



Automated Vehicles: Liability and Insurance

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***I AM NOT A LAWYER YET AND NOTHING THAT I SAY TODAY SHOULD BE CONSTRUED AS PERSONAL
LEGAL ADVICE!**



Purpose of this Webinar

Our topic today is **civil liability** for automated vehicles (AVs).

The type of AV crashes we will be discussing are **unintentional**, with no bad actors involved—we will not be addressing cybersecurity.

We will be raising far more questions than we can answer—this technology is so new and so markedly different from existing technologies that we just can't make many concrete legal assertions.

This webinar will focus on **ten policy choices** that policymakers must think through in order to create a fair, efficient civil liability scheme for AVs.

Legalese will be kept to a minimum!



Goals for this Webinar

I want to encourage listeners to think about liability as a series of policy choices. Although many of our liability principles are ancient, they were not handed to us on stone tablets from the heavens. Liability rules can and should change when the problems of our era call for new policy approaches.

For the purpose of this webinar, imagine that any kind of change to the liability system is within our reach.



Before We Begin: Some Terms

An Automated Vehicle (AV) is a vehicle capable of automating one or more driving functions. It is *not* necessarily synonymous with a “self-driving car”—it is a broader term than that.

When we are talking about vehicles capable of full self-driving (SAE Level Four or Five), we will endeavor to use the term “self-driving AV” for clarity.

SAE Levels refer to the spectrum between partially automated vehicles (SAE Level One) all the way to vehicles capable of self-driving in all situations (SAE Level Five).



Ten Policy Questions for AV Liability

- (1) Who are the potentially liable parties when an AV crashes?
- (2) Should we extend liability to AV fleet owners and dispatchers?
- (3) What is the proper legal analogy for self-driving AVs?
- (4) Should we evaluate AV crashes under a negligence scheme or a strict liability scheme?
- (5) Is products liability the right legal standard for evaluating AV crashes caused by a vehicle's self-driving software?



Ten Policy Questions for AV Liability

(6) What is the manufacturer's legal duty with regard to software design?

(7) What is the human AV operator's legal duty to monitor the vehicle while it operates in self-driving mode?

(8) How do we prevent a patchwork of state-level AV tort laws?

(9) Do we need to reform our insurance schemes in order to facilitate self-driving AV deployment?

(10) What broader policy goals for self-driving cars can we effectuate through the AV liability system?



What is Civil Liability?

Civil liability is the system that governs civil wrongdoing – actions that are not (necessarily) criminal, but that nevertheless cause damage to another party.

If you injure another party—physically, emotionally, financially, etc.—a court may hold you liable for causing that injury.

If you are assigned liability, you must compensate the other person—generally by paying them money to offset the injury they suffered.

What is the Purpose of Civil Liability?

Generally, every civil liability scheme has two primary goals: to efficiently compensate the injured party for their injury; and to assign the cost of compensation to a blameworthy party.

Efficient compensation requires speedy compensation at the lowest possible cost.

Fair assignment requires that the party assigned liability is a party who can fairly be deemed "at fault".

Efficient and Fair Civil Liability

Efficient-but-unfair is a bad scheme:

Ex1: "Jeff Bezos should be solely liable for all AV crashes because he is rich and can afford it."

Ex2: "There should be no civil liability at all for AV crashes—if you're injured by an AV, tough luck."

Fair-but-inefficient is also a bad scheme

Ex1: For better or worse, in many cases, litigation.

(Relatively) Efficient and Fair: conventional vehicle auto insurance.



Non-Automated Vehicle Liability

About 93% of all conventional vehicle crashes are attributable to a driver error, so in the vast majority of cases, a human driver is liable.

Approximately 2% of conventional vehicle crashes are attributable to the vehicle itself.

Some of these crashes are still attributable to a human driver (e.g., failure to maintain the vehicle). Others are attributable to a design or manufacturing error—in these cases, liability is assigned to the vehicle manufacturer or vehicle component manufacturer.

These numbers will likely shift dramatically as self-driving AVs reach the road.



Policy Question #1

Who are the Potentially Liable Parties?

Why don't we know the answer to this question yet?

Likely Candidates:

AV Manufacturers: manufacturer of the vehicle and/or the self-driving software. May be one company or two separate companies.

AV Operators: the human inside the vehicle. At low SAE Levels, a driver; at high SAE Levels, more like a passenger.

AV Fleet Owners: owners of self-driving AVs that are loaned out for use in a ride-hailing service.

AV Dispatchers: Transportation Network Companies (e.g. Uber or Lyft) that dispatch self-driving AVs on behalf of the vehicle owners.



Policy Question #2

Should We Extend Liability to AV Fleet Owners and Dispatchers?

It isn't clear that these parties can be liable under current law—fleet owners under the Graves Amendment, TNCs under a lack of legal precedent.

What policy goals would be effectuated by extending liability?

What policy goals would be inhibited by extending liability?

Policy Question #3

What is the Proper Legal Analogy for Self-Driving Cars?


Self-driving AV operator as a conventional vehicle driver?

Self-driving software as a human driver?

Self-driving AV as an untamable wild animal?

Self-driving AV as an elevator?

Self-driving software as a horse?



Policy Question #4

Negligence or Strict Liability?

In our current scheme, we usually judge humans under a negligence standard and product manufacturers under a strict products liability standard.

Should humans be able to avoid AV crash liability if they can prove they weren't negligent? What about manufacturers?

Is it better to promote AV technology at the expense of some victims who would win under strict liability but not negligence? Or is it better to ensure all victims are compensated, even if that impedes technological development?



Policy Question #5

Is Products Liability the Right Standard?

Bias check: This webinar is by the co-author of a Law360 article called "Products Liability is the Wrong Standard for Self-Driving Cars."

Problems with PL: long and complicated litigation, expensive, evidentiary problems for plaintiffs under a design defect theory, etc.

However, PL may be redeemable with some tweaks, most notably a burden shifting approach.

Malfunction doctrine could help to fill the gap if expanded beyond its current usage.

Policy Question #6

What is the Manufacturer's Legal Duty Regarding Software Design?

How we conceive of this duty is critically important. In a negligence scheme, in particular, the conception of duty may determine outcomes.

Should we think of this legal duty as a duty to:

- Ensure the vehicle never crashes under any circumstance?

- Perform more safely than a human driver? Twice as safe? 100x as safe?

- Perform like "The Reasonably Prudent Computer"?

What's the legal duty to update the software? To continue updating in perpetuity, or is there such thing as "planned AV obsolescence"?



Policy Question #7

What is the Operator's Legal Duty to Monitor?

SAE Level likely matters a lot here—so whatever the duty is, we need to define it very carefully.

Policy implications of a duty to monitor—doesn't this defeat the very purpose of a self-driving car?

Would the duty to monitor prevent an intoxicated person from legally operating a Level Three vehicle? Level Four? Level Five?




Policy Question #8

Preventing Legal Patchworks

Do we even want to prevent it? What about the Louis Brandeis "50 laboratories of democracy" theory?

Should we look to the UCC as our goal? What about the UPC model? The Model Penal Code model?

What about federal preemption of state tort law?



Policy Question #9

Do We Need to Reform Insurance?

In California, we certainly do – see the Policy Institute’s “Insuring Automated Vehicles in California” [forthcoming spring 2019]

We need our insurance regulation schemes to permit rapid rate changes for consumer benefit —the safety rating of a vehicle can literally improve in an instant thanks to over-the-air safety updates.

We may need to rethink and retool insurance concepts such as mandatory rating factors, intervenor processes, “good driver discounts” as well.

But, we need to be careful not to eschew regulation entirely—self-driving AV insurance will be very challenging; requires some oversight.



Policy Question #10

How Can Liability Promote Our Other Key Policy Goals for AVs?

If self-driving vehicles are safer than human drivers, we should promote their usage—must be careful how we assign liability so as not to cripple the nascent industry.

Give manufacturers clear incentives to improve the safety of their vehicles—both for new models and for vehicles already on the road.

Ensure fast and complete victim compensation, whether through insurance or through an expedited litigation process.

Promote ride-hailing to reduce the need for personal vehicle ownership!

Q & A



Conclusion

If you're interested in further reading about AV liability and insurance, please see the Policy Institute's website.

If you have any other questions or topics that you would like to discuss, please reach out! My e-mail is below.

Thank you all very much!

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