CREATING FAIR LIABILITY RULES FOR AUTONOMOUS CARS: IS ARTIFICIAL INTELLIGENCE NEEDED TO “GET IT RIGHT”? 

I. Introduction

Artificial intelligence may not yet be needed to create fair liability rules for autonomous vehicles. While there are no “easy answers,” liability rules can be developed with human intelligence. As development and use of this technology evolves, so too will the liability rules regarding accidents and injuries involving autonomous vehicles.

SAE International has identified six progressive steps of automation levels from Level 0 (no automation) to Level 5 (full automation). Based on a careful appraisal of these levels, is it reasonable to conclude that current state judge-made common law liability rules should apply through Level 3, “conditional automation,” where the automated car can perform all functions in certain environments, but a human driver is a “fall-back option.” The driver should still have responsibility in tort law.

In sum, from Levels 0 through 3, tort law should encourage human driver responsibility under the laws of negligence, as reflected in Restatement of Torts (Third): Liability for Physical and Emotional Harm (2005). If the accident is caused solely by the failure of the equipment, current product liability rules should apply, as properly set forth in the Restatement of Torts (Third) Products Liability § 2 (1998).

II. Liability Rules for Highly Automated and Fully Automated Vehicles

A. Highly automated vehicles are anticipated to be widely available by 2025. Between 2025-2040, fully automated vehicles are likely to become the “new normal.”

B. When vehicles are fully automated, there will be no human “driver,” but there may be a human “owner.”

C. Should the “owner” be treated as if he or she were a passenger on the D.C. Metro, in a city bus or in a commercial airplane, or should he or she be treated as an owner of a dog? (By the way, the “one bite” rule is a fiction).

D. If the manufacturer of an autonomous vehicle is to bear responsibility for harms caused by that vehicle, should the basis of liability be negligence or product liability?

E. If negligence is the standard, should it be based on a standard as applied to humans, “a reasonable driver in the same or similar circumstances,” or a more rigorous standard?
III. **If there is to be a change in the current state-by-state liability system:**

A. When should that change occur?
   When 50 percent of all vehicles are autonomous? Higher? Lower?

B. Which law-making body should set the standard if there is to be change?

C. To whom should the new standard apply? Manufacturers? Owners? Both?

IV. **Setting Liability Rules – Options and Public Policy**

A. **Public Policy Background**

1. Autonomous vehicles do not drive when drunk or using drugs, engage in road rage, speed, fall asleep while driving, have the frailties of human aging, or commit human errors that cause most major automobile accidents.

2. With those assumptions in mind, the Center for Transportation (CFT) estimates that if 10 percent of cars on the road are self-driving, 1,000 lives and $18 billion would be saved each year. If and when 90 percent of the cars on the road are autonomous, 22,000 lives and $350 billion in costs would be saved.

3. If those assumptions are valid (or close to valid), it is in the national interest to have laws that will encourage development of safe autonomous vehicles.

B. **Incentives and Deterrents to the Development of Driverless Cars**

1. Find the right regulatory level and mix
   a) Congress is now deciding what the federal rules should be with respect to the regulation of autonomous vehicles and what should be left to the states. Under Senate Bill 1885, the federal government, through NHTSA, would be exclusively responsible for regulating the safety, design and performance aspects of autonomous vehicles. States would be responsible for regulating the human “driver” and vehicle operations. Best practice guidelines, as compared to actual regulation, are still being considered an option by some Members of Congress. Some states, such as California, are already regulating test autonomous vehicles (not sold to the public).

2. While Congress has focused on finding the right regulatory mix to assure public safety, which will not deter progress in promoting the development of autonomous vehicles, “excessive” liability rules are viewed by learned observers as having greater potential than regulation to slow development of autonomous vehicles. See Adam Thierer, When the Trial Lawyers Come for the Robot Cars, Slate.com, June 10, 2016; see also Douglas Newcomb, Will Lawsuits Kill the Autonomous Car?, MSN Autos, Apr. 15, 2013; Dan Strumpf, Liability Issues Create Potholes on the Road to Driverless Cars, Jan. 27, 2013.
C. Some manufacturers of autonomous vehicles have said that they will “accept” liability caused by any defect in their products, but this is a misleading “cure” for the liability problem.

1. How much in the way of “damages” will they “accept” beyond compensating for actual economic losses?

2. Will there be litigation over the issue of whether an accident was caused by the autonomous vehicle or some other entity?

3. Will those manufacturers make the same pledge when vehicles are sold to the public and are not simply in the test phase?

It is fair to conclude that we cannot depend on such “pledges” to solve the liability problem or set public policy with respect to the issue of liability relating to autonomous vehicles.

D. Three Liability Alternatives

1. Keep the same common law judicial system for resolving liability issues involving autonomous vehicles.
   a) If we do keep the same common law judicial system, should manufacturers bear sole responsibility under product liability rules (the position of the plaintiffs’ lawyers’ organization, American Association for Justice) or rules based on negligence?

2. Congress enacts liability limits
   a) Precedent: When Congress believed it was in the national interest, it enacted laws, with bipartisan support that limited liability.


   (2) The Biomaterials Assurance Access Act. President Bill Clinton signed this legislation in 1998 limiting the liability of suppliers of raw materials for medical devices, as long as the supplier followed guidelines set forth by the manufacturer of those devices.

   (3) The Teacher Protection Act. President George W. Bush signed legislation in 2001 eliminating the tort liability of elementary and high school teachers and principals if they comply with school rules.
b) Approaches to limit liability of manufacturers of autonomous vehicles.

(1) Preemption of state tort claims when the manufacturer has complied with existing Federal safety standards.

(2) Limits on excessive non-economic damages – compensatory and punitive.

3. Congress provides an alternative liability system

a) Precedent: When Congress wanted to assure the availability and cost of childhood vaccines, it enacted The National Childhood Vaccine Injury Fund of 1986. Anyone injured by a specific vaccine can obtain compensatory damages by applying to the fund. Fault need not be shown.


V. The “Bin Laden of 2040”

Terrorists break computer codes and use autonomous vehicles as weapons of mass destruction. There should be a serious effort toward prevention. Nevertheless, we have learned in other contexts that preventive efforts are not always successful. Should our nation prepare, in advance, for compensating terrorist victims of injury and, also, those who suffer damage to their property? How should this be done?

VI. Conclusion