturing heavyweights have hopped on the automated bandwagon in a race to develop their networks of self-driving vehicles. For example, Tesla founder Elon Musk unveiled his ‘Master Plan, Part Deux’, which involves the development of self-driving electric cars that can be added to the ‘Tesla shared fleet’ to be used by other passengers while owners are at work or on vacation. Non-traditional players in the automotive manufacturing industry have also entered the fray. IBM, for example, recently introduced ‘Olli’, a 12-person autonomous bus, with plans to test an urban transportation network in Miami, Florida.

Other companies are moving full-throttle to find their niche in the autonomous vehicle space. For example, Lyft recently announced that it is developing a new several-hundred-employee “Level Five” unit focused on developing an open network for autonomous vehicles that can be used by automakers and technology companies. Others are jumping at opportunities to partner with Lyft’s open network, and consumers may soon find Google’s Waymo vehicles or General Motors’ Bolt model operating on the network. This illustrates how some businesses focus their energies on building and selling autonomous cars, while others are taking the lead in developing the computer software, sensor technologies and user interface that autonomous vehicles need to navigate.

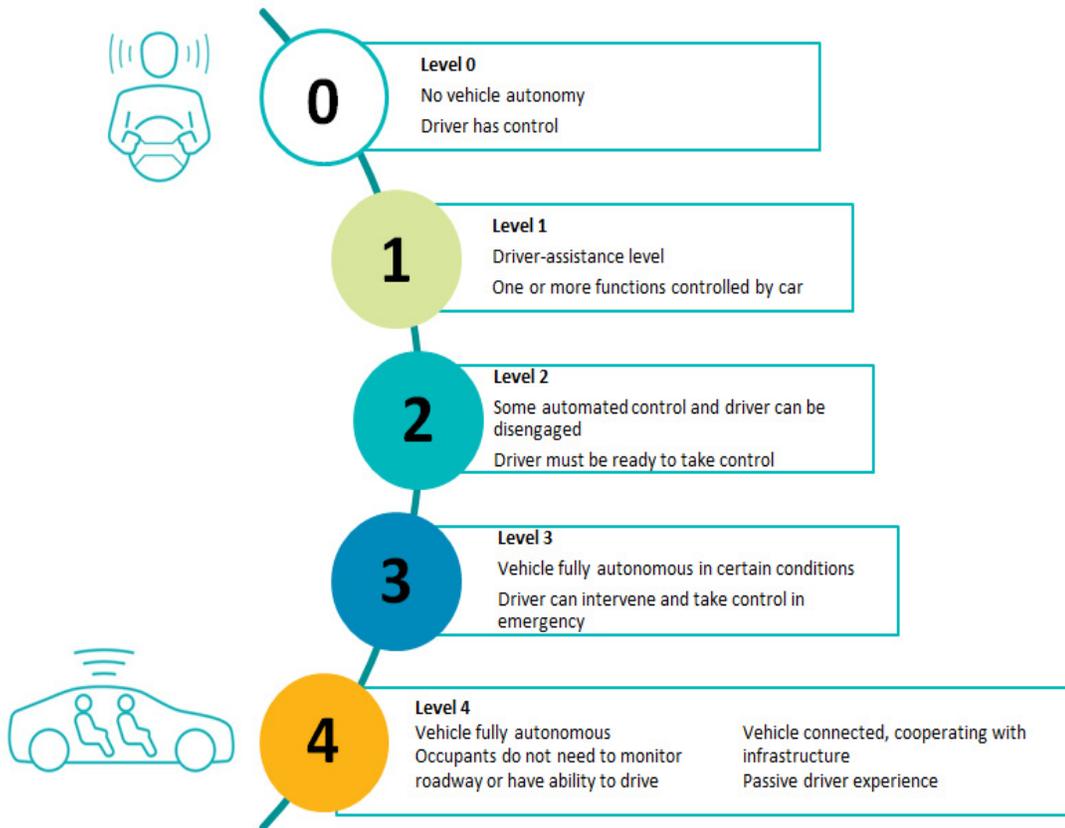
The diverse industry investment signals that automation is expected to create numerous benefits for businesses and consumers: better safety, greater mobility, energy efficiency and cost savings. In an attempt to keep up with this growth, many states are grappling with how to regulate these vehicles and industry players. In fact, some states have opted to reduce regulatory barriers in order to lure investment and innovation into their borders. The result, however, is a patchwork quilt of regulations and varying forms of liability.

While the risks associated with driving have, traditionally, been addressed through auto insurance, the potential liabilities that arise from deploying autonomous vehicles raise questions about whether these traditional policies will be enough and to whom the policies should be issued. As vehicles become more ‘connected’ to outside forces and controls, autonomous vehicle operators will need to focus on new areas of liability that previously may have had little place in the automotive industry – issues such as privacy, cyber security and the Internet of Things (IoT). Going forward, auto insurance as we know it may lose its importance, and the ‘connected’ nature of these vehicles will require greater consideration of other forms of insurance to address new liabilities.

### **New and Uncertain Risks**

Autonomous vehicles can also introduce new, potentially catastrophic risks, as well as new questions about who is responsible for them. For example, the first known fatality in an autonomous vehicle occurred recently on a divided highway in central Florida. While on autopilot mode, the vehicle collided with a tractor-trailer—reportedly due to a combination of flaws in the vehicle radar system settings, the weather, and the atypical height of the trailer. As this unfortunate event demonstrates, companies and consumers in the coming years will need to rethink their use of auto insurance when a human driver is not in control, and instead increase the role of other forms of insurance, such as product liability coverage, business interruption policies and cyber insurance options.

In many instances, the ability of the driver to exert some degree of control over the vehicle may have the greatest impact on determining liability. The National Highway Transportation Safety Administration’s (NHTSA’s) five levels of vehicle autonomy illustrate the spectrum of autonomous vehicle types, ranging from full driver control to total automation.



**At Level Zero**, the driver is in complete and sole control of the vehicle controls at all times, and is solely responsible for monitoring the roadway. **At Level One**, automation involves one or more specific control functions, such as electronic stability control or pre-charged brakes. **At Level Two**, automation involves at least two primary control functions designed to work in unison to relieve the driver of control of those functions, such as adaptive cruise control in combination with lane centring. **At Level Three**, there is limited self-driving automation. Automation at this level allows the driver to refrain from monitoring the roadway and cede full control of all safety-critical functions, but returns control to the driver in certain conditions. **At Level Four**, the vehicle is fully autonomous. The vehicle can perform all operation and safety-critical driving functions for an entire trip.

For vehicles on the market that utilize only partial autonomy (Levels One through Three), the driver is still expected to monitor the roadway and have at least some control over the vehicle. In those situations, the driver should remain generally responsible for accidents because the driver still has ultimate control of the vehicle. Hence, the driver’s own insurance should apply. Traditional bodily injury and property damage liability coverage, uninsured or underinsured motorist coverages, and no-fault coverages may not change significantly for these vehicles, though premium costs may decrease with a reduction in accidents.

But as vehicles on the market become truly autonomous (Level Four), the role of the individual driver disappears. Driving decisions will instead be based on artificial intelligence and through communication with other connected vehicles and surrounding infrastructure. In these circumstances, the potential liability of the manufacturers and technology developers will likely increase, while the liability of individual drivers will likely decrease. The allocation of liability among these various actors can be difficult to determine when different technologies are meant to interoperate with each other to collectively create an autonomous experience. For example, if an accident occurs in an auto manufacturer's self-driving vehicle that drives on a rideshare app's network and accepts data through a "SMART" City's connected road infrastructure, then liability will likely hinge on identifying which elements contributed to the accident amid this technological chain. Thus, automation will require introducing insurance to cover the potential liabilities faced by *all* these new players in the industry, including suppliers of new technologies, digital services and infrastructure developers.

Importantly, the risks posed by autonomous vehicles are not limited to traffic accidents. Autonomous vehicles utilize sensors that constantly collect and maintain identifying information about passengers and owners. Not only do the vehicles track the individuals' driver safety habits and entertainment settings, but also their movements and whereabouts. Voice recognition technologies used to operate the vehicle may also enable the vehicles to capture private communications by passengers. In addition, some vehicles will be capable of interoperating with its owner's contact lists and social media accounts. Businesses and advertisers will surely capitalize on the ability to track this detailed information about a passenger's personal interests and daily routine. Exposure of this sensitive information poses a number of risks for passengers – from embarrassment, to identity theft, to potential bodily injury if location data becomes accessible to stalkers or other wrongdoers. And, if private user data is exposed on a large scale, then companies may face the risk of data breach response costs and regulatory sanctions.

### **Minimizing Liability Before It Occurs**

Auto manufacturers, service providers, technology platform developers, transit authorities and other businesses using self-driving cars have a number of options to help minimize the potentially crippling costs caused by autonomous vehicle mishaps. These players will need to look to broader commercial auto and liability insurance options and should reconsider common policy exclusions. For example, traditional weather-related policy exclusions may need to be altered to account for the effects weather may have on sensors or cellular signals.

*Cf. Small v. King*, 915 P.2d 1192, 1193 (Wyo. 1996) (no coverage under CGL policy due to exclusion for weather-related damage).

Relatedly, traditional auto policies also contain audio, visual and data electronic equipment coverage exclusions, which were originally devised to limit coverage for sound systems and communications devices. *Cf. Maryland Cas. Co. v. Integration Concepts, Inc.*, 119 F. Supp. 3d 1322, 1328 (S.D. Fla. 2015) (electronic data exclusions barred coverage for bodily injuries sustained due to defects in software designed to conduct flow measurements); *Clark v. Clarendon Ins. Co.*, 841 So. 2d 1039, 1044 (excluding coverage for losses to CDs and cassettes under audio, visual or data electronic devices exclusion). Since visual and data signals are critical components of autonomous vehicles, businesses will want to negotiate exceptions to this exclusion.

Cyber liability and crime insurance coverages will also be essential, given the increased risk of hacking or other exposure of private data transmitted using autonomous vehicle technologies. Relying only on traditional commercial liability insurance will likely leave significant coverage gaps for autonomous vehicle businesses that rely heavily on data transmission and processing. *See, e.g., Travelers Prop. Cas. Co. of America et al. v. Federal Recovery Services et al.*, No. 2:14-cv-170-TS (D. Utah May 11, 2015) (unauthorized withholding of data was not an “error, omission, or negligent act” for which the cyber liability policy provided coverage.). Separate cyber liability and crime coverages can cover dishonest third-party acts, such as employee theft, forgery or alteration, computer fraud and funds transfer fraud, and cyber extortion.

Distinct business interruption coverages can also protect against cyber events that cause an outage or interruption in autonomous vehicles’ delivery and transportation schedules when there has not been actual physical damage to the vehicles. *Cf. American Guaranty & Liability Insurance Company v. Ingram Micro Inc.*, 2000 WL 726789 (D. Ariz. Apr. 19, 2000) (no coverage under general liability policy for interruption in functionality of computer system because there was no physical damage); *Vonage Holdings Corp. v. Hartford Fire Ins. Co.*, 2012 WL 1067694 (D.N.J. Mar. 29, 2012) (no coverage for business losses resulting from corruption to servers where there was no physical damage to “tangible property”). Additionally, products liability and recall exposure coverage can be used to cover liabilities associated with the technical components of autonomous vehicles, such as faulty sensors and communications devices.

Finally, given the significant media attention placed on the autonomous vehicle industry, companies will want to consider coverages for reputational or business income losses that stem from accidents, recalls or hacking events. Such consequential losses may not be

covered under basic cyber policies. *Cf. P.F. Chang's China Bistro, Inc. v. Federal Ins. Co.*, No. 2:15-cv-1322 (SMM), 2016 WL 3055111 (D. Ariz. May 31, 2016) (consequential damages from hacking event not covered under cyber risk policy).

## **New Insurance Products**

Several insurance carriers are already offering new specialized policies for autonomous vehicles. In 2016, U.K. insurer Adrian Flux introduced the first driverless car insurance policy. The Flux policy provides limited coverage for losses arising from hacking or attempted hacking of the vehicle's software, as well as losses arising from collisions caused by a failure to install updates to the car's operating systems within a certain period of time. The Flux policy also provides coverage for losses stemming from satellite failures or other outages that affect the navigation systems. Other companies are also bundling driverless car insurance with their vehicles. Tesla, for example, has bundled QBE-provided insurance along with the driverless cars it sells in Asia and Australia.

These driverless car insurance policies are tailored toward the individuals who own driverless cars, and thus may not be the right product for businesses operating on autonomous vehicles, third-parties that develop technologies or services that provide information or commands to the vehicles, or developers of connected road infrastructure. These organizations will still want to consider broader commercial auto and liability insurance options to cover the cyber, product liability, business interruption, and reputational risks described above. Although there are existing insurance options to help cover these risks, we can expect insurance carriers to begin offering more specialized products aimed at the companies that provide technologies and services that interoperate with autonomous vehicles.

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Autonomous technologies will dramatically change driving as we know it. Many businesses are sure to thrive on the efficiencies that driverless vehicles bring. Nevertheless, embracing autonomous technologies can also create new cracks and potholes in traditional risk management frameworks. Experienced coverage counsel can advise on how to fill those gaps—including by analyzing policy language in light of new risks, and partnering with brokers to negotiate endorsements to fit a company's unique needs.