



California Department of Insurance

Public Hearing on Autonomous Vehicle (AV) Insurance Issues

Ensuring appropriate insurance coverage for AVs in the near and distant future

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10:00 am – 12:30 pm

The Tech Museum of Innovation

“New Venture Hall”

201 South Market Street

San Jose, CA 95113

Prepared testimony by

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Good Morning,

It is a pleasure for me to be here because it is my view that the insurance industry and its regulators are the Key Players positioned to accelerate the consumer adoption of automated road vehicles.

Automation of vehicles has two distinct market opportunities: Initially, to substantially enhance safety and unburden drivers ... To be followed by the delivery of safe, economical, high-quality mobility to everyone.

The first has the opportunity to enhance the profitability of the insurance industry, while delivering the societal benefits of saving lives, reducing injuries and curtailing grief.

The 2nd is largely a fleet play for which different insurance products may likely emerge; ones that look more like those of today's transit industry.

In the past, consumers have been reluctant to buy safety; else, everyone would be driving Volvos. Why, because I'm a safe driver; it's the other guy. He needs it, I don't; ... can't afford it.

Also, insurers haven't been so thrilled about past crash safety measures. Sure, lives have been saved, but the costs of accidents has actually gone up. Why, because the focus has been on crash mitigation (crush zones, seat belts, air bags). Lives have been saved and injury severity reduced, but... Some saved lives incur a greater financial cost; fixing the crushed cars is more expensive; Insurance Burden has increased.

Automation technology approaches safety from a different perspective,... that of avoiding the accident in the first place. The purpose of anti-lock brakes is to have the vehicle stop faster, thus avoiding some accidents. Similarly with the mandated electronic stability control. Interestingly, both of these systems monitor driver behavior and at some point automatically decide to take over because they determine that the driver is not driving properly.

With respect to anti-lock brakes, I'm pushing too hard on the brake pedal. They won't let me.

With stability control, I'm taking a turn too fast. Steering alone isn't going to safely negotiate the curve.

What's important is that these systems take over automatically and counter what I'm doing wrong. They don't warn,... they don't ask for permission, ...I can't turn them off, ...they just do it!

Automated driving systems extend these crash avoidance systems and will substantially reduce accidents ... reducing the financial liability of the so-equipped vehicles irrespective of who is in the driver's seat. Thus, insurance has a great deal to save (and thus gain) from the accelerated adoption of these technologies.

I believe that we'll be able to offer these technologies at a price that is less than the present value of the expected liability savings that these technologies will deliver. Thus, at existing rates, an insurer can pay for the automated technologies AND make more money... AND... at no additional costs: lives are saved, injuries avoided, societal pain is diminished! This has to be the "ideal arbitrage opportunity" for the insurance industry and its regulators. Keep rates the same, make more money and save lives. Wow!

This is such a fantastic opportunity that a substantial part of this meeting should be focused of figuring out how insurance regulators can help accelerate the research, certification and commercialization of these technologies.

Moreover, these technologies have the opportunity to evolve naturally, propelled by ever increasing value delivered to the insurance industry and to society. Initially at NHTSA Level 2... where substantial accident reduction reduces insurance liabilities and saves lives. As these systems improve to Level 3, the opportunity for drivers to text safely during sanctioned portions of their drive cycle creates a tangible incentive for consumers to purchase this incremental technology, enhancing the arbitrage opportunity for insurers and public.

With respect to Driverless (Level 4) cars that can go empty from A to B ...

I anticipate that there will be very little consumer demand for personal ownership of a driverless car. Thus, little need for Private Passenger Auto Insurance.

However, Driverless cars create the opportunity for a fleet owner to offer "common-carrier", on-demand, ubiquitous, elevator-like, mobility, 24 x7 without incurring labor costs. No need to own a car when this kind of mobility is available inexpensively.

Think of it... Enterprise Rental Cars won't need to hire recent college graduates to "we'll pick you up". They are buyers!

One-way Zip cars can go by themselves from the previous customer to "where I need the car now". They are buyers!! and

Transit Authorities can now deliver auto-like mobility economically to everyone. They are buyers!!!

If no one else steps up, I'll petition the NJ Legislature to grant me a charter to operate a fleet of 1.5 million of these driverless vehicles throughout the State. I'll deliver to everyone auto-like mobility. By incentivizes ride-sharing, I'll eliminate congestion, increase ridership on NJ Transit Rail by a factor of 5 and reduce energy consumption and associated pollution by 50% and make money.

While state-wide systems will take some time to materialize, smaller fleets providing mobility in "gated communities" may be right around the corner. Insuring these systems will likely be an extension of the way the transit industry currently insures buses.

Summarizing... Level 2 is an ideal arbitrage opportunity for the insurance industry and the public at large. Accordingly, its Insurance Products should incentivize research, certification and commercialization of these technologies. The personal benefits of Level 3 will accelerate the adoption of even safer technologies, expanding the arbitrage opportunity. Consumers and/or communication providers will gladly pay any extra technological costs because "drivers" can now "text" safely. Society benefits!

Level 4 driverless cars will cause fleet operators to substantially erode consumer demand for Level 2 and 3 cars; but, these new and expanded fleets will require fleet-oriented insurance products and deliver unprecedented mobility for all.

Thank you,

Alain L. Kornhauser