Macroliability

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The charts that follow are not to scale.

https://www.flickr.com/photos/tonynetone/2736868450
Crashes without automation

> 30,000 fatal crashes
1,600,000 injury crashes
5,500,000 police-reported crashes
11,000,000 total crashes (...)

every year in the United States alone

Crashes with automation?

This has yet to be demonstrated (notwithstanding frequent claims to the contrary)
Crashes without automation

Crashes with automation?

(Increase in vehicle miles traveled?)
Crashes without automation

Product failure

Crashes with automation?
Crashes with automation:
Some types of product failure

The automated driving system ...

... performed worse than a human
... performed worse than a better system

... interacted poorly with the user
... interacted poorly with other systems

... used bad data
... supplied bad data

... facilitated a security breach
... degraded ungracefully
• X runs a stop sign, striking and injuring Y.

• X is likely liable to Y.

• If Y is in an automated vehicle, its manufacturer may also be liable to Y (if its vehicle could have anticipated and avoided the crash).
Crash costs without automation

$1 trillion/year (NHTSA)

Crash costs with automation?
Crash costs without automation

Product liability

Crash costs with automation?
Without automation

With automation?
Compared to individual drivers, manufacturers ...

... may face higher jury awards
... may be more likely to be solvent
... may pay more through J&S liability
Product liability tomorrow

Product liability without automation

Product liability with automation?
Product liability tomorrow

Lack of automation as the defect

Product liability without automation

Product liability with automation?
Product liability tomorrow: A bigger slice of a smaller pie (of liability)?

Product liability without automation

Product liability with automation?
Who cares?

• People who are injured in crashes
  (*Compensation rationale of product liability*)

• People who could be injured in crashes
  (*Safety rationale of product liability*)
### Who might care?

<table>
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<tr>
<th>Developers</th>
<th>Consumers</th>
<th>Society</th>
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<tr>
<td>Liability uncertainty?</td>
<td>Slower deployment?</td>
<td>Slower adoption?</td>
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<tr>
<td>Liability exposure?</td>
<td>Higher cost?</td>
<td>Slower adoption?</td>
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*Is this testable?*
“The prospect of liability for catastrophic accidents resulting from a failure of AVCS will likely deter entities from becoming involved with AVCS and impede its development unless the federal government adopts some or all of the legislative [limits on liability].”

Advanced Vehicle Control Systems: Potential Tort Liability for Developers (prepared for FHWA in 1993)
So what happened?

• 1993 report’s recommendations were not adopted

• Automakers released many of the technologies

• Many companies investing heavily in R&D

• Several have “accepted” current liability regime
Others also “accept” liability
What could and should happen?

Proximity-Driven Liability
102 Geo. L.J. 1777 (2014)

Regulation and the Risk of Inaction
Autonomous Driving in the Road Transport of the Future
newlypossible.org

How Governments Can Promote Automated Driving

Technology and Liability
(forthcoming 2016)
newlypossible.org
law of the newlypossible
newlypossible.org