

F19 How Judges and Juries May Perceive Liability Issues Arising From the Operation of Highly Automated Vehicles

Stephanie Domitrovich, JD, PhD*, Sixth Judicial District of PA, Erie County Court House, 140 W 6th Street, Rm 223, Erie, PA 16501; and Laura L. Liptai, PhD*, BioMedical Forensics HQ CA/FL, 1660 School Street, #103, Moraga, CA 94556

After attending this presentation, attendees will better understand the dynamic relationship between law and technology regarding highly automated vehicles, as well as related ethical and moral dilemmas.

This presentation will impact the forensic science community by increasing competence in understanding legal and scientific issues as to this technology and will allow attendees to recognize possible solutions in developing and understanding appropriate laws in this area.

This presentation begins with an analysis of human errors associated with 85% of motor vehicle accidents. It is hoped that the Highly Autonomous Vehicle (HAV) will address and diminish most of these error types. The full-scale tests of HAVs in difficult control situations will be presented. The side-by-side comparison of HAVs next to human-controlled vehicles will be demonstrated through modeling and full-scale testing. It's impressive, but many unresolved issues exist.

Federal and state laws regulate HAVs being operated on public roads in the United States. When laws from state to state regarding HAVs are reviewed, one can see a myriad of different laws across the United States. The National Highway Traffic Safety Administration (NHTSA) is a federal agency of the Executive Branch and part of the Federal Department of Transportation. NHTSA's mission is to "Save lives, prevent injuries, reduce vehicle-related crashes. Accordingly, NHTSA has proposed Model State Policy to create consistency and unify the national framework of states to regulate all levels of HAVs. This Model State Policy builds on collective knowledge to date and assists in avoiding inconsistent laws and regulations among the 50 states and other United States jurisdictions. Their goal is to avoid the delay of wide acceptance and promote deployment of lifesaving technologies. NHTSA foresees a system wherein states would treat HAVs as the "drivers" of these vehicles. In the interim, Model State Policy suggests states only allow testing and require application and approval before manufacturers are permitted to begin testing. This policy recommends statutes requiring licensed human drivers possessing special training. Overall, this policy urges states to begin addressing issues arising with increased use but recommends states' current usage be limited to testing only.

The legal landscape involving autonomous vehicles will be complex and can include product liability laws such as negligence, strict liability, misrepresentation, and breach of warranty as well as contract law. Jurisdictions adhering to the Second Restatement of Torts would hold manufacturers liable for the sale of their products containing an "unreasonably dangerous" defect even if manufacturers have "exercised all possible care in the preparation and sale" of their products. Other jurisdictions may be utilizing the Third Restatement of Torts, which would specifically deal with manufacturing defects, design defects, and failure to warn to include liability for design defects and failure to warn to "foreseeable risks." The Third Restatement addresses the failure of manufacturers to identify and mitigate dangerous "foreseeable" risks in a similar vein as negligence concepts rather than as strict liability concepts. Liability insurance is another complicating factor as each state has varying laws for impleading the manufacturers versus initiating separate legal actions against manufacturers after the case concludes.

Another dimension involves ethical concerns regarding autonomous vehicles. Will autonomous vehicles fully replace human drivers? What ethical judgments will manufacturers of autonomous vehicles be called upon to make? What socioeconomic impacts flow from the operation of autonomous vehicles? Will these vehicles disrupt the nature of privacy and security? What dialogue needs to take place with government, industry, academia, and the public?

The Uniform Law Commission (The National Conference of Commissioners on Uniform State Laws) recently established a Study Committee on State Regulation of Driverless Cars. Due to this technology rapidly evolving and ripening, four states and the District of Columbia have already enacted their own autonomous vehicle legislation. Moreover, NHTSA has issued guidelines for states to use to regulate these types of vehicles. This Study Committee of the Uniform Law Commission will study the need for and feasibility of drafting uniform state legislation for autonomous vehicles. Their efforts will be discussed.

Autonomous, Liability, Ethics

Copyright 2018 by the AAFS. Permission to reprint, publish, or otherwise reproduce such material in any form other than photocopying must be obtained by the AAFS.