<u>NEW TECHNOLOGY—OLD LAW: SOME LEGAL</u> CHALLENGES OF SELF-DRIVING VEHICLES

ROBERT W. PETERSON PROFESSOR OF LAW DIRECTOR, CENTER FOR INSURANCE LAW AND REGULATION

SANTA CLARA UNIVERSITY





WHAT'S IN A NAME?

• Autonomous, automated, or self-driving?



"Autonomous lawnmowers were a bad idea. I see that now."



Some Advantages:

- Accidents—90% or more caused by human error.
- Leading cause of Death, ages 3-34.
- Over 30,000 U.S. death/year
- Over two million emergency room visits/year
- Urban Crash Costs--\$300 billion/year. <u>http://newsroom.aaa.com/2011/11/aaa-study-finds-costs-associated-</u> <u>with-traffic-crashes-are-more-than-three-times-greater-than-congestion-</u> <u>costs/</u>



Some Advantages (cont'd)



- Safer—360 Degree Vision, Faster Reaction Time
- More Efficient
- Fewer Stop Signs, Traffic Lights or Traffic Jams
- They Do Not Fall Asleep, Get Intoxicated, Rubber Neck, or Experience Road Rage (Hopefully)



Some Advantages (cont'd)

- Causation Disputes and Fraud Minimized The Black Box Tells (Almost) All
- Maximize Use of Aging Infrastructure
- Better Serve Aging Population
- Gen. Y Can Text, the More Mature Baby Boomers Can Catch Up on Jan Austen



Some Possible Collateral Impact:

- Urban Planning—No Longer Need Adjacent Parking Lots
- Commuting—More Distant Housing May Be Appealing
- Municipal Funding—Where Did All the Parking Tickets Go?
- Auto Sales and Body Shops?



Some Issues:

- Privacy
- Safety Standards
- Hacking



Compensation for Injuries (Liability)

- Faulty cars with Faultless Drivers
- Standard Auto Policy
 - Liability Coverage—"legally responsible"
 - Uninsured/Underinsured—"legally entitled"
- When, if ever, will a faultless driver be "legally responsible" for an accident or be "legally entitled" to recover from a faultless, underinsured motorist?



Compensation for Injuries (Liability)

- Celent—the demise of auto liability insurance premiums? "[P]roperty/casualty insurers see a major reduction in their auto insurance premiums revenue."
- Eliminate "human error" and eliminate 90% of premium for fault-based accidents?
- Similar decrease in comprehensive and collision losses?



Timing of introduction:

- Google—Approx 4-5 years
- Others 2020
- Penetration?



OF ELEPHANTS AND ROOMS

Will remaining liability remain with the operator/owner?

Will policy makers (legislatures, administrative agencies, courts) relegate injury compensation to products liability claims against manufacturers and/or supplier? Products Liability suits are less efficient. They generate about 40% in friction costs. Claims directly against drivers generate 5%-6%

What standard for "Defect?" With expanded knowledge of drivers' behavior, what standard for "Negligence?"



<u>Or:</u>

- 1. Expand an agency analogy the car is the "agent" of the operator/owner.
- 2. Expand nondelegable duty defect in the car's program, like negligently repaired brakes, is attributed in the first instance to the operator/owner. *Maloney v. Rath*, 69 Cal.2d 442 (1968).
- Operator Strictly Liable Up To Financial Responsibility Limits (e.g., \$15,000/\$30/000 in CA)?



Nev. Admin Code sec. 484.1(a), 482.3, 482a(4)(2) provides that autonomous vehicles "shall comply with all statutes and regulation. The "autonomous technology shall be granted all of the rights and shall be subject to all of the duties applicable to the driver" The person who causes the autonomous vehicle to engage is "deemed the operator" and "for the purposes of enforcing the traffic laws and other laws applicable to drivers . . . shall be deemed the driver." Does this language impose a nondelegable duty in tort?

See: <u>http://www.leg.state.nv.us/register/2011Register/R084-11Apdf</u>

A web site tracking legislative and administrative developments for autonomous vehicles is:

http://cyberlaw.stanford.edu/wiki/index.php/Automoated Driving: Legislativ e and Regulatory Action



Piecemeal, state-by-state approach. E.g., assuming a continuing role for liability, underinsured and PIP coverage, what challenges does Proposition 103 present?

Proposition 103 applies to rates and premiums for automobile policies "as described in subdivision (a) of Section 660" of the California Insurance Code. Section 660(a) defines "policy" as any:

"[A]utomobile liability, automobile physical damage, or automobile collision, or combination thereof . . . insuring a single individual or individuals residing in the same household [if the automobile is] a motor vehicle of the private passenger or station wagon type that is not used as a public or livery conveyance for passengers, nor rented to others."



Prop. 103 and accompanying regs mandate Rating Factors in the following order of importance (abridged)

- 1. The Insured's driving safety record
- 2. The number of miles he or she drives annually
- 3. The number of years of driving experience the insured has had.

See 10 CCR sec. 2632.5



The mandatory factors must be weighted in order and above <u>all optional rating factors</u>:

- (1) Type of vehicle;
- (2) Vehicle performance capabilities, including alterations made subsequent to original manufacture;
- (3) Type of use of vehicle (pleasure only, commute, business, farm, commute mileage, etc.);
- (4) Percentage use of the vehicle by the rated driver;
- (5) Multi-vehicle households;
- (6) Academic standing of the rated driver;
- (7) Completion of driver training or defensive driving courses by the rated driver;
- (8) Vehicle characteristics, including engine size, safety and protective devices, damageability, reparability, and theft deterrent devices;
- (9) Gender of the rated driver;
- (10) Marital status of the rated driver;
- (11) Persistency (this is a discount for how long you have been with the insurer
- (12) Non-smoker;
- (13) Secondary Driver Characteristics. For drivers not assigned as a primary or secondary driver to another vehicle, this factor may be composed of a combination of the following factors: Safety Record, Years Licensed, Gender, Marital Status, Driver Training, and Academic Status;
- (14) Multi-policies with the same, or an affiliated, company;
- (15) Relative claims frequency.
- (16) Relative claims severity.
- Numbers 15 and 16 are usually referred to as the "territorial rating factors."



Good Driver Discount:

Proposition 103: "at least 20% below the rate the insured would otherwise have been charged."

10 CCR sec. 2632.12(a): "20 percent less than the lowest rate available to a comparable driver who is not a good driver."



<u>Lowering Rates When Technology</u> <u>Rapidly Improves Safety</u>

Proposition 103 provides that "Every insurer which desires to change any rate shall file a complete rate application with the commissioner."



<u>Intervenors</u>

- Intervenors "Any person may initiate or intervene in any proceeding" Cal Ins. Code Sec. 1861.10(a).
- Fees—""The commissioner or a court shall award reasonable advocacy and witness fees and expenses . . . " In rate applications, the award is to be paid by the insurance company. Cal. Ins. Code sec. 1861.10(b).
- Compare Nevada rate approvals (20 days or fewer) with CA. With intervention, over one year.



- The Mandatory Rating Factors, the Good Driver Discount, and impediments to rate change present serious, and unnecessary issues when applied to autonomous vehicles.
- Weighting driving record and years of driving experience above the type of vehicle is arbitrary and will substantially overcharge autonomous vehicles.
- The good driver discount will overcharge "not good" drivers who move to autonomous vehicles.
- Inability to rapidly adjust rates to reflect rapid improvement in safety will overcharge drivers.

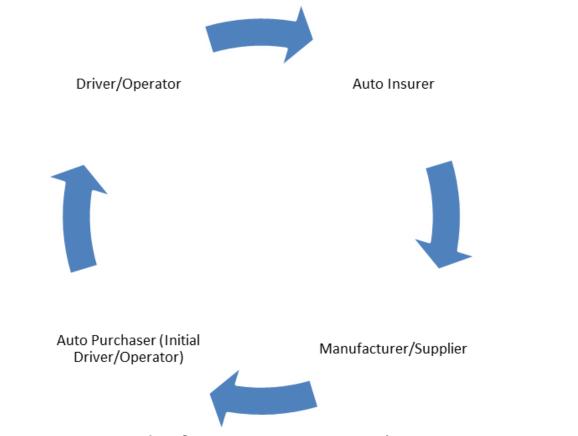


The Insurance Merry-go-'Round

- 1. If only manufacturers and suppliers are responsible, Proposition 103's auto rating provisions have no application.
- If automobile insurers are initially responsible for accidents caused by the selfdriving car, the loss can be passed back to the manufacturer and/or supplier.



• The insurance cost of the automobile, then, will pass back to the owner in the cost of the car.



 Most Rating Factors, de facto, Move to the Average Over the Pool. Some Vanish.



As the significance of rating factors falls away, others, e.g. territory, will rise in weight.

- Mandatory Rating Factors:
- <u>1. The Insured' driving safety record</u>
- 2. The number of miles he or she drives annually
- 3. The number of years of driving experience the insured has had.
- •
- (1) Type of vehicle;
- (2) Vehicle performance capabilities, including alterations made subsequent to original manufacture;
- (3) Type of use of vehicle (pleasure only, commute, business, farm, commute mileage, etc.);
- (4) Percentage use of the vehicle by the rated driver;
- (5) Multi-vehicle households;
- (6) Academic standing of the rated driver;
- (7) Completion of driver training or defensive driving courses by the rated driver;
- (8) Vehicle characteristics, including engine size, safety and protective devices, damageability, reparability, and theft deterrent devices;
- (9) Gender of the rated driver;
- (10) Marital status of the rated driver;
- (11) Persistency (this is a discount for how long you have been with the insurer
- (12) Non-smoker;
- (13) Secondary Driver Characteristics. For drivers not assigned as a primary or secondary driver to another vehicle, this factor may be composed of a combination of the following factors: Safety Record, Years Licensed, Gender, Marital Status, Driver Training, and Academic Status;
- (14) Multi-policies with the same, or an affiliated, company;
- (15) Relative claims frequency.
- (16) Relative claims severity.



Conclusions?

- Clarify Liability Rules?
- Amend Ins. Code Sec. 660 (2.3 vote, "in furtherance" of "purposes"?).
- Modify Application of Optional Rating Factors? Spanish Speaking Citizens' Found., Inc. v. Low, 103 Cal. Rptr. 2d 75 (Cal Ct. App. 2000)

