

Reshaping Liability and Insurance Rules for Automated Vehicles

POLICY BRIEF
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Current Liability Systems Cannot Accommodate Automated Vehicles

The American civil liability framework has two basic goals: ensuring the efficient compensation of victims for their injuries and assigning the cost of compensation to the blameworthy party. When it comes to auto crashes, the existing liability system achieves these goals by assigning liability based on human fault and requiring human drivers to carry insurance. But this system, and the legal theories that support it, are predicated on the assumption that car crashes are traceable to human driver error.

In the near future, automated vehicles (AVs) capable of self-driving will come to market. These vehicles will sometimes crash while operating in a self-driving mode. The problem is that the current vehicle liability scheme does not neatly translate to a world where driving errors are made by non-humans. Failure to update liability laws could be a missed opportunity to promote AV usage and thereby maximize the technology's safety benefits. Furthermore, a patchwork liability scheme that varies between jurisdictions can jeopardize efficient victim compensation and fair liability assignment.

Liability Must Be Clear And Fair

Liability in most car crashes today is [assigned to human drivers](#). This liability scheme may still work for partially automated vehicles, where human drivers still control (or have the ability to re-take control of) the vehicle. But the human occupant of a self-driving vehicle may have no control over the vehicle in much the same way that a bus or taxi passenger lacks control of those vehicles. Assigning liability to AV occupants without vehicle control would create a conflict with both basic liability theory and fundamental fairness.

An alternative is [assigning liability to AV manufacturers](#). This scheme may be appropriate for crashes caused by flaws in AV hardware or software design. But it also raises practical issues. Liability concerns could

discourage vehicle manufacturers from entering the AV market. Typical accident victims may find it difficult to bring products liability claims that involve new and rapidly evolving technology, making it difficult for these victims to recover. Manufacturer liability may be theoretically fairer than occupant liability in many cases, but will require modifications to the current liability system to be workable in practice.

Two other types of parties could also be held partially or fully liable for incidents involving AVs. New mobility business models could involve [AV fleet owners](#) who operate taxi-like services. Fleet owners may also contract with [transportation network companies \(TNCs\)](#) like Uber and Lyft to dispatch AVs just as they dispatch human drivers. Since fleet owners and TNCs will oversee AV operation and maintenance, it stands to reason that they hold at least some responsibility for AV crashes.

Under current law, it is unclear whether AV occupants, manufacturers, fleet owners, or dispatchers are liable in the event of an AV crash. As a result, injured plaintiffs are likely to sue some or all of these parties to "see what sticks". This will result in fruitless litigation that needlessly wastes financial and judicial resources. The existing liability system must be updated to fairly assign and clearly explain how liability is allocated among these parties in different scenarios.

Inconsistent Precedents And Policies Must Be Reconciled

A major hurdle in establishing an effective liability system for AVs is that relevant precedents and policies often conflict. Statutes, judicial rulings, and guidance issued by executive agencies have different theories about who is a potentially liable party in the event of an AV crash. Specific rules for assigning liability can vary between jurisdictions.

The status quo raises interesting but complicated governance issues. A major open question is whether an AV fleet owner is more similar to a

rental-car company or a taxi company. The answer to this question will determine whether the federal “Graves Amendment” (49 U.S.C. § 30106) could be invoked to protect AV fleet owners from liability. A second important question is how to give states and municipalities sufficient flexibility to tailor AV regulations to regional and local needs while avoiding a “patchwork” of liability laws.¹

Policy Recommendations

Legislatures, not courts, should lead on liability policy.

If lawmakers cannot establish a comprehensive AV governance policy, AV liability policy will be instead be set by the judicial system. This is far from ideal. Leaving AV liability policy up to individual judges would exacerbate and extend inconsistency and uncertainty. This would make it difficult and expensive for victims of AV crashes to recover damages.

Take advantage of AV capabilities to help determine fault.

AVs are equipped with sensors, cameras, and data-collection systems. These assets can and should be used to assign fault in the case of an accident. Sensors could help determine whether an accident was the result of a software malfunction or weather conditions. Cameras could help determine whether the human operator of a partially automated vehicle appropriately responded to the car’s request for human intervention. Leveraging AV technology could streamline fault determination process and achieve faster case resolution.

Manufacturer liability should be substantial but not excessive.

Manufacturers are the only parties who directly influence AV safety. Assigning substantial liability to manufacturers for accidents involving AVs will encourage manufacturers to prioritize safety in AV software and hardware design. But assigning excessive liability to manufacturers risks discouraging entry into and innovation within the AV sector. A sensible balance is for liability to be assigned to manufacturers in the event of an AV crash unless (1) the AV’s owner failed to install necessary safety updates, (2) the AV’s operator failed to heed the

vehicle’s request for driver intervention, or (3) the AV was used in conditions or areas expressly prohibited by the manufacturer.

Insurance products should be updated.

Even if AVs crash less frequently than human-driven vehicles, they will still sometimes crash. Insurance will continue to play a role in allowing some victims to receive compensation while avoiding the court system entirely. State-level insurance rules may need to be tailored to allow for innovative new market entrants with specialized knowledge of AVs to create new insurance products.

Stakeholders should work together to resolve uncertainty.

Much of current concern regarding AV liability is rooted in uncertainty—uncertainty about which parties can be held liable, what type of circumstances will engender liability, what type of legal theories will be viable, who will be required to purchase insurance, which existing vehicle laws will apply to AVs, and so on. Only when there are clear answers to these questions will consumers have the ability to make rational economic decisions about whether and when to use AVs.

Yet while AV liability is a hot topic in legal academic circles, legislative or regulatory activity to reform AV liability has thus far been limited. This must change, and soon. Consumers will be far more likely to use AVs—and society will benefit much more quickly from the advantages AVs have to offer—if liability rules are predictable and consistent. Achieving this goal will require coordination among subject-matter experts, consumer advocates, private companies, and others. Policymakers have a key role to play in working with stakeholders to proactively implement a fair AV liability system that works for all.

This policy brief summarizes the issue paper series “Automated Vehicle Liability and Insurance” by Gordon J. Anderson, Austin L. Brown, and Hannah R. Safford.

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¹ For more on this topic, see the issue paper “Federal, State, and Local Governance of Automated Vehicles”.