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INTERACTIVE WORKSHOP 2016

Principal Coordinator:

William N. Erickson, Robins Kaplan LLP

Facilitators:

Greg Hoffnagle, Mintz Levin Cohn Ferris Glovsky and Popeo PC

Nancy D. Israel, Law Office of Nancy D. Israel

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“A Brave New World: Insuring Emerging Risks”

Panelists:

Kenneth P. Mortensen, PriceWaterhouseCoopers

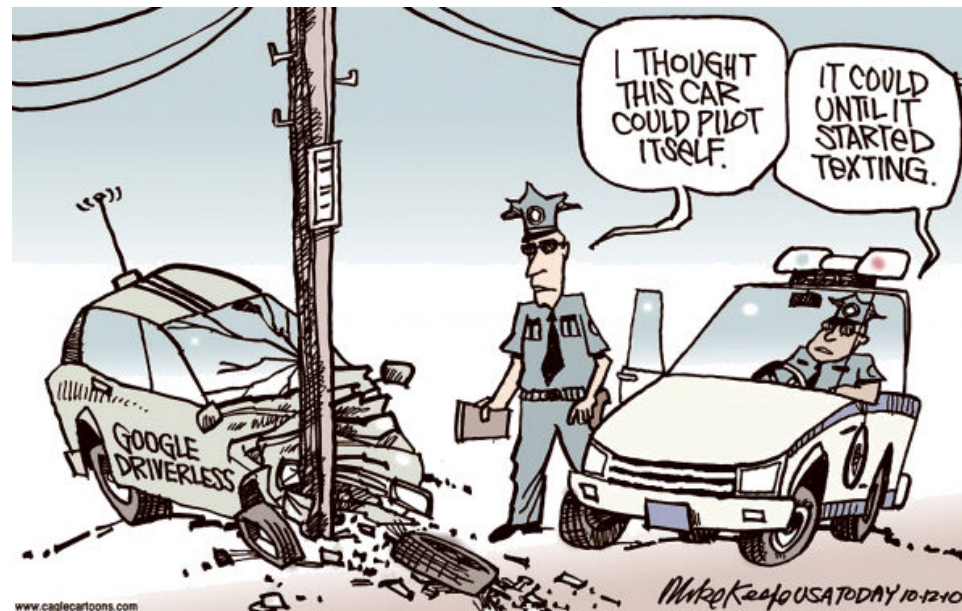
Elizabeth C. Sackett, Hermes, Netburn, O'Connor & Spearing, P.C.

Joseph S. Sano, Prince Lobel Tye LLP

Moderator and Panelist:

Robert A. Whitney, Neighborhood Health Plan

Insurance in the New World of Autonomous Vehicles



Robert A. Whitney

Insurance in the New World of Autonomous Vehicles

- According to an article in the New York Times on Sunday, May 22, 2016, roadway fatalities are soaring at a rate not seen in 50 years, resulting from crashes, collisions and other incidents caused by drivers.
- Almost all crashes stem from driver behavior like drinking, distracted driving and other risky activity. About 6 percent are caused by vehicle malfunctions, weather and other factors.
- Preliminary estimates by the nonprofit National Safety Council show deadly crashes rose by nearly 8 percent in 2015 over the previous year, killing about 38,000 people.

Insurance in the New World of Autonomous Vehicles

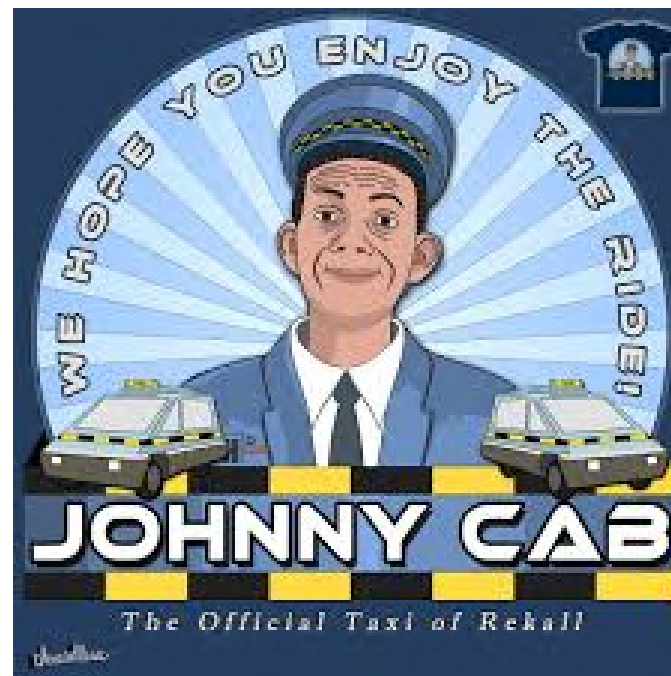
- When autonomous vehicles rule the roads, they will eliminate the estimated 90 percent of traffic accidents caused by human error, which could save 30,000 lives per year and, according to an advisor to car insurance companies, wipe out car insurance companies.
- As reported in *Forbes*, Lawrence Burns, a retired GM executive and professor who advises corporations, including Allstate and Google, has stated that: “Cars are not going to crash nearly as frequently, and they’re not going to crash as severely as we’ve seen in the past, so you could say it could be the demise of the car insurance industry.”

Insurance in the New World of Autonomous Vehicles

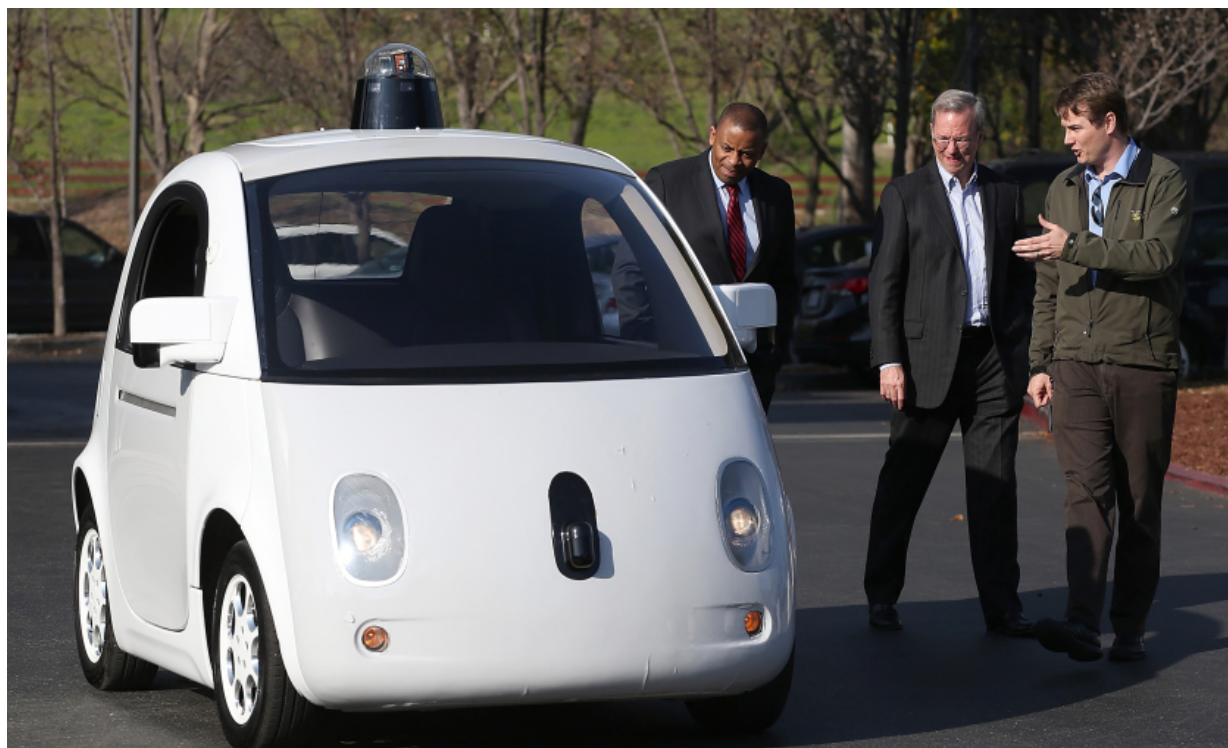
- On September 19, 2016, in an op-ed piece for the Pittsburgh Post-Gazette, President Barack Obama came out strongly in favor of developing the technology behind self-driving cars - as long as they are sufficiently regulated to keep Americans safe.
- The next day, administration officials from the U.S. Department of Transportation outlined ambitious plans to regulate autonomous vehicles that called for the federal government, rather than states, to take the lead in regulating these vehicles. One area that was specifically left to states, however, is regulating autonomous vehicle insurance requirements.
- But if the states are to regulate the insurance requirements for self-driving cars, what should those requirements be? What are the risks?

Insurance in the New World of Autonomous Vehicles

- <https://www.youtube.com/watch?v=xGi6j2VrL0o>



Insurance in the New World of Autonomous Vehicles



Google's Chris Urmson shows a Google self-driving car to U.S. Transportation Secretary Anthony Foxx and Google chairman Eric Schmidt at Google's headquarters on February 2, 2015. *Photograph by Justin Sullivan — Getty Images*

Insurance in the New World of Autonomous Vehicles

- A study last year in 2015 by the University of Michigan's Transportation Research Institute, found driverless cars are more likely than human-operated vehicles to be in accidents, but the accidents documented in the study were all the fault of the human drivers of other cars. None of the driverless cars caused an accident.
- Often, the study concluded, the driverless cars were struck because they were adhering to traffic laws, like making sure an intersection is clear before proceeding when a light turns green, only to get rear-ended by human drivers.

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- The testing of Google's self-driving cars on California roads has resulted in about a dozen minor accidents during the past six years, but humans were to blame for the accidents, Google said, and no one was hurt in the accidents.
- Chris Urmson, director of Google's self-driving project, wrote in an Internet post that his company's 11 accidents involved "light damage, no injuries." Google has tested its vehicles over 1.7 million, nearly 1 million in self-driving mode.

Insurance in the New World of Autonomous Vehicles

- Also, in the Fall of 2015, a California DMV report came out showing that all of the self-driving car accidents were actually the fault of a human driver in a conventional car.
- Still, in spite of the self-driving cars' high accident rate, the University of Michigan study did not contradict the conclusions of Google and the California DMV that self-driving cars were not to blame in any of their crashes, and also found that injuries in those incidents tended to be less serious than in regular car accidents.

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- The testing of Google's self-driving cars on California roads has resulted in at least car being pulled over in June 2015 – for driving too slow!
- There was no driver – only a passenger in the back seat. The officer determined that the car had broken no law.

Insurance in the New World of Autonomous Vehicles

- The big question for the future of insuring autonomous vehicles: ***How much will it cost?***
- Google wants to move forward with developing autonomous electric vehicles and in order to speed the process along, has been working with auto insurance carriers concerning insurance pricing issues.
- As noted above, Google maintains that autonomous vehicles are far safer than vehicles being driven by humans. Therefore, Google believes that insuring those vehicles should be *cheaper* than insuring human-driven vehicles.

Insurance in the New World of Autonomous Vehicles

- ***One issue:*** where a vehicle will be driven by a human at least part of the time, how to determine what insurance rate to charge – and should rates be different depending on who – or what – is driving at a particular time.
- Carmakers are already anticipating the deployment of autonomous vehicles: GM anticipates its “self driving” vehicles will be on the road in the US by 2020. The Boston Consulting Group, in a study released in January 2016, has forecasted that at least “partially autonomous vehicles” are likely to hit the roads in large numbers by 2017.”

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- For example, Tesla among other vehicle manufacturers are beginning to integrate autonomous components into production cars *right now*.
- And the results of this integration are already apparent – in October 2015, a Tesla driver credited the electric vehicle's new autopilot mode with saving him from a head-on collision this week when he didn't even have his foot on the brake.

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- For example – imagine a form of “super cruise control” which would allow a car to automatically (and without any driver input) to pass another vehicle and get back into the lane of travel –
- Also, imagine the car following the vehicles’ navigation system without any driver input at all – at least for part of the journey).
- Production vehicles are very close to being able to do both of these imagined task today – but how to insure a vehicle that is at least for part of the time is *not* under the control of the insured driver?

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- Various states are now beginning to explore what regulations should govern autonomous vehicles operating within their respective jurisdictions. Sixteen states introduced legislation related to autonomous vehicles in 2015, up from 12 states in 2014, nine states and D.C. in 2013, and six states in 2012.
- Nevada was the first state to authorize the operation of autonomous vehicles in 2011. Since then, five other states—California, Florida, Michigan, North Dakota and Tennessee—and Washington D.C. have passed legislation related to autonomous vehicles. Arizona's governor issued an executive order related to autonomous vehicles.
- In all cases, these laws govern the “testing” of autonomous vehicles, including the insurance requirements for such test vehicles.

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- These states are generally requiring that such vehicles be covered by liability policies with limits from \$1 million to \$5 million per accident – and in every case, the “insured” under these policies is *not* usually the owner of the vehicle, but instead, is the provider of the autonomous software that is “driving” the vehicle undergoing testing.
- In such cases, the state’s usual auto insurance requirements – usually with substantially lower limit requirements - would apply to the vehicle owner but *only* during those time periods when a human driver is at the wheel.

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- Massachusetts has two bills currently pending before the Joint Committee on Transportation:
- **House Bill 2977**, which authorizes the operation of autonomous vehicles without active control or monitoring by a human operator. The bill requires that prior to the start of testing in this state, the entity performing the testing must submit to the state's Division of Highway Safety an instrument of insurance, surety bond, or proof of self-insurance in the amount of \$5,000,000.
- **Senate Bill 1841**, which defines autonomous vehicles and allows the operation and testing of autonomous vehicles on public roads if the manufacturer certifies that all safety standards are met. The bill has no insurance requirements.

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- Google has taken the position that “excessive” insurance requirements are *not* appropriate for its autonomous vehicles.
- It says that the current multi-million dollar limit insurance requirements of some states are unrelated to any true “risk” of accidents associated with driverless vehicles, and that these insurance requirements are likely to *discourage* the development of autonomous capabilities of vehicles that will result in *fewer* accidents.
- For example, in early April 2015, Delphi ’s autonomous Audi drove 3,400 miles from the West Coast to New York City, and **99 percent** of the distance without a driver controlling the car. (The *only* accident took place when another car with a human driver jumped a median and struck the Audi).

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What The Future Hold:

- Uber has stated that its ultimate goal is to do away with human drivers altogether and to buy “thousands” of Tesla autonomous electric vehicles “when they are ready.”
- But how to insure those vehicles? Current auto insurance requirements based upon *human* drivers would make little sense.
- In a report issued during the summer of 2015, McKinsey & Company suggested auto insurers might shift the core of their business model, focusing mainly on insuring car manufacturers from liabilities from technical failure of their autonomous vehicles, as opposed to protecting private customers from risks associated with human error in accidents.

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- In the near term, we might begin to see auto carriers developing “hybrid” insurance pricing models – similar to what is happening in the world of transportation network companies like Uber and Lyft – where a human driver’s insurance “rate” might be higher when the driver is at the wheel, while the rate goes down when the car is placed into autonomous mode – with the autonomous software provider picking up the insurance tab.
- In any event, if a driverless transportation system truly comes to pass, individual auto insurance itself will need to substantially change to meet the needs of a “brave new (driverless) world.”

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"Speeding, officer? You'll have to ask the self-driving car."

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