



# THE ADVENT OF AUTONOMOUS VEHICLES

Jacob J. Liro and Erik P. Crep Wicker Smith O'Hara McCoy & Ford P.A.

Technology pervades our day-to-day lives more so than ever. From cell phones to wearable fitness tracking gadgets to cloud-based computing and data storage, the impact of technology all around us is impossible to ignore. However, in our rush to accept the latest and greatest are we appreciating the real world boots on the ground limitations of our technical equipment and programs and addressing those factors by way of appropriate legislation and regulations? As the use of semi-autonomous and autonomous vehicles expands across the country, what are the liability implications and how do we address the defense of novel claims? As it currently stands, variables such as significant mechanical failures and contributing factors such as outside passenger vehicle causes demand the human judgment and decision making abilities that autonomous vehicles do not possess. Accordingly, it will be difficult to fully replace the human driver with software-based equipment, particularly in high-density urban areas.

While not immediately apparent, the path toward autonomous vehicles has been a more gradual as opposed to punctuated

evolution. The media tends to herald autonomous vehicles as a significant and immediate shift in the current state of transportation, however, the reality of the situation is more measured. In some form or another, the industry has been progressively implementing more computer-controlled safety mechanisms as far back as the anti-lock brake system. To be sure, after anti-lock brakes were widely incorporated into both commercial and passenger vehicles, the automotive industry pushed forward adding stability control, electronic control units and eventually collision mitigation systems. If we look at the adoption of semi-autonomous and autonomous vehicles as more of an extension of ever increasing safety equipment we realize that this technology is not as revolutionary as suggested but is rather a natural and anticipated evolution. In May of 2015, Daimler Trucks North America, LLC unveiled the semi-autonomous Freightliner Inspiration with the anticipation that the transportation industry market had room for autonomously driven trucks. Proponents of the “driverless” and “semi-driverless” technology argue that it is an important step towards the “safe, sus-

tainable road freight transport of the future.” However, state and national statutes and regulations are lagging behind the roll out of this machinery.

In 2013, the National Highway Traffic Safety Administration (“NHTSA”) proposed a classification system of five levels within which to define autonomous and semi-autonomous vehicles. These classifications run from Level 0, which is a completely human-controlled vehicle, to Level 4, which is defined as a vehicle that performs “all safety-critical functions for [an] entire trip, with the driver not expected to control the vehicle at any time.”<sup>1</sup> The NHTSA’s classification system is categorized based on vehicle capabilities and primarily leaves a human driver as an afterthought. Further, the Society of Automotive Engineers (“SAE”) has put forth a similar designation system that focuses on the level of human interaction needed to perform tasks. The SAE’s classification commences at “no automation”, level 0, and ends with “full automation”, level 5. The SAE’s analysis of the semi-autonomous and autonomous driving capabilities also examined these vehicles and the relevance of their capabilities and

limitations, from a legal perspective. In addition to setting forth the classifications themselves, the SAE also determined that for Level 3 systems up to Level 5 systems, the current traffic laws and vehicle regulations are likely insufficient to address their implementation and that liability issues including burden of proof problems are possible.

Nevada was the first state, in 2011, to enact legislation regarding the operation of autonomous vehicles. Since then, five additional states, including California, Florida, Michigan, North Dakota, Tennessee, plus Washington D.C., have passed a bill regulating autonomous vehicles and driving. This type of legislative trend is only increasing as 16 states introduced proposed legislation in 2015 alone. The breadth of these bills range widely from enactments like North Dakota's HB 1065 which provides for a study of autonomous vehicles to more substantive regulations like those in states such as Michigan or Nevada. Michigan's SB 663, for instance, limits the liability of a vehicle manufacturer or upfitter for damages in a product liability suit resulting from modifications made by a third party to an automated vehicle. Nevada SB 140 addresses the use of cell phones while driving and permits the use of such devices for persons in a legally operating autonomous vehicle, specifically noting that these persons are deemed not to be operating a motor vehicle for purposes of the law.

While there are varying degrees of legislation at work or in the pipeline on the state level, the fact remains that a significant number of states have yet to fully implement comprehensive legislation to address the impending use of autonomous and semi-autonomous trucks. This begs the question for the purposes of the interstate transportation industry, where does the federal government stand on the issue? As of February 9, 2016, the United States Department of Transportation has engaged in an "Automated Vehicle Research Program" which is coordinated by the Intelligent Transportation Systems Joint Program Office. This office then funds research regarding automated vehicles within the Federal Highway Administration, the Federal Motor Carrier Safety Administration, the Federal Transit Administration, and the NHTSA. Most recently, the NHTSA has conducted public meetings on April 8, 2016, and April 27,

2016, to develop "Guidelines for the Safe Deployment and Operation of Automated Vehicle Safety Technology."<sup>2</sup> These meetings welcomed public input on operational guidelines for automated vehicles, as well as those roadway situations and environments that highly automated vehicles will need to be prepared to address. As of the date of this article, while the DOT/NHTSA has not yet issued their finalized guidelines, they have received at least 67 comments and suggestions from a litany of automotive industry members including Ford Motor Company, the Association of Global Automakers, Daimler Trucks North America and General Motors, just to name a few. The hope being in the future that standardization of regulations provides some level of guidance for the implementation of this expanded technology.

That said, a standardization of legislative regulation of this technology may not take into consideration all of the facets of this developing technology. Realistically speaking, the current state of the environment does not focus on completely autonomous vehicles, but instead focuses on semi-autonomous vehicles that fall within the classifications of Levels 2 (Combined Function Automation) and 3 (Limited Self-Driving Automation). Therefore, we are faced with the prospect of vehicles that still have some element of human control and are still subject to the foibles of drivers around them. According to at least one study from the American Trucking Associations, approximately 70% of fatal crashes between a large truck and a passenger vehicle are caused by passenger motorist as opposed to the commercial driver. Additionally, according to FMCSA, in 91% of fatal head-on collisions between a large truck and a passenger vehicle, the passenger vehicle crossed the median into the truck's lane of travel.<sup>3</sup> Where does this leave us in connection with allocating fault for accidents between semi-autonomous trucks and passenger motorists from a liability perspective? The answer it seems is not very far from where we are now, just with different players being added to the mix.

Current products liability law is likely ready and able to allocate liability and damages due to manufacturing, design defect and failure to warn. There will almost certainly be theories of negligence raised by the plaintiff bar against the manufacturers

of the technology. This will add a new element into the interaction among players in trucking accidents that will require the trucking defendant to add an understanding of products liability to their repertoire. Current tort law will take into consideration the interrelation between a driver who causes an accident when the vehicle is operating entirely independently, improperly assumes control of vehicle and causes an accident, or engages the autonomous mode in a negligent manner (for instance, at an inappropriate time such as during a detour in high volume traffic). Traditional concepts of contributory negligence and indemnity will most certainly be able to adequately address the allocation of liability in such situations. Similarly, one can quite easily imagine situations where new theories of liability will arise where claimants argue that a driver and company should be subject to damages due to improperly disengaging available autonomous technology, when a reasonable person would view it as unsafe to do so, or alternatively, failing to incorporate technology that could have avoided an accident into their existing fleet.

Ultimately there needs to be careful consideration to determine the need for extensive regulation and legislation and where the industry can most benefit from that regulation. Perhaps the answer lies with an Aristotelian approach focusing on moderation such that legislation should be limited to acknowledging the existence of the technology, promoting the safe incorporation of said technology but leaving the tort concepts to the Courts and common law.



*Jacob J. Liro is a partner at Wicker Smith O'Hara McCoy & Ford P.A. in Coral Gables, Florida. He is admitted to practice in Florida and the Southern U.S. District Court of Florida. His practice focuses on transportation and construction litigation. He can be reached at [jliro@wickersmith.com](mailto:jliro@wickersmith.com).*



*Erik P. Crep is a partner at Wicker Smith O'Hara McCoy & Ford P.A. in Coral Gables, Florida. He is admitted to practice in Florida, Southern District of Florida and Middle District of Florida. His practice focuses on transportation, general liability and professional liability. He can be reached at [ecrep@wickersmith.com](mailto:ecrep@wickersmith.com).*

<sup>1</sup> National Highway Traffic Safety Administration. (2013, May 30). *U.S. Department of Transportation Releases Policy on Automated Vehicle Development*. Retrieved December 18, 2013 from <http://www.nhtsa.gov/AboutNHTSA/PressReleases/U.S.DepartmentofTransportationReleasesPolicyonAutomatedVehicleDevelopment>.

<sup>2</sup> National Highway Traffic Safety Administration. (n.d.). *Automated Vehicles*. Retrieved from <http://www.nhtsa.gov/Research/Crash+Avoidance/Automated+Vehicles>.

<sup>3</sup> U.S. Department of Transportation. (2014, June). *Large Truck and Bus Crash Facts 2012*. Retrieved from <https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/Large-Truck-Bus-Crash-Facts-2012.pdf>.