SUMMARY

Automated vehicles (AVs) will crash less frequently than human-driven vehicles, but they will still crash. These crashes will sometimes create victims, and these victims will justifiably demand compensation. Our legal system is well-equipped to handle non-automated vehicle crashes, but AVs will challenge our existing doctrine. It is not yet clear how liability will be assigned when an AV crashes.

Each part of this four-part brief series considers one of four possible defendants—AV manufacturers, operators, fleet owners, and dispatchers—in a lawsuit following an AV crash. This brief (Part Four) explores the liability and insurance outlook for AV dispatchers: that is, transportation network companies (TNCs) that connect self-driving highly automated vehicles (HAVs) with passengers willing to pay for rides.

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1 Background

This four-part series explores questions around AV liability and insurance. Our purpose is to highlight areas where the emergence of AVs will pose a challenge to existing legal doctrine. Uncertainty in liability is a major barrier to deployment of any new technology, especially one with such wide-ranging effects as AVs. A predictable, fair, and science-based approach to creating liability rules would assist in facilitating the rapid deployment of the safest AV business models.

Each part of this brief considers the liability burdens that a particular party to an AV crash could bear. This brief—Part Four of the series—explores the liability and insurance outlook for AV dispatchers: that is, transportation network companies (TNCs) that connect self-driving highly automated vehicles (HAVs) with passengers willing to pay for rides.

This brief uses the California Public Utilities Commission’s definition of a TNC: a company that “provide[s] prearranged transportation services for compensation using an online-enabled application (such as smart phone apps) to connect drivers using their personal vehicles with passengers.” TNCs are profoundly impacting the transportation industry. Uber, the largest and most visible TNC, operates in over 800 cities across 84 countries. At present, TNC drivers are human in the vast majority of cases. When highly automated vehicles (HAVs) reach market in the near future, it is likely that TNCs will favor replacing human drivers with HAVs in at least some cases to cut costs, increase safety, and improve operational simplicity. For simplicity, this brief refers to TNCs that include driverless HAVs in their fleets as “AV dispatchers” or simply “dispatchers.”

Because TNCs and HAVs are both quite new and evolving quickly, TNC liability law is in its infancy and HAV liability law for the most part does not exist. The collision of these two emerging bodies of law is difficult to predict. As such, though this brief focuses on liability implications that seem most likely based on our expertise and the limited precedent that does exist, we acknowledge that our conclusions are necessarily speculative.

This brief makes the following simplifying assumptions:

- TNCs will want to, and be legally allowed to, dispatch driverless HAVs.
- Commercial HAV fleet operators will want to, and be legally allowed to, contract with TNCs to dispatch their HAVs.
- TNCs will not own their own HAV fleets. They will only connect prospective passengers with HAVs owned by other parties (i.e., commercial fleet operators).
- HAV insurance, like conventional auto insurance, will be available in a competitive market offering a variety of insurance products.
- Parties choose to purchase insurance when it is economically rational for them to do so.

This brief is structured as follows. Section 2 describes challenges to determining liability for and insuring AV dispatchers. Section 3 presents three possible liability and insurance frameworks for AV dispatchers and notes the advantages and drawbacks of each. Section 4 outlines anticipated outcomes of each framework at different levels of vehicle automation. Section 5 concludes.

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1 California Public Utilities Commission (CPUC), Transportation Network Companies.
2 Uber Estimator, Uber Cities.
2 Challenges

2.1 Dispatcher liability

It is not yet clear if or how AV dispatchers can be held liable when their drivers crash and cause injury. The TNC industry is less than a decade old, and the law inevitably lags technology. Litigation against TNCs has only emerged in the last few years, and several filed lawsuits that will ultimately shape TNC law have not yet reached trial. Thus, courts have not had the opportunity to explicate the liability burden that TNCs face. Similarly, while most state legislatures have passed TNC regulations, these regulations typically only compel TNC drivers to carry insurance and to register with state regulators.

It is even less clear what type of liability an AV dispatcher faces. It is very likely that TNCs will want to use HAVs instead of human drivers where possible. Unlike humans, HAVs do not need to take rest breaks or abide by other state employment laws. Furthermore, if HAVs crash less frequently than human drivers, TNCs will prefer to use HAVs for both marketing and safety reasons. However, it remains an open question as to what liability the dispatcher will bear when one of its HAVs does crash.

Under a vicarious liability framework, a TNC can be held liable for the actions of its drivers if drivers are deemed “employees” of the company rather than independent contractors. This legal rule reflects the different level of independence that employees and contractors retain. Employees are ostensibly under direct control of their employer, but independent contractors are not—they have more freedom to choose how and when to perform the contracted work. It is not yet clear whether an HAV would be treated as an employee, an independent contractor, or something else. Hence the viability of a vicarious liability lawsuit against a TNC for the actions of a HAV it dispatches remains an open question.

There may be other avenues by which to hold an AV dispatcher liable. A plaintiff might be able to convince a court that a dispatcher has a non-delegable public safety duty, i.e., a legal duty to operate safely that it cannot delegate to its drivers, whether humans or computers. This argument has not yet been tested in court, but it may prove to be a viable path to liability.

A plaintiff might also be able to sue an AV dispatcher for direct negligence. This would require the plaintiff to show that the dispatcher’s action or inaction contributed to the plaintiff’s injury. Two possible negligence frameworks that could apply to dispatchers are negligent supervision and negligent hiring/retention. Both are detailed in Section 3.

2.2 Dispatcher insurance

Every U.S. state except New Hampshire requires drivers to hold auto insurance. Uber and Lyft, the two largest TNCs, both require their drivers to carry personal auto insurance that meets their state’s minimum financial responsibility laws. Uber carries its own additional liability insurance policy that applies when a driver is logged into the Uber Driver app waiting to accept a trip or transporting customers. Lyft has a similar liability insurance policy for its drivers. These policies supplement the driver’s personal insurance policy in case the driver’s liability exceeds his or her personal policy limits. For instance, most states only require a TNC driver to carry $100,000-per-accident insurance for bodily injury. Since serious bodily injuries can cost a great deal more than $100,000, Uber’s policy kicks in to compensate the victim after the driver’s $100,000 threshold is surpassed. Uber’s insurance policy varies by state but is “at least $1,000,000 per accident.” Lyft also provides a $1,000,000 per accident insurance

3 James Buyucos, 1 California Torts § 8.05 (2018) (“As a general rule, a person who employs an independent contractor is not liable for the torts of the contractor.”).
4 Uber, Help: Insurance.
5 Lyft, Insurance Policy.
6 Uber, Insurance: How you are covered.
policy in excess of a driver’s personal insurance. The Lyft policy does not explicitly vary by state.\(^7\)

A similar two-tiered insurance system is likely if TNC dispatchers rely on HAVs instead of human drivers, assuming that dispatchers do not own their own fleets but rather contract with commercial fleet owners. HAV owners will meet state mandatory insurance minimums so that they (or their customers) are legally allowed to operate their HAVs on public roads. When HAV owners make their vehicles available to TNCs, it is likely that the TNCs will further insur the vehicles in case of catastrophc accidents that exceed the owner’s coverage. Dispatchers will likely provide this additional insurance not out of altruism, but as a cost-saving measure. Litigation—even meritless litigation or litigation with a low probability of succeeding—can be extremely costly. It will likely be cheaper for a dispatcher to maintain a supplemental insurance policy to avoid HAV owners suing for contribution (that is, demanding that the dispatcher help the owner pay a liability judgment) while the legal landscape is still indeterminate.

Carrying supplemental insurance will also help dispatchers pitch themselves to HAV owners. A sensible HAV owner will not contract with a dispatcher unless the owner will come out ahead financially by doing so. If the owner is “on the hook” for all possible liability, the owner’s expected return on the contract is much lower than if the dispatcher assumes at least a share of the liability burden. Although the owner could also take out a supplemental insurance policy of his or her own, it will likely be more efficient for the dispatcher to handle this type of insurance because of the dispatcher’s superior market presence. A TNC representing thousands of drivers has the negotiating power to achieve a better rate than an individual HAV owner.

Ultimately, the insurance an AV dispatcher needs to buy depends on the type and likelihood of liability that the dispatcher may incur. If dispatchers can be held liable for the actions of their drivers under a vicarious liability framework (i.e., if drivers are considered employees rather than independent contractors) or under a negligence framework, they will need far more insurance than if not. Clarification on these points is needed to identify the insurance products that AV dispatchers should and will buy.

3 Possible liability and insurance frameworks

3.1 Vicarious liability and the nondelegable duty doctrine

Nondelegable duties are duties that “cannot be contracted away or referred to a third party.”\(^8\) Such duties can force companies to assume certain liabilities for the actions of their independent contractors. The NDD prevents companies from dodging liability by hiring and then pinning blame on independent contractors. A plaintiff could use the nondelegable duty doctrine (NDD) to assert that an AV dispatcher has a nondelegable duty to protect public safety. If courts agree, then the NDD could hold dispatchers vicariously liable for at least some actions of their drivers even when drivers are classified as independent contractors.\(^9\)

There are two possible ways for courts to find that an AV dispatcher is subject to the NDD. A company may be subject to the NDD if (1) the company is publicly licensed or franchised, or (2) the company undertakes an activity deemed inherently dangerous to the public.\(^10\) It is only necessary that a company meet one of these criteria, but TNCs could meet both.

Most states publicly license TNCs through a government authority. Many states, including California, Colorado, and Massachusetts, govern TNC licensing through their respective public utility agencies. Michigan regulates TNC licensing through its Corporations, Securities and Commercial Licensing Bureau,\(^11\) and Virginia regulates TNC

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\(^7\) Lyft, *Insurance Policy*.


\(^9\) For further explanation of the NDD as applied to TNCs, see Alexi Pfeiffer-Gillett, *When Disruption Collides with Accountability: Holding Ridesharing Companies Liable for Acts of Their Drivers*, 104 Cal L. Rev 233 (2016).

\(^10\) Id. at 253.

licensing through its Department of Motor Vehicles. Regardless of which state government agency handles TNC licensing, the act of state licensing may itself be sufficient to meet the NDD's “public licensing” specification.

It could also be argued that the NDD applies to TNCs because they undertake an activity that is inherently dangerous to the public. California provides an informative case study. The California Public Utilities Commission (CPUC) has described TNC regulations as a matter of public safety. Moreover, the CPUC imposes affirmative duties on TNCs—including that TNCs conduct driver background checks and confirm that drivers carry auto insurance—that further indicate that the CPUC believes TNCs pose a public danger. In a landmark 1952 case, the California Supreme Court found that under the NDD, a trucking company could not avoid vicarious liability by exclusively using independent contractors. The Court's rationale was that the CPUC and the California legislature had indicated their intent to create affirmative, nondelegable safety duties for the trucking industry through their recent regulations. A court could similarly find that the CPUC and the California legislature have shown intent to make TNC safety duties nondelegable as well.

If TNCs have a nondelegable duty to protect public safety, vicarious liability should apply to TNCs relying on HAVs as well as TNCs relying on human drivers. If TNCs cannot legally shirk their safety duties by pinning all liability on human drivers, they should not be able to pin all liability on HAV owners either. However, this conclusion remains theoretical. Courts have not yet ruled on the NDD as it relates to conventional TNCs, much less TNCs relying on HAVs.

Opening AV dispatchers to vicarious liability lawsuits under the NDD could have significant insurance impacts. Given the choice of suing an individual driver or HAV fleet owner (who may have limited assets and insurance) or a large TNC (with presumably more resources), most plaintiffs would sue the TNC. Thus, if dispatchers can be vicariously liable for accidents involving their dispatched HAVs, they will almost certainly face more lawsuits and insurance claims. The fact that HAVs are expected to be much safer than human drivers (and hence be involved in fewer incidents) will offset increased frequency of lawsuits against dispatchers caused by the possibility of vicarious liability. However, if the offsetting effects are relatively small and there is a net increase in insurance claims brought against AV dispatchers, then the dispatchers will face higher liability insurance rates.

The possibility of vicarious liability also means that smaller dispatchers not currently offering supplemental insurance will need to start carrying such policies. Insurance prevents litigation, which can end up being costlier than an insurance payout even if the insuring party wins. Small TNCs would likely be better off carrying supplemental insurance than trying to defend a series of vicarious liability lawsuits even in a favorable litigation climate.

3.2 Negligent supervision

AV dispatchers could also be held liable under a negligent supervision framework. Negligent supervision is when an actor with a legal obligation to supervise others fails to do so in a responsible manner. For example, suppose that a HAV dispatched by a TNC decides to drive on a road known to be hazardous, and that the TNC does not attempt to reroute the vehicle or warn the passenger. If the vehicle then crashes on the hazardous road, a plaintiff could assert that the TNC had a legal duty to supervise the HAV but failed to do so. The plaintiff in Doe v. Uber Tech (2016) brought a negligent supervision claim against Uber, but the claim was ultimately dismissed for procedural matters. It remains unclear whether a negligent supervision claim brought against a TNC would hold up in court, particularly if the TNC was dispatching HAVs instead of human-driven vehicles.

There are three elements to a negligent supervision claim. First, the plaintiff must establish that a TNC has a legal

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12 Virginia Department of Motor Vehicles, TNC Frequently Asked Questions.
14 See Eli v. Murphy, 39 Cal. 2d 598, 599-600 (Cal. 1952).
15 See Doe v. Uber Tech, Order Granting in Part and Denying in Part Defendant's Motion to Dismiss, Case No. 15-cv-04670-SI (N.D. Cal, 05/04/2016) at 15-16.
duty to supervise the vehicles it dispatches. This duty has not yet been recognized by courts, and TNCs have refused to independently acknowledge supervisory responsibility. Either courts or legislatures could create and then impose a supervisory duty under several rationales. Given documented public suspicion regarding HAVs, policymakers might impose a supervision duty to ease public fear that an individual may lack legal recourse if a HAV that he or she is in crashes. Courts could also decide that because TNCs remain in constant telemetric communication with their drivers via mobile apps, TNCs have implicitly accepted a supervisory legal responsibility.

Second, the plaintiff must show that a TNC failed to properly monitor the vehicles it dispatches. Specifically, the TNC’s monitoring (or lack thereof) would be compared against how a hypothetical “reasonable supervisor” would have acted in a similar situation. The plaintiff could establish what the reasonable supervisor would have done by showing what other supervisors at the same company (or supervisors at competitors) do. The plaintiff could also simply appeal to the court’s common sense about what level of monitoring is and is not reasonable.

Finally, the plaintiff must show that his or her injury was (1) foreseeable and (2) a direct result of the TNC’s failure to supervise. Foreseeability in this context means that the reasonable supervisor could have predicted that the result would occur. In the above example of the HAV taking a hazardous road, the injury to the plaintiff would meet these criteria if a reasonable supervisor could have predicted that an accident would occur if the HAV took the hazardous road and could have directed the HAV to reroute.

If negligent supervision claims are indeed viable against AV dispatchers, a particular insurance problem emerges. It is unclear where liability bounds lie under a negligent supervision framework. In the hazardous road example, the same plaintiff who brings a negligent supervision suit against a TNC could simultaneously bring similar suits against a number of other parties. The plaintiff could sue the HAV manufacturer for designing an unsafe vehicle that can’t recognize a hazardous road, the HAV owner for leasing an unsafe vehicle, and any other parties involved in the crash who committed a negligent act that contributed to the crash.

To understand the implications of this problem, assume the plaintiff brings a negligence lawsuit against both the AV dispatcher and manufacturer. In a negligence case with multiple defendants, fault is typically assigned proportionally. For example, the court could find that the manufacturer was 90% at fault for its computer software design and the dispatcher was 10% at fault for its negligent supervision. In some states (known as “several liability” states) the plaintiff could only recover from each party in proportion to the fault. In these states, the manufacturer would have to pay 90% of the damages and the dispatcher 10%. In other states (known as “joint and several liability” states) a plaintiff can recover any or all of their damages from any liable party. This means that the plaintiff could choose to recover 100% of his or her damages from the dispatcher even if the dispatcher was only 10% at fault. The possibility that a dispatcher could be held liable for damages that extend beyond those directly attributable to the dispatcher’s supervisory negligence could significantly raise insurance prices.

3.3 Negligent hiring or retention

A final framework under which AV dispatchers could be held liable is “negligent hiring” or “negligent retention.” Under this framework, a company can be found negligent if it hires or retains a worker when the company knows (or should have known) that the worker poses a particular risk to the safety of others. For example, a trucking company that hires or retains a completely blind driver could be subject to negligent hiring or negligent retention claims. TNCs are already facing litigation for negligent hiring and retention of human drivers after numerous plaintiffs have come forward with claims that TNC drivers, some of whom had previous criminal records, sexually harassed or assaulted their passengers.

17 According to the American Automobile Association (AAA)’s May 2018 AV survey, 73% of Americans now report that they are too afraid to ride in a fully self-driving vehicle, up 10% from 2017. For further information, see AAA, American Trust in Autonomous Vehicles Slips (May 22, 2018).
The negligent hiring and retention framework was developed for human workers, but computer drivers pose many of the same threats that human drivers do. If it is negligent to put a dangerous human driver on the road, courts could decide that it is similarly negligent to put a dangerous computer driver on the road as well. Furthermore, there is a nascent but growing push towards endowing robots and other autonomous machines with certain employment rights. In January 2017, the European Parliament raised the idea of creating a new legal status for “smart robots.” The purpose of this legal status would be to make the robot (and therefore its owner) “responsible for making good any damage they may cause.” As autonomous machines become more ubiquitous, the likelihood of robots being categorized as a type of employee will increase.

If a HAV is treated as a worker with similar status as a human employee, negligent hiring and retention claims could be viable against AV dispatchers if it is demonstrated that the vehicles dispatched present a public danger. For example, suppose a certain HAV is known to be unable to recognize street signals. If a TNC contracts to use the HAV anyway and the HAV proceeds to ignore a red light and crashes, a negligent hiring claim could be filed. Similarly, suppose a TNC dispatches a certain HAV but learns that after a recent software update, the HAV glitches and is unreliable. If the TNC continues to dispatch the HAV and a crash occurs as a result of the known glitches, a negligent retention claim could be filed.

The insurance impacts of enabling negligent hiring and retention claims against TNCs that rely on HAVs will depend on how the law treats HAV safety in general. It is not yet clear how the legal system will view the risk of harm that a HAV poses. Policymakers must first decide if the concept of HAV safety should be tied to the relative safety of conventional vehicles or to a higher standard. Does a HAV that is exactly as safe on average as a human driver be pose a particular risk to the safety of others? What if the HAV is twice as safe as a human driver, but ten times less safe than the HAV industry average?

These questions are as yet unresolved, but must be answered to determine if an AV dispatcher needs to insure against negligent hiring and retention theories. Dispatchers will only need to insure in proportion to the likelihood that a vehicle they dispatch will be found to pose a “particular risk”, but it will be impossible to predict what the “particular risk” is until we know what society deems an acceptable level of danger. All conventional vehicles are dangerous in the sense that they are capable of crashing and doing harm, but society is clearly willing to tolerate a certain amount of risk in exchange for the benefits that conventional vehicles provide. A similar risk-benefit analysis should be carried out on automated vehicles in order to clarify the numerous subjective terms (e.g., “particular risk,” “inherently dangerous,” “unreasonable act”) that make up liability law.

4 Anticipated outcomes of framework application

If the NDD does not apply, vicarious liability will depend on whether a dispatched HAV is considered an employee of the dispatcher, an independent contractor, or something else entirely. If the NDD does apply, an AV dispatcher could be held vicariously liable for the actions of the HAVs it dispatches even if the HAVs are viewed as independent contractors. This would depend on a particular state’s vicarious liability rules. AV dispatchers could also be held liable under negligent supervision, negligent hiring, or negligent retention frameworks. The former (negligent supervision) appears to be available for a TNC that negligently supervises a human driver, but has not yet been tested in court for a TNC that relies on HAVs. The latter two (negligent hiring and retention) have been formally asserted but not proven against TNCs relying human drivers. It is not yet clear whether they would apply to AV dispatchers.

19 Rachel Withers, The EU Is Trying to Decide Whether to Grant Robots Personhood, Slate (April 17, 2018).
Table 2. Dispatcher liability and insurance outlooks under various scenarios

<table>
<thead>
<tr>
<th>Liability scenario</th>
<th>Could dispatcher be held liable?</th>
<th>Should dispatcher insure?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicarious liability against dispatcher for actions of a HAV considered to be an employee.</td>
<td>Yes, vicarious liability attaches liability for employees.</td>
<td>Yes, vicarious liability lawsuits are clearly viable in this scenario.</td>
</tr>
<tr>
<td>Vicarious liability against dispatcher for actions of a HAV considered to be an independent contractor.</td>
<td>No, vicarious liability does not attach liability for independent contractors.</td>
<td>No, there is no real risk of vicarious liability for the actions of independent contractors under current law.</td>
</tr>
<tr>
<td>NDD applies.</td>
<td>Unclear, but appears viable. Likely to be litigated in the near future.</td>
<td>Yes, particularly in joint and several liability states.</td>
</tr>
<tr>
<td>TNC negligent supervision of a HAV.</td>
<td>Unclear, but appears viable (though very scenario-dependent).</td>
<td>Yes, particularly in joint and several liability states.</td>
</tr>
<tr>
<td>TNC negligent hiring and negligent retention of a HAV.</td>
<td>Unclear, but appears viable.</td>
<td>Probably, depending on likelihood that a HAV is deemed to pose a particular risk.</td>
</tr>
</tbody>
</table>

5 Conclusion

The AV revolution will challenge the tort liability scheme, but some existing legal rules and doctrines may prove sufficiently flexible to address the unique features of AV manufacturing. Legal policymakers should consider both the benefits and shortcomings of AVs to strike the appropriate balance between innovation and victim compensation. Regardless of the scheme policymakers adopt, liability assignment must be clear. If all parties have a clear understanding of if, when, and how they may be liable, they will be better informed and will make better choices about using (and insuring their use of) AVs.

If policymakers choose to assign liability to AV dispatchers, the critical questions that must be resolved are:

- Can a plaintiff bring a vicarious liability lawsuit against an AV dispatcher for the actions of a HAV? Is an HAV an employee, independent contractor, or something else?
- If vicarious liability is not possible, can an AV dispatcher be sued directly for negligence? If so, under what circumstance?
- Does an AV dispatcher owe a nondelegable safety duty to the riders of one of the company’s HAVs?
- Are there other forms of state or federal AV governance that will complement the chosen liability standard?

To answer these questions, policymakers should collaborate with legal experts who are doing important research in this field. This brief only touches on a few of many liability concepts that legal academia is currently debating. Legal experts can support good policy development by providing useful historical insight and practical analysis to help guide policymakers through the conceptual challenges of liability reform. This type of collaboration will ensure that manufacturers and consumers can realize the safety goals of AV technology.