



# Tort Law and Vehicle Automation

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# Outline

- Tort Law Basics
- Tort Law in Theory
- Tort Law in Practice
- Conclusions

# Tort Law Basics: What is a tort?

- Tort = Wrong
- Duty of Care, Breach, Causation, Damages
- Generally common-law not statutory
  - Judge-made
  - Very flexible
  - Hard to predict
- Generally state-level and not federal

# “Reasonableness” is key

- Reasonableness critical in negligence
- “Man on the Clapham Omnibus”
- Also critical in products liability



# Interventions in Common-Law Regime

- State legislative action
  - State statute defining liability
- Federal legislative action
  - Federal statute
    - Explicit or implicit preemption
    - Federal agency action acts via statute

# Lessons for Vehicle Automation

- Common-law system will sensibly cope with new innovations
- But...
  - There will be uncertainty for a while
  - There may be slightly different regimes in different states
  - There will be lawyers
  - Outcome may not be optimal from social welfare perspective
- Not clear other options are better

# Lessons for Vehicle Automation (II)

- Identity of potential defendants not fundamentally different with or without automation
  - Owner (individual, fleet, transit agency)
  - Operator
  - Manufacturer
  - Infrastructure provider
    - Physical (road defective)
    - Telematics/mapping
- Suits against all of these defendants exist today
- Common-law system able to cope with new technologies

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# Justifications for Tort Law

- Deterrence/Economic Efficiency
- Compensation
- Civil Recourse/Corrective Justice

# Deterrence/Economic Efficiency

- Create incentives for safety and deter dangerous activity
- Key goal of tort law is to minimize net accident costs
- Decentralized market-based system with millions of potential regulator/plaintiffs
- Internalize externalities (e.g. pollution, crash costs)
- Make market *more* efficient

# Cheapest Cost Avoider

- Guido Calabresi's insight: Place liability on the cheapest cost avoider
  - will have right incentives to reduce overall costs
- But complex in practice: short-term or long-term?
  - Road designer or manufacturer or driver or pedestrian?
  - Complexities of tort doctrine create multiple incentives (e.g. last clear chance)

# Compensation

- Compensate the injured
  - Built-in insurance system
- But if the goal is simply to compensate the injured, why not just use insurance?
- Auto insurance costs have gone down with increase in health insurance coverage

# Corrective Justice/Civil Recourse

- Provide state-sanctioned mechanism for individuals to right wrongs (and avoid self-help)
- May be less salient in “accident” than in intentional tort (e.g. battery, environmental torts)

# Lessons for Vehicle Automation – Tort Theory

- Increasing automation suggests manufacturer is cheapest cost avoider
- Compensation rationale? Depends on prevalence of health insurance
- Corrective Justice rationale also probably supports increased manufacturer liability – hard to *blame* other driver if reasonably relying on automation

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# Auto Tort in Practice

- Litigation is rare
- Highly administrative
  - Extensive use of arbitration among insurers
- Products liability suits against manufacturers are uncommon but do occur in high damage cases



# No-Fault Experience

- No-fault insurance was designed to reduce costs by reducing litigation
- But in practice, no-fault did not reduce litigation very much and fault-based states reduced litigation
- So promised cost-savings did not materialize
- Systems converged in practice

# Lessons from Auto Tort in Practice

- Big disconnect between tort theory – which might suggest that consumers could be suing auto manufacturers after every fender-bender – and practice
- Social norms about crashes (that they are the driver's fault) matter
- Social practices about compensation (and efficient insurance company practices) also shape ground truth

# Lessons for Vehicle Automation – Tort Law in Practice

- Even if manufacturers may be theoretically more liable, existing system for compensating drivers for routine crashes may endure
  - Especially if crashes episodic (and therefore easily insurable)
- Considerable regulation and 50 state system creates barriers to entry but disruption may happen
- Not going to sue manufacturer if a tree limb falls on your self-driving car

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# Overall Conclusions

- Common-law liability system capable of addressing new technology
  - Imperfect but not clear that alternatives are better
- Considerable theoretical reasons to expect increased manufacturer liability with increased automation
  - In best position to reduce crash costs
- But conventional auto insurance probably not going away anytime soon – at least as long as individually owned vehicles continue to be common

# You can review our study at [RAND.org](https://www.rand.org)

- State of technology
- Costs and benefits
- Communications
- Liability issues
- Recommendations for policymakers



## Autonomous Vehicle Technology

A Guide for Policymakers

James M. Anderson, Nidhi Kalra, Karlyn D. Stanley, Paul Sorensen,  
Constantine Samaras, Oluwatobi A. Oluwatola

