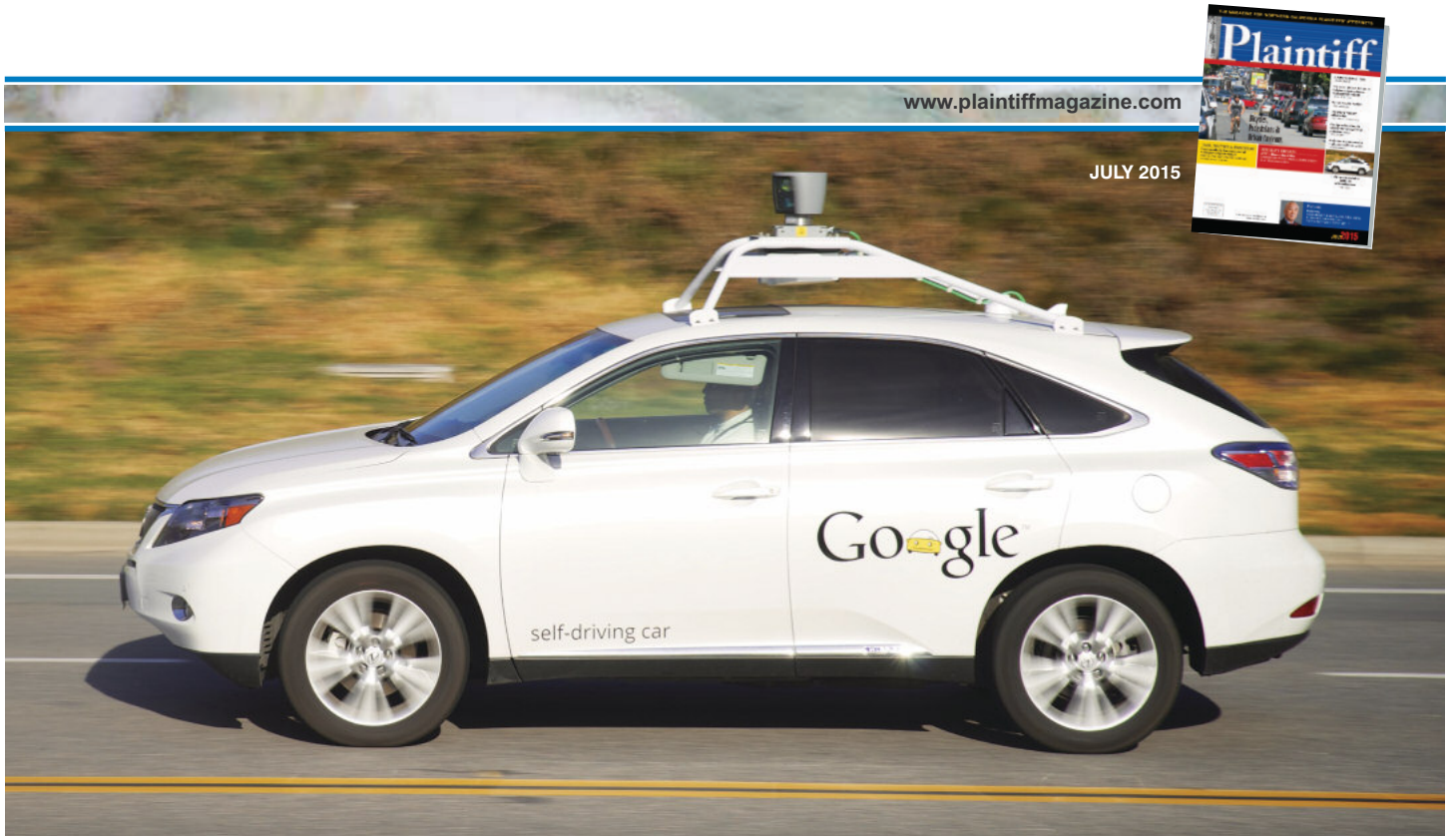


LOKAN SARDARI/CREATIVE COMMONS LICENSE

Shaping liability in the driverless car era

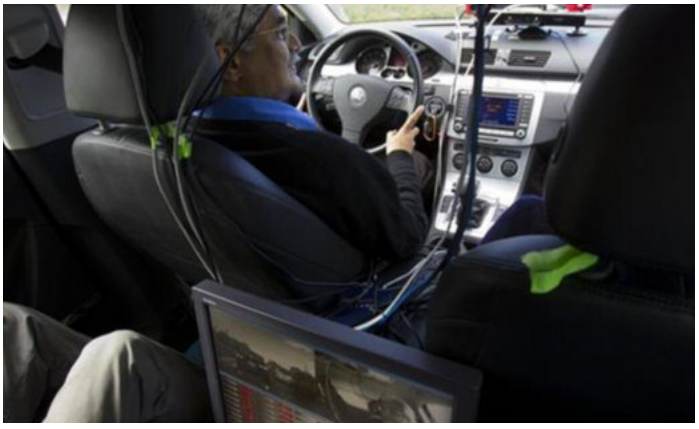
Some say liability concerns could be a roadblock for driverless cars, stifling innovation

By Chris Dolan

In 2009 the California Department of Transportation commissioned a study by the Rand Corporation (you know, that conservative think tank) entitled Liability and Regulation of Autonomous Vehicle Technologies. The authors felt that "overall, we do not anticipate that liability for individual drivers will be a problematic obstacle to the use of autonomous vehicle technologies. On the contrary, the decrease in the expected probability of a crash and associated lower insurance costs that autonomous vehicle technologies will bring about will encourage adoption of these technologies by drivers and automobile-insurance companies."

And, leaving no opportunity unexploited, they made a pitch for no-fault insurance which inures a benefit to the insurance company at the consumer's expense. Despite the obvious enhanced safety benefits to consumers, the study said "we anticipate that current liability laws may lead to inefficient delays in manufacturers introducing autonomous vehicle technologies. The gradual shift in responsibility for automobile operation from the driver to the vehicle will lead to a similar shift in liability for crashes from the driver to the manufacturer."

In essence, the authors are saying that the manufacturers will shy away from technology that could save lives because of the fear of lawsuits for when their technology fails. Indeed, they write, "It will probably be in automakers' interest to continue to focus attention on the need for a responsible driver to monitor



Interior of a car modified to be driverless

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the autonomous vehicle technologies, even after the technologies mature sufficiently to allow truly autonomous operation. To the extent possible, automakers will want to preserve the social norm that crashes are primarily the moral and legal responsibility of the driver, both to minimize their own liability and to ensure safety."

The authors also suggest that preemption, requiring manufacturers to incorporate the most promising forms of this technology by regulatory fiat, while simultaneously exempting them from state tort liability, presents a practical approach to encouraging manufacturers to develop the technologies under the theory that in the aggregate more good than harm will occur.

The Rand study centers too much on protecting the interests of the manufacturers and not enough on protecting the public. It completely fails to address harms to third parties such as pedestrians. Presumably, the preemption theorists feel their lives will be the price to be paid for progress. What is apparent is that those of us to whom the process of sorting out responsibility and accountability is entrusted need to become a part of the policy discussion and regulatory framework so that the interests of the yet-to-be-injured are factored as much, if not greater than, those who stand to profit off of this technology.

The future is here

In May of 2014 Google unveiled the first of 100 completely driverless vehicles. Most striking is not the radar on top, it is the absence of *any* controls inside the vehicle. That's right, no steering wheel, brake, turn signal, accelerator, or mirrors. To see the car in action, go to YouTube and enter "a first drive." You will see a slick promo done by Google which talks about empowerment, security, freedom and the cool factor. You will be equally intrigued and disturbed at the same time. (www.youtube.com/ watch?v=CqSD-WoAhvLU)



Chris Urmson, director of Google's self-driving car project, told The Guardian that "the aim was to run extended tests in California where Google is based." Urmson reportedly stated the development was "an important step toward improving road safety and transforming mobility for millions of people." Google states that the results of their testing suggested it was safer to remove all driver controls because the potential of a human suddenly taking over was too unpredictable and potentially dangerous. Urmson reportedly told the New York Times that "[w]e saw stuff that made us a little nervous."

Google is not the only company pushing forward with automated technology, indeed, in a CNNMoney interview, Tesla Founder Elon Musk said that the 2015 Tesla would allow for what he termed "autopilot" for up to 90 percent of miles driven and definitely for highway travel. During the October 2014 meeting of the Intelligent Transport Society, General Motors CEO Mary Barra, speaking about consumer expectations, stated; "[t]hey want unfettered personal mobility. More specifically, they expect us to help mitigate... if not eliminate... the congestion... pollution... and traffic accidents that are the downsides of automobiles. To me, these aren't noble causes. They are imperatives. If we expect our industry to thrive well into the future, we have to provide solutions. To do that, we have to be passionate and fearless advocates for safety technologies like vehicle-to-vehicle communication... vehicle-to-infrastructure communication... and ultimately, fully autonomous driving. No other suite of technologies offers so much potential for good... and it's time to turn potential into reality. That's why I'm announcing today that GM will put its first V2V-enabled car on the road in about two years." Audi and Volvo are in hot pursuit.

In 2013 The Earth Institute at Columbia University released a study called "Transforming Personal Mobility" which modeled various existing transportation systems in comparison to driverless vehicles, shared vehicle system, and specific-purpose vehicles in an effort to see if economies and efficiencies would result. The results are staggering. For example, the study revealed that with just 9,000 autonomous vehicles managed through the "Mobility Internet," all of New York's taxis could be replaced, reducing pick-up wait times to about 36 seconds and costs by as much as 80 percent for fleet owners. Savings that could then theoretically pass down to passengers. One author suggested that at a cost of $25,000 per driverless car, all 171,000 taxis in the US could be replaced for about $4.3 billion.

So who is perhaps most excited about the driverless car? Uber. Currently the mammoth common carrier application (with a market value of over $41 billion) pays around 75 percent of gross profit per ride to the drivers who provide the vehicles and labor. Indeed, in 2014, while speaking at The Code Conference in Palos Verdes, Uber CEO Travis Kalanick said that Uber will eventually move away from hiring human drivers to using a fleet of autonomous vehicles. He stated, "Look, this is the way the world is going… If Uber doesn't go there, it's not going to exist either way." [We think he meant to say "…it's going to exist either way." — editor]

Kalanick went on to state, "The reason Uber could be expensive is because you're not just paying for the car – you're paying for the other dude in the car. When there's no other dude in the car, the cost of taking an Uber anywhere becomes cheaper than owning a vehicle. So the magic there is,

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you basically bring the cost below the cost of ownership for everybody, and then car ownership goes away." Given that Morgan Stanley research released in September of 2014 revealed a utilization rate by car owners of about four percent of available hours, Kalanick is banking on both car ownership and driving to become obsolete. Indeed, on February 2nd of this year, Uber announced a strategic partnership with Carnegie Mellon University (CMU) in creating the Advanced Technologies Center in Pittsburgh whereby Uber will endow faculty chairs and graduate fellowships. CMU already hosts the General Motors-Carnegie Mellon Autonomous Driving Collaborative Research Lab. Research at CMU has been heavily funded by the National Science Foundation (NSF), the Defense Advanced Research Projects Agency (DARPA), the U.S. Department of Transportation's University Transportation Centers program as well as General Motors and private foundations. It was the Carnegie Mellon's modified Cadillac SRX autonomous vehicle which transported Bill Shuster, chairman of the House Transportation and Infrastructure Committee, 33 miles to Pittsburgh International Airport. CMU is now providing members of Congress the opportunity to ride the vehicle around Washington.

Not surprisingly, GM CEO Barra's statement about the 2017 Cadillac V2V release came just weeks after Chairman Shuster was safely delivered to Pittsburg. Given GM and CMU's inside track with Washington, it makes sense that Uber (supposedly) shunned its investor Google when it turned to form a strategic partnership with CMU (and by association, GM) in an effort to develop the driverless car. A more jaded skeptic (one of the more polite things that I have been called) might see this as Uber and Google, partners from the start, collaborating to infiltrate the competition and, between them, control the marketplace.

The magnitude of change

According to Price Waterhouse Cooper's Autofacts team's February 2013 predictions contained in the report entitled, "Look Mom No Hands," autonomous vehicle technology has the potential to reduce the vehicle fleet from 245 million to just 2.4 million vehicles, reduce the number of traffic accidents from 10.8 million to 1.1 million and reduce commute time and energy as a function of quantity of fuel consumed from 1.9 billion gallons to 190 million gallons.

According to one tech blogger, Zach Kanter, who cites the Price Waterhouse Study as a basis for his predictions, "[a]ncillary industries such as the $198 billion automobile insurance market, $98 billion automotive finance market, $100 billion parking industry, and the $300 billion automotive aftermarket will collapse as demand for their services evaporates. We will see the obsolescence of rental car companies, public transportation systems, and, good riddance, parking and speeding tickets. But we will see the transformation of far more than just consumer transportation: self-driving semis, buses, earth movers, and delivery trucks will obviate the need for professional drivers and the support industries that surround them."

"The Bureau of Labor Statistics lists that 884,000 people are employed in motor vehicles and parts manufacturing, and an additional 3.02 million in the dealer and maintenance network. Truck, bus, delivery, and taxi drivers account for nearly six million professional driving jobs. Virtually all of these 10 million jobs will be eliminated within 10-15 years, and this list is by no means exhaustive."

Kanter cites to a Morgan Stanley report entitled "Nikola's Revenge: TSLA's New Path of Disruption" predicting that autonomous vehicles, among other significant impacts, will lead to a 90 percent reduction in crashes which would save nearly 30,000 lives and prevent 2.12 million injuries annually. In short, the driverless vehicle is predicted to definitely, and permanently change all aspects of transportation as we know it. Throughout all of this disruption we need to remain ever vigilant so that we do not see consumer safety and corporate accountability trampled under the hoofs of the techno titans as they shout their battle cry (whine): "don't stifle my innovation."


Dolan

Chris Dolan is the owner of the Dolan Law Firm with offices in San Francisco, Oakland and Sacramento. He has been widely recognized for his excellence in trial advocacy, receiving the Consumer Attorneys of California Trial Lawyer of the Year Award, the Edward Pollock Award for service to the Plaintiff's Bar, the SFTLA Trial Lawyer of the Year Award, The Chief Justice's Award for Contribution to the Courts, and the SFTLA Civil Justice Award. Chris is rated AV Preeminent by Martindale Hubble, has been designated as one of the Top 100 Lawyers in California by the Daily Journal, is named as one of the Best Lawyers in America, and has been a Top 100 Super Lawyer for over a decade. He currently serves as president-elect of the San Francisco Trial Lawyers Association.

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