

The Future: Autonomous Vehicles



AN INSURANCE REGULATOR'S PERSPECTIVE

The Maryland Insurance Administration
May 1, 2018

Overview / Agenda



- Historical Perspective
- Levels of Autonomous Driving Systems
- Automobile Liability Insurance 101
- The Future of Automobile Insurance
- The Effect of Autonomous Vehicles on Premiums

Historical Perspective



- Horse and Buggy
- Combustion Engine
- Electric Powered Vehicles
- Data Revolution

Levels of Autonomous Driving Systems



- **ZERO** Vehicle is 100% controlled by the driver
- **ONE** At least one function (e.g. braking, accelerating or steering) can be automated
- **TWO** The driver can be disengaged from physically operating the vehicle but must be ready at all times to physically take control
- **THREE** Full automation under certain traffic or environmental driving conditions, less need for driver intervention
- **FOUR** Full automation within the operational design domain
- **FIVE** 100 % Autonomous in all driving scenarios

Accidents Happen



ACCIDENTS HAPPEN – INJURIES AND PROPERTY DAMAGE
WHAT HAPPENS NEXT?

CLAIMS

LAWYERS and LAWSUITS

VICTIM COMPENSATION

- *Insurance is the mechanism that allows individuals to protect themselves against the consequences of their unintentional negligent acts and provides the resources for victim compensation.*

Negligence



- Maryland's contributory negligence system
- Comparative Negligence
- No Fault

The Future of Automobile Insurance



- Younger Generations are more comfortable with technology
 - ✦ More likely to use ride sharing (LYFT / UBER)
 - ✦ More likely to embrace autonomous vehicle technology
 - ✦ Potentially less desirous of owning an automobile (particularly in urban areas)
 - ✦ Accident Frequency
 - Near term increase due to distracted driving and unfamiliarity with technology
 - Long term decrease as technology improves and gains market share

The Future of Automobile Insurance



- Automobile insurance regulation is state-based
- The National Association of Insurance Commissioners (NAIC)
 - ✦ Model Laws / Regulations
 - ✦ Innovation and Technology Task Force
 - ✦ Monitoring Federal Legislation

The Future of Automobile Insurance



- Insurance Premium / Premium Tax Revenues
 - ✦ Insurers pay a 2% tax on automobile insurance premiums
 - ✦ \$5.45 Billion written premium in policy year 2017
 - ✦ \$109 Million premium tax in policy year 2017
- The transfer of risk / written premium from traditional automobile liability insurance to product liability insurance would have no impact on general fund revenue
- To the extent that traditional automobile insurance is replaced by self-insured entities, there will be a commensurate reduction in general fund revenue from premium taxes.

The Maryland Insurance Administration Website



- www.insurance.maryland.gov
- Sign up for e-notifications
- Filing a complaint
 - Property & Casualty
 - Life and Health
- Checking a license
- Make a MPIA request
- Review rates and forms
- News Center
- Job Opportunities
- State Laws and Regulations
- The State Legislature