

Driverless Cars... The Road Ahead

I write this article while feeling the trade winds blow and watching the palm trees bend in the open-air lobby of the Fairmont Hotel in Maui. I just wrapped my presentation on the subject of autonomous vehicles at the Consumer Attorneys of California Hawaii travel seminar.

First, by way of shameless plug, if you've not attended this seminar I'd highly recommend it. It's a great cross-section of top trial lawyers (present company excluded) from across the state and country presenting "quick hits" – twenty minutes or less – on a host of important subjects that directly impact our practices. And since we're on the beautiful south shore of Maui, the educational programming is generally done midday and the balance of the afternoon can be spent enjoying the boundless sun and fun with friends and family. San Diego is often underrepresented at this seminar but if you ask the likes of John Gomez, Josh Gruenberg, Jeremy Robinson and/or Jeff Padilla – all of whom I've seen in recent years - you'll get the same reviews.

Back to the task at hand: driverless cars. They're already here. The impact this technology will have on our society and our practices cannot be understated. We will bear witness over the next fifteen to twenty years to a sea-change in automotive safety, liability insurance, and the car ownership model, as we know it. In personal terms, when my nine-month old daughter turns sixteen I won't buy her a car. Not because I'm cheap or because I don't want her to drive, but rather because she won't want a car. For the first time in our history, the percentage of millennials – age 16 to 24 – who do not have a driver's license has dipped beneath seventy percent. It's anticipated that this trend will continue to drop with the rise of autonomous technology and ride-sharing transportation, such that by the time my baby girl turns sixteen, less than forty percent of her peers will be licensed drivers.

For further proof of the sea change occurring before our eyes, look no further than this past year's Los Angeles Auto Show. For the first time in its history, the keynote speakers were not representatives from a Big Three auto manufacturer touting its latest, sleekest, most powerful prototype vehicle. Rather, the keynotes were principals from ride-sharing services like Uber, Lyft and Sidecar talking about their vision of an interconnected network of taxi-bots.

Put simply, car ownership stinks. It's a horribly depreciating asset that sits idle 95% of the time, requires significant maintenance costs and has resulted in large swaths of our communities to be covered in asphalt so we can get from point A to point B. Add to that the gigatons of emissions created each year by the dirty fossil fuels most vehicles burn and the millions of collective hours spent wallowing away in the stress of the daily commute and one might ask that in light of these social costs, why have we put up with this for so long?

In many respects, the evolution towards full autonomous vehicles has been on-going for some time. It's generally accepted that there are four levels of vehicle autonomy. Level 1 is the most basic, where a specific safety function is being handed over to the technology of the vehicle. For instance, anti-lock-brakes, cruise control, or electronic stability control. Level 2 is what we're seeing in the more modern development of crash avoidant technology; things like back-up cameras, lane change warnings, and self-parking features. This level of autonomy is generally "hands-off" and/or "feet-off" but remains "eyes-on" for the driver to maintain safety. Level 3 autonomy is most easily

by: Brett Schreiber, CASD President



Brett Schreiber is a partner at Thorsnes Bartolotta McGuire and his practice includes mass torts, personal injury, medical malpractice and condemnation law. Brett pursued his undergraduate studies at Florida State University, and his law degree at Thomas Jefferson School of Law. He may be contacted by email at: schreiber@tblawyers.com.

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described as the Google Car. This is where the driver cedes all safety controls and relies on the vehicle to monitor any changes requiring transition back to driver control. Level 4 is complete autonomy where vehicles will not have steering wheels or pedals and will communicate directly through "vehicle-to-vehicle" (V2V) over-air technology.

Hold Onto Your Seatbelt, Assuming There is One

As I write this, Tesla has just released an over-air download to allow its Model S to engage "autopilot" mode. Chevrolet has plans for its 2016 Volt to function with autonomous driving features, as has Volvo and Cadillac within this model year. Every major automotive research institution and/or manufacturer is currently pursuing autonomous and/or V2V technologies for its new fleets. The biggest game-changer to enter this field is a well-known technology company whose products you and everyone you know likely owns, Apple Computer. That's right, Apple is reportedly engaged in a skunk-works program called Titan, which they recently staffed with nearly fifty automotive and computer engineers they hired away from Tesla. Reportedly, Apple is developing a full autonomous, fully electric vehicle that will change the automotive industry in the same way iTunes and the iPod changed the music industry. While there are many skeptics and rumors swirling around this program, the undisputed fact is that Apple has the cash to pull it off. Apple's market cap currently sits at nearly \$700 billion. By comparison, Ford Motor Company is less than \$50 billion. Put another way, Apple has more capital than every major domestic and international auto manufacturer combined. Apple has the ability to investigate, develop, design and manufacture a fully autonomous electric vehicle without even making a dent in its cash reserves.

Today, we find ourselves on the precipice of a "stagecoach moment". Either you are out in front of this technology and anticipating its impacts on your practice or you're the one investing in stagecoaches while the Model T is rolling off the assembly line. The National Highway Traffic Safety Administration (NHTSA) anticipates that when driverless cars reach critical mass in approximately ten to fifteen years, we'll see an 85% reduction in auto collisions in the first year alone. This will translate into over 1,100 fewer fatalities annually. That's right. Over eleven-hundred fewer funerals every year. The impact that this technology can have on the safety of our community, on the elderly and disabled, is truly remarkable. However, if your practice is exclusively car crashes, it's time to start thinking about what an 85% reduction in car crash cases will mean to your bottom line. Perhaps it's time to start thinking about diversification?

Public comments on NHTSA rule-making regarding autonomous vehicles and V2V technology have been closed for over a year. We anticipate further regulations any day. The California DMV has just issued a regulatory scheme that will be open to public comment in the Spring, 2016. Defining who the "operator" of a vehicle is when there's no driver's seat or steering wheel is posing a challenge to lawmakers and regulators. Who is responsible when two fully autonomous vehicles crash into one another? Which system failed? Will the drastic

reduction in auto collisions anticipated by this technology, result in a loosening of safety standards for things like seat belts, child restraints and airbags? What will this technology mean for personal liability insurers? Or state departments of motor vehicles if so few actually obtain a driver's license?

In sum, these issues raise far more questions than answers at this juncture. However, these are issues our adversaries at the Defense Research Institute (DRI) have been looking at for years. In fact, the DRI hosted NHTSA's general counsel at their summer meeting in May, 2013 to address autonomous vehicles and liability issues. Currently, thanks to the help of our friends at CAOC we've put together a team of attorneys and policy makers who are interfacing regularly at the local, regional and national level. We're reviewing regulatory proposals, educating our legislators and inviting public comment. As plaintiff's attorneys we're likely to be the first responders to autonomous vehicle technology and its interplay with the civil justice system. If nothing else, this is a dialogue that we all need to engage in; as a society and as a community of attorneys. I hope that by reading this column, I've helped to start this conversation in some small way. Today. **TBN**

Editor's Note: Please also see *Trial Bar News* May 2013, "Who is at Fault if a Driverless Car Has an Accident", by Andrea Kaplan Russel, Volume 36, Issue 5, all archives available at www.casd.org.

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