

Autonomous Self-Driving Cars Are Already Here

If you thought it might be 5 to 10 years before we saw autonomous vehicles on the highway, think again. By the summer of 2015, Tesla will be sending software updates to owners that will enable hands-free driving on the freeways and the ability to operate Tesla cars hands-free on private property.

Just this month, on March 22, 2015. Delphi began the world's first 3500-mile cross-country trip, coast to coast in a self-driving 2015 Audi SQ5 with passengers, one of which is in the driver's seat, ready to take over if necessary.

At the last CES convention in Las Vegas, the CEO of Ford was quoted as saying that in the next five years someone would be introducing autonomous vehicles. Just months later, that quote is already sounding dated.

By 2016, Mercedes plans to introduce "Autobahn Pilot" or "Highway Pilot" to allow hands-free highway driving with autonomous overtaking of other vehicles. Also in 2016, Mobileye plans to release hands-free driving technology for highways.

By 2018, Mobileye also expects autonomous capabilities for country roads and city traffic. By 2018, Nissan anticipates having a feature that will allow its vehicles to maneuver on multi-lane highways.

But there are new players in the autonomous self-driving field that may push everyone else to move even more quickly or risk being left behind and out of style. Apple is said to be developing a vehicle and one can only imagine that they will not be satisfied to simply develop one that is electric. And Google, which may become one of the biggest players in this field, is also developing driverless vehicle systems.

In Germany, they're preparing to digitize the autobahn for self-driving car tests and the UK is about to implement an anything-goes approach to testing of autonomous driving technology to make the UK the best place on earth to develop self-driving cars.

The Google self-driving car project involves the development of technology for autonomous cars that are predominately electric cars. Google cars are called Google Chauffeur. The project has been led by an engineer who is the former director of an artificial intelligence laboratory which should give us some idea of the capabilities we may come to expect of our vehicles in the future.

It's unclear if Google will ever become a car manufacturer or simply choose to develop and market a system to automobile manufacturers. The Google project team has equipped cars for a number of manufacturers to test with Google engineers.

But one thing is crystal clear. California autonomous self-driving vehicle accident lawyers, of

which there are so far very few, are going to need to get up to speed fast. Autonomous vehicles are just round the corner and there isn't much in their way at the pace they're moving.

California Autonomous Vehicle Law

Currently California requires a specially trained driver to operate a self-driving autonomous vehicle, but that is very likely about to be changed. The California Department of Motor Vehicles is rushing to write new regulations designed so that regular drivers may operate autonomous vehicles and self-driving cars. In 2012, California became the third state to allow testing of autonomous cars on public roads, after Nevada and Florida had already done so.

Currently, California's motor vehicle regulations allow for testing by auto makers, not for average drivers. If that were not enough for the California Department of Motor Vehicles to grapple with, Tesla is expected to introduce a "fetch" feature to allow autonomous or robotic vehicles to drive without any occupant at all in places like parking lots and garages to pick up their drivers. Needless to say, this "fetch" feature presents all manner of liability questions for California autonomous self-driving car accident lawyers.

Autonomous Self-Driving Vehicle Features and Technology

The Audi system expected to be available on the Audi Q7 sport utility vehicle coming out in 2016 will reportedly have an autonomous mode which has a "check-in" feature that makes sure the driver is still awake and paying some attention to traffic and road conditions, which would conceivably still make the driver responsible in an accident.

The Tesla "fetch" feature which would allow the autonomous vehicle to operate without an occupant raises the question of who would be responsible if the self-driving driverless car strikes someone in the parking lot or parking structure. Who will California autonomous self-driving car accident attorneys feel are responsible to pay for the injuries, the medical bills, wage loss and pain and suffering of the accident victim then?

How California Autonomous Self-Driving Attorneys Will Determine Liability in Autonomous Vehicle Accidents

California autonomous self-driving car accident law firms like ours are watching these developments very carefully. In accidents with self-driving autonomous vehicles, there are all manner of questions yet to be answered. One of the most intriguing is how an officer investigating a traffic collision will be able to question the autonomous vehicle. The typical question, "Do you know how fast you were driving?" and "Didn't you see the pedestrian in front of you" put to a robotic vehicle is likely to be met with silence until or unless the vehicle can provide a read out and a video of the accident."

At present, federal law does not prohibit self-driving vehicles with a human onboard nor does it even prohibit a driverless autonomous vehicle without occupants, such as Tesla's "fetch" feature. And if there is no law against something, then it's legal. But as we stated at the start of this

article, this is the most dangerous time for autonomous vehicle makers.

With technology running much faster than the law can catch up, there is the potential for features on self-driving vehicles to be in operation before the California Department of Motor Vehicles or the National Highway Traffic Safety Administration can fully understand their risks.

While the National Highway Traffic System Administration can recall vehicles they deem unsafe, as with the Food and Drug Administration, the dangers of some foods and drugs aren't realized until they start causing people to become sick or suffer serious or catastrophic injury.

Even with vehicles that require the driver to occasionally "check in" to show the vehicle that the driver is awake and paying some level of attention, the whole purpose of a self-driving vehicle is so that the driver can be hands-free while they pay attention to the screaming child in the child seat or be able to do other things rather than pay attention to the road.

Accident Liability Questions Yet To Be Answered

One question, the answer to which is yet to be determined, is whether the California Department of Motor Vehicles will allow drivers in autonomous vehicles to legally use cell phones in a non-hands free basis while the vehicle is in a self-driving mode. Our belief is that they will not. Were they to allow this, the driver in an accident who is posting selfies on Facebook when their autonomous vehicle has an accident would almost certainly bear some, if not the entire responsibility for an accident which is not the fault of another driver or pedestrian.

When Nevada passed a law to authorize the use of autonomous cars and became the first jurisdiction in the world where autonomous vehicles might eventually be operated on public highways and roadways, Google sought an exemption from a ban on distracted drivers to permit occupants of self-driving vehicles to be permitted to send text messages while sitting in the driver's seat. This exemption, however, did not become law.

If vehicle buyers are unsure how liable they will be in an accident while their autonomous vehicle is in a self-driving mode, insurance companies are even more unsure how to insure against such risks. There simply is no track record and no accident statistics of autonomous vehicles to determine the likelihood of accidents involving self-driving vehicles. Should the insurance rates be lower or higher if you own a self-driving car? Will teens still have to pay a higher premium? These are questions yet to be answered as well.

Concerns of California Autonomous Self-Driving Accident Lawyers

For the California autonomous self-driving vehicle accident lawyer, there are questions as well. Will an attorney representing victims in a self-driving accident be required to file a lawsuit in every case just in order to determine if the autonomous automaker had some responsibility for an accident.

It may become necessary to determine what ethical guidelines have been incorporated into a

computer's software. If a child runs out into the street, will the self-driving car's computer risk injury to the vehicle's occupants to avoid injury to the child pedestrian? What if there is another car in the way? Will the self-driving vehicle's computer risk injury to that vehicle's occupants as well or the risk of causing a multi-vehicle accident to save the life of the child in the street.

By early 2017, the U.S. Department of Transportation hopes to publish a rule mandating vehicle-to-vehicle communication by an as-yet unspecified deadline. GM reportedly says that by the 2017 model year, the Cadillac CTS will be V2V equipped. It will have to be seen how this technology will also assist in preventing accidents.

Other Liability Questions And Issues For Autonomous Automakers

There are so many questions yet to be answered. Will the self-driving car automatically slow down if a ball runs out into the street as a human would knowing that a child may soon follow the ball? What about if a dog runs out into the street? Will the car just run over the dog even if it's safe to swerve to avoid it? What if other self-driving autonomous vehicle makers have different ethical guidelines built into their software? Will that be evidence of an industry standard that a self-driving vehicle maker failed to build into their software?

Not everyone is going to suddenly trade in their current vehicle for a self-driving autonomous car. But what happens when one self-driving vehicle takes an evasive action causing another self-driving vehicle to take a different evasive action and the two collide? Then where are we?

Autonomous Vehicle Features in the Future

It's quite likely that self-driving vehicles will have different levels of autonomous driving. You may be able to choose, for instance, between just allowing the autonomous vehicle to operate in a lane keeping mode, or to have complete control of all safety-critical functions and to operate the vehicle for the entire trip.

A driver may have less than a second to avoid an accident and to take back control of a self-driving autonomous vehicle. The system on Google driverless cars will allow a human driver to take back control of their car simply by stepping on the brake or turning the wheel, similar to current cruise control systems in many cars today.

It is reported that autonomous vehicle systems are still being tweaked so they can obey temporary traffic lights and discern when humans, such as a police officer or road construction crew are signaling the car's driver to stop. They also still need to be able to identify objects such as trash, debris, animals and potholes.

Autonomous self-driving cars and other vehicles are going to be fertile ground for comedians to use in their stand up routines. One can imagine a comedian portraying a situation in which a self-driving vehicle warns a driver that he or she needs to retake control but uses a language or even an accent that the driver can't understand.

But if the vehicle is meant to notify the driver if conditions require the driver to retake control and the vehicle fails to do so, or fails to provide a sufficiently comfortable transition time to do so, you can imagine that a driver put at fault for an accident will claim that their vehicle's self-driving mode was the blame.

Autonomous Vehicle Accident Reports

We can imagine cases where the investigating police or highway patrol officer will need to impound the vehicles involved to determine responsibility for an accident. The questions that are raised by that situation are also many. How long will it take to obtain a traffic collision report and how much will that cost if an investigation takes weeks or a month or more?

How long will it take to get your vehicle back after an accident? Will the vehicle's computer records need to be obtained and retained by a California autonomous self-driving vehicle accident attorney? And how are police, sheriff's departments and highway patrol offices ever going to be able to pay for all of these extra investigative costs?

Autonomous Self-Driving Vehicles Already Here and Expected In The Future

In the years to come, we're all going to be hearing more and more about unmanned ground vehicles and not just unmanned aerial vehicles and drones. There are going to be driverless trash and construction vehicles, automatic train operations, automated transit systems, a Robo-Taxi vehicle from Google, and features for autonomous and self-driving vehicles with names like Lane Keep Assist and Autonomous Cruise Control System.

Driverless dump trucks and tractors are already here in case you didn't know. Mining company Rio Tinto already operates a fleet of driverless dump trucks at an ore mine in western Australia. John Deere produces autonomous tractors and lawn mowers.

Companies like Uber, Lyft and ZipCar will likely be competing to see which company can put self-driving vehicles on the road first and it will be interesting to see how long it takes before those companies and rental car companies like Enterprise are allowed by new technology and the law to pick you up without any driver at all.

Anyone who thinks it will be far, far in the future before we see platoons of robotic cars on the freeways, think again. Volvo has already successfully tested "road trains" of robo-cars. By 2017, Volvo expects to be testing self-driving cars with actual customers in 2017. Nissan and Mercedes-Benz have given themselves until 2020 to put cars with autonomous vehicles on the market, but we may see robo-vehicles from Audi and possibly even from other companies.

Apple and Google certainly have the money to do whatever they choose to do, and for all we know, they may already be planning to manufacture and market such vehicles themselves. If so, can Amazon be far behind since they are already currently testing aerial drones for delivery of their packages in Canada? How long will it be before Starbucks wants to purchase a fleet of autonomous self-driving cars to deliver your coffee to your workplace before you arrive in the

morning?

Volvo plans to put 100 customers in cars in 2017 with autonomous capabilities and let them loose on public roads in Sweden, limited to 30 miles of pre-approved roads in Gothenburg, with no pedestrians, cyclists or oncoming traffic in a program they call, "Drive Me." Drivers will have to be sober, awake and alert and ready to take over in conditions like bad weather or when there is debris in the road.

Volvo's new XC90 SUV, which goes on sale in 2015 is already semi-autonomous. Its auto brake function prevents drivers from making risky maneuvers that endanger others. It can automatically safely follow a car in stop-and-go traffic. And like other car maker vehicles, it can parallel park mostly on its own, with the driver simply in charge of the gas and the brake.

Ten years from now, California autonomous self-driving vehicle accident lawyers won't be asking when can we expect autonomous self-driving vehicles on the interstates and on city roads. We may be asking instead, when will hand-steered cars be outlawed because states consider humans too unpredictable and dangerous to drive themselves.

California Autonomous Self-Driving Accident Lawyers At The Forefront Now And In the Future

Only one thing is certain. As autonomous self-driving vehicles in the marketplace and on our highways come closer and closer to a reality, California autonomous self-driving vehicle accident lawyers will be at the forefront of analyzing the potential liabilities in autonomous vehicle accidents in California and across the country.

Until that day comes and even when it does, if you're injured in a California autonomous self-driving vehicle accident, you will need an autonomous self-driving car accident attorney who is on top of the latest developments, and who has considered and analyzed liability issues such as those presented in this article as this technology rapidly advances.