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## Auto Insurance in the 21<sup>st</sup> Century

Driverless cars, smartphones, and ride-sharing companies are radically changing how Americans move around. New technologies and applications hold the promise of reducing auto crashes and the need for many people to own cars, and freeing up drivers to work or read on their daily commutes.

These advances also will challenge many industries, including automobile insurance. Over the next two decades, technology will take more control of vehicles but in the short term, smartphones and other electronics have led to an increase in distracted drivers.

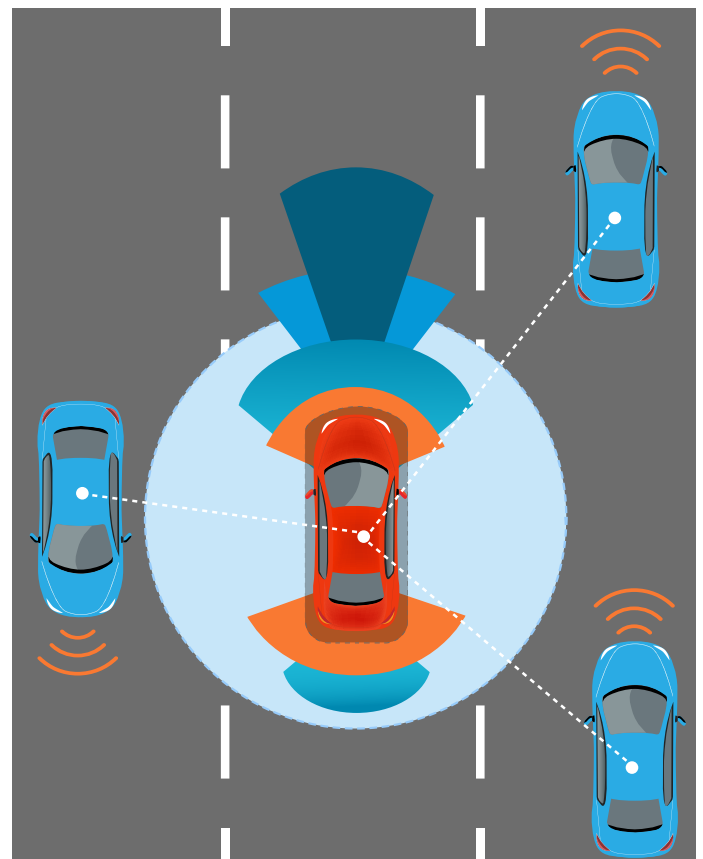
Here are four technology trends that are reshaping the auto insurance marketplace.

### Autonomous Vehicles

The development of self-driving vehicles is moving forward, although no one knows how fast. Various forecasts project that millions of autonomous vehicles will be sold in the next three decades. Before fully automated cars take off, however, advanced driver assistance systems—automatic braking, collision-avoidance devices, and intelligent speed adaptation—are being adopted by manufacturers and hold the promise of dramatically reducing auto collisions.

As these intelligent systems become more integrated into vehicles, auto insurance could see a gradual shift from liability coverage solely for drivers to policies that also cover risks associated with hardware or software that make driving decisions. Risks can arise not only from technology problems within vehicles, but from computer hackers, failures by communications providers, or infrastructure problems related to traffic lights or external sensors. An additional risk is that the new technology creates a host of uncertainties that are likely to spark litigation throughout the transition to cars driven by automated systems.

Insurers will need to substantially increase their data processing and analyzing capabilities. Most auto insurance is based on long-standing data of drivers' ages, past acci-



dents, and miles driven per year to determine risk. Going forward, insurers will need to analyze quickly changing information about insuring vehicles with various combinations of automatic brakes or collision-avoidance technology as well as how those vehicles will interact with other



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cars and trucks that possess varying amounts of smart technology. Eventually, insurers will need to be able to calculate risks when substantial numbers of self-driving vehicles are navigating among human drivers.

**Shared Vehicles**

Uber, Lyft, and other ride-sharing companies have made it cheaper and more convenient for consumers to get to work, home, or the airport. This new model of taxi-like service also makes it possible for drivers to earn a living or make extra income with their own vehicles. But state and local regulations are still evolving on the rules governing ride-sharing companies and their drivers, including insurance coverage.

Several states have adopted or are considering legislation that prescribes insurance coverage for ride-sharing companies—also known as transportation network companies—and their drivers. Lyft and Uber both provide liability coverage to drivers when they are carrying passengers and during other parts of their journeys, but

drivers could face gaps between company and personal insurance coverage. Several insurers have started offering supplementary policies for drivers working for ride-sharing companies as well as people using their personal vehicles to deliver commercial packages.

**Smartphones and Distracted Driving**

Although there are many causes of distracted driving, smartphones and other devices in recent years have contributed significantly to drivers not fully paying attention to the road. All types of distracted driving claimed nearly 3,500 lives in 2015, according to the National Highway Traffic Safety Administration, and has contributed to an increase in overall motor vehicle fatalities and insurance rates in 2016, the National Safety Council reported.

Nearly all states have laws that prohibit texting while driving but some are taking further steps. For example, California passed a law in 2017 that prohibits drivers from holding and operating mobile devices, including

cell phones. In New York, a bill was introduced in 2017 that would allow police to field test mobile phones and other electronic devices to determine whether they were being used prior to accidents.\* A technology dubbed “textalyzer” is being developed that would allow police to display phone apps that were open and in use during the time of crashes.

**Telematics**

Collectively known as telematics, several different technologies now make it possible to track driver behavior and location, monitor mileage, and record vehicle history. The data is reported remotely to an insurance company, vehicle manufacturer, or other entity.

Some insurers provide discounts to drivers based on telematics. Others are offering insurance on a per-mile basis using mileage and location data. However, concerns have been raised about privacy and the use of data in litigation. Questions about ownership and control of the data also need to be addressed.

\*This legislation was pending as of August 2017.