

Oregon Task Force on Autonomous Vehicles

Kick-Off Meeting

April 18, 2018



Welcome to the Task Force on Autonomous Vehicles



4/18/2018

Purpose of the Task Force

Framing the Future for Autonomous Vehicles in Oregon



- **Problem:** Oregon law currently assumes a human driver is operating each vehicle on our roadways. The vehicle code doesn't address a scenario of a partially or completely autonomous vehicle.
- **First Steps:** The Task Force will begin the process of reviewing Oregon's driver and vehicle laws and proposing any necessary revisions to the Legislature.



House Bill 4063: Why we are here today



79th OREGON LEGISLATIVE ASSEMBLY--2018 Regular Session

Enrolled House Bill 4063

Introduced and printed pursuant to House Rule 12.00. Pre-session filed (at the request of House Interim Committee on Transportation Policy)

CHAPTER

AN ACT

Relating to autonomous vehicles; and declaring an emergency.

Be It Enacted by the People of the State of Oregon:

SECTION 1. The Department of Transportation is the lead agency responsible for coordination of autonomous vehicle programs and policies.

SECTION 2. (1) The Task Force on Autonomous Vehicles is established.

(2) The task force consists of 31 members appointed as follows:

(a) The President of the Senate shall appoint two members from among members of the Senate who are not members of the same party.

(b) The Speaker of the House of Representatives shall appoint two members from among members of the House of Representatives who are not members of the same party.

(c) The Director of Transportation shall appoint 27 members as follows:

(A) Six members representing state agencies that will be affected by the deployment of autonomous vehicles.

(B) Twenty-one members as follows:

(i) One representative of the automotive industry;

(ii) One representative of the cybersecurity industry;



Charge from the Legislature

Framing the Future for Autonomous Vehicles in Oregon

- Develop recommendations on four urgent policy areas relating to automated vehicles
- Submit a report, including recommendations for legislation, to the Legislature
- **Deadline: September 15, 2018**



4/18/2018



Automated Vehicle Task Force

HB 4063 directs the Task Force to address the following issues:

Licensing and
Registration

Law Enforcement
and Crash
Reporting

Insurance and
Liability

Cybersecurity
and Long-Term
Policy



Second Report on Long-Term Effects of Automated Vehicles

Framing the Future for Autonomous Vehicles in Oregon

- Task Force may also develop recommendations on long-term effects
- May submit a second report and recommendations to the legislature
- **Deadline: September 15, 2019**

Land Use

Road and
Infrastructure
Design

Public Transit

Workforce
Changes

Cybersecurity
and Privacy



Task Force on Autonomous Vehicles Membership

Rep. Susan McLain

Rep. Denyc Boles

Two Oregon State Senators

Tom McClellan,
Department of Transportation

Jim Pfarrer,
Employment Department

Cheryl Hiemstra,
Department of Justice

Richard Blackwell,
Department of Consumer and
Business Services

Capt. Teresa Bloom,
Oregon State Police

Carrie MacLaren,
Department of Land
Conservation and Development

**Daniel Fernández (Jaguar
Land Rover),**
Automotive Industry

**David McMorries (Office of
the Chief Information Officer),**
Cybersecurity industry

**Lt. Timothy Tannenbaum
(Wash. County Sherriff's
Office),**
Law enforcement

Jon Isaacs (Uber),
Transportation network
company

Carly Riter (Intel Corp.),
AV technology industry

Robert Nash (State Farm),
Automotive insurance industry

Neil Jackson (OTLA),
Trial lawyers

Graham Trainor (AFL),
Workers' union

Mark MacPherson (Teamsters),
Transportation union

Jared Franz (ATU),
Transportation union

Sid Leiken (Lane County),
Association of Oregon Counties

Eric Hesse (City of Portland),
League of Oregon Cities

Marie Dodds,
American Automobile
Association

Jana Jarvis,
Oregon Trucking Association

Steve Entler (Radio Cab),
Taxicab industry

Eliot Rose (Metro),
Metropolitan planning
organization

Jebediah Doran (TriMet),
Oregon Transit Association

**Chris Hagerbaumer (Oregon
Environmental Council),**
Nonprofit organization

Sean Waters (Daimler),
Commercial truck manufacturing
industry

Jeremiah Ross (Ross Law LLC),
Consumer protection advocates

**Becky Steckler (University of
Oregon),**
Public University

Selection of a Chairperson



Operational Protocol



National Overview: State Automated Vehicle Laws



National Highway Traffic Safety Administration (NHTSA): Federal and State Regulatory Roles for Vehicles

Federal	State
Regulating motor vehicles and motor vehicle equipment	Regulating human drivers and other aspects of motor vehicle operation
<ul style="list-style-type: none">• Set Federal Motor Vehicle Safety Standards (FMVSS) for motor vehicles and equipment• Enforce compliance with FMVSS• Manage safety recalls• Educate public about safety	<ul style="list-style-type: none">• License drivers• Register motor vehicles• Regulate insurance and liability• Enact and enforce traffic laws• Conduct safety inspections

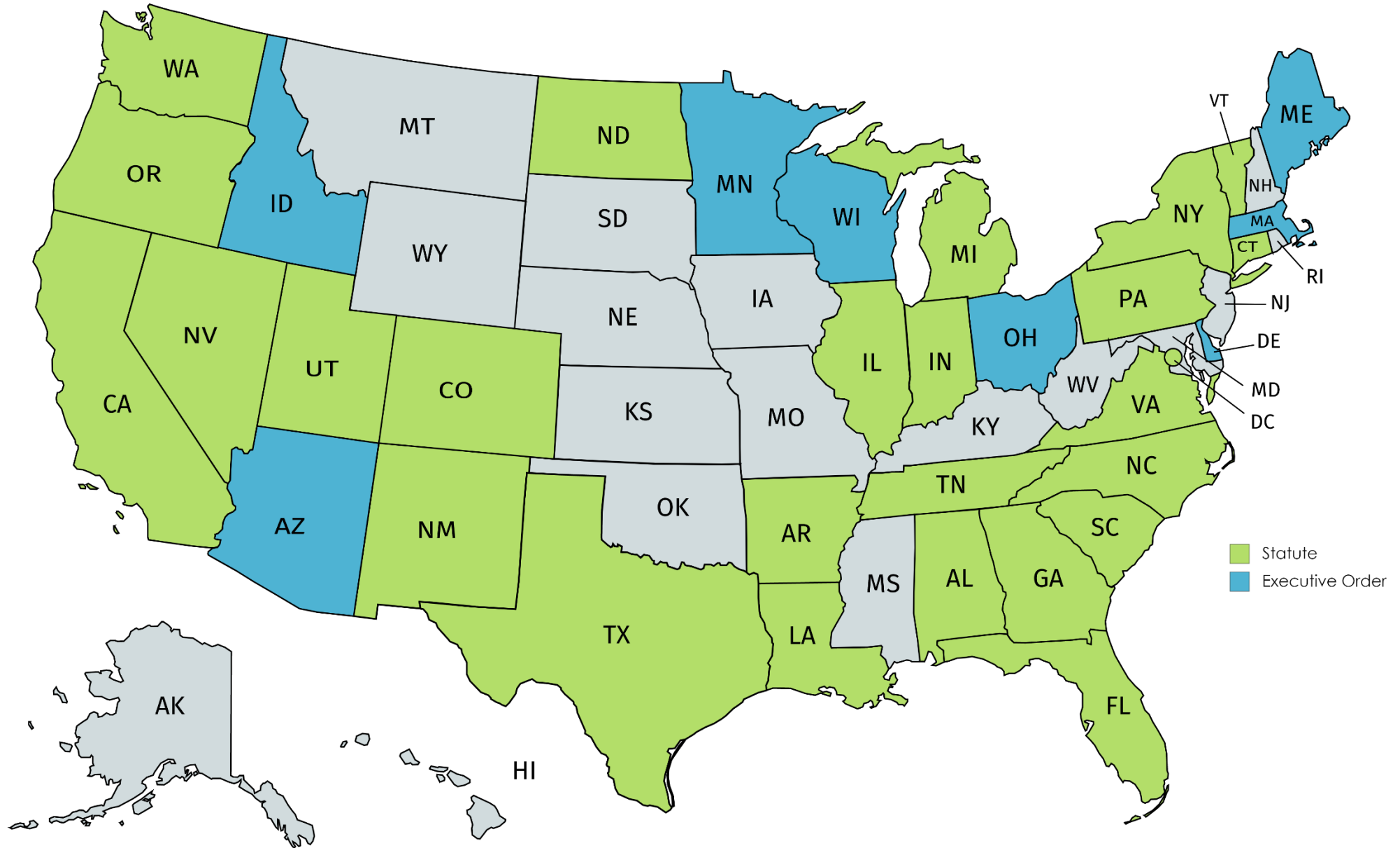


Testing

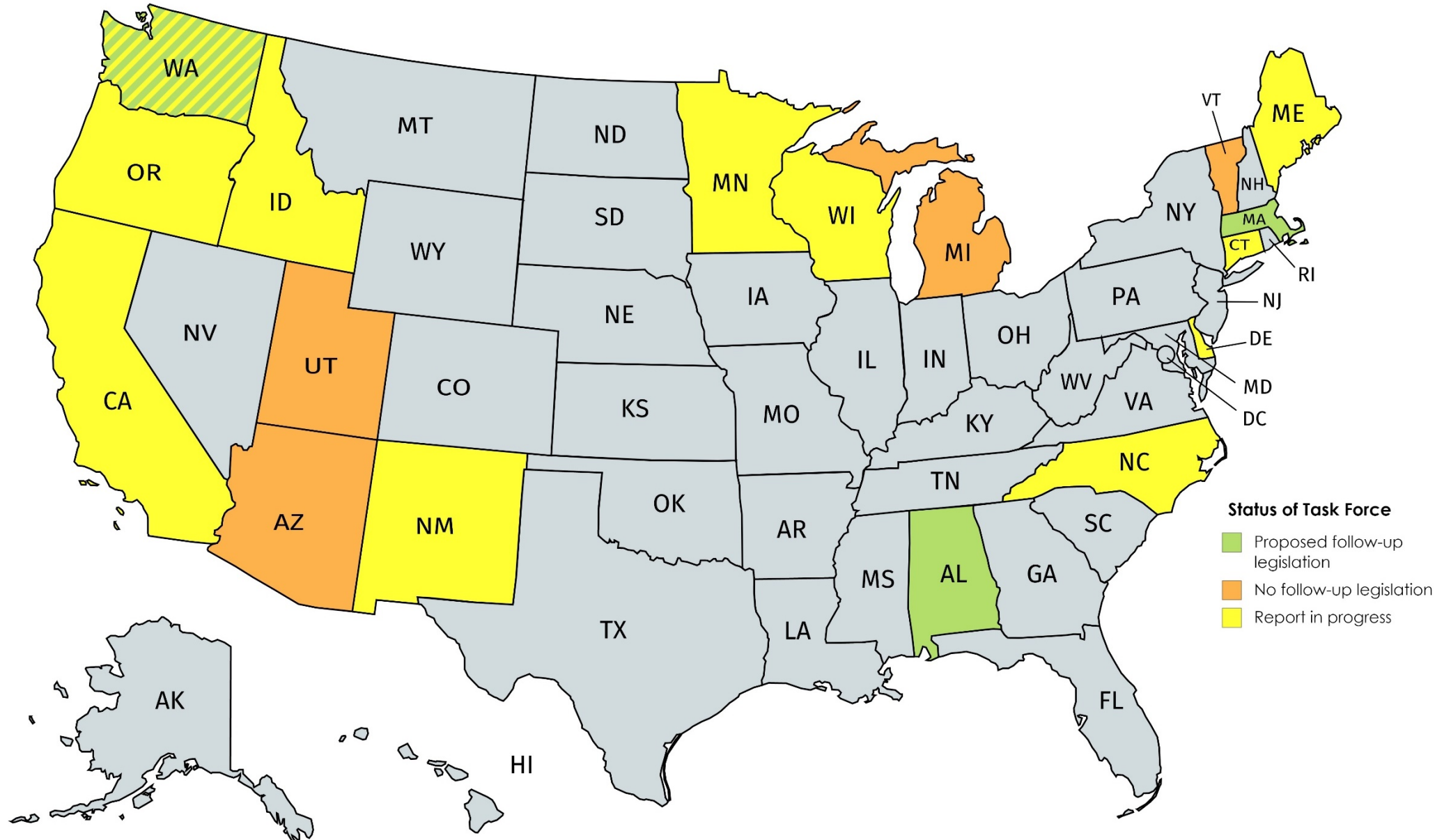


Deployment

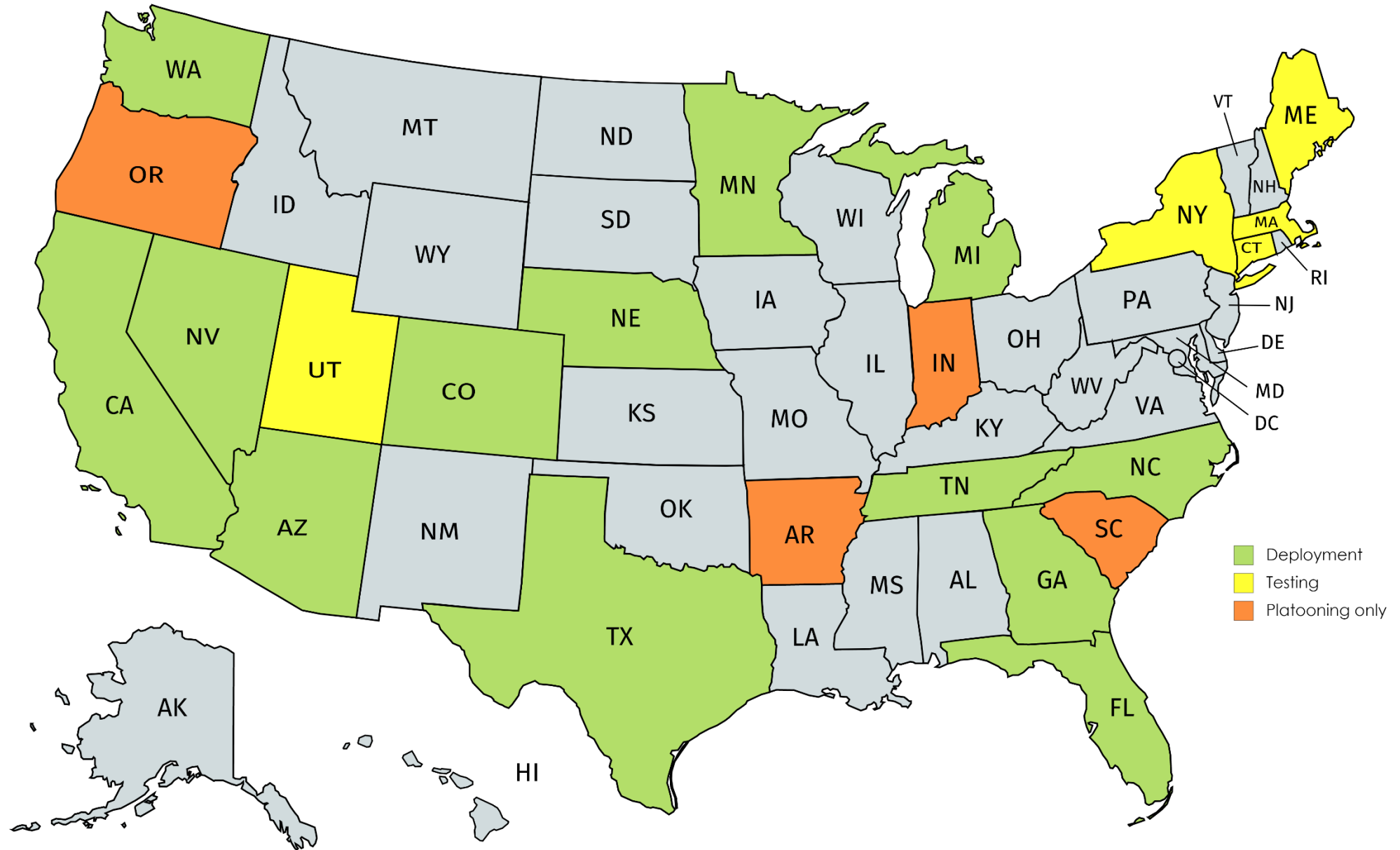
States with Laws or Executive Orders on Autonomous Vehicles



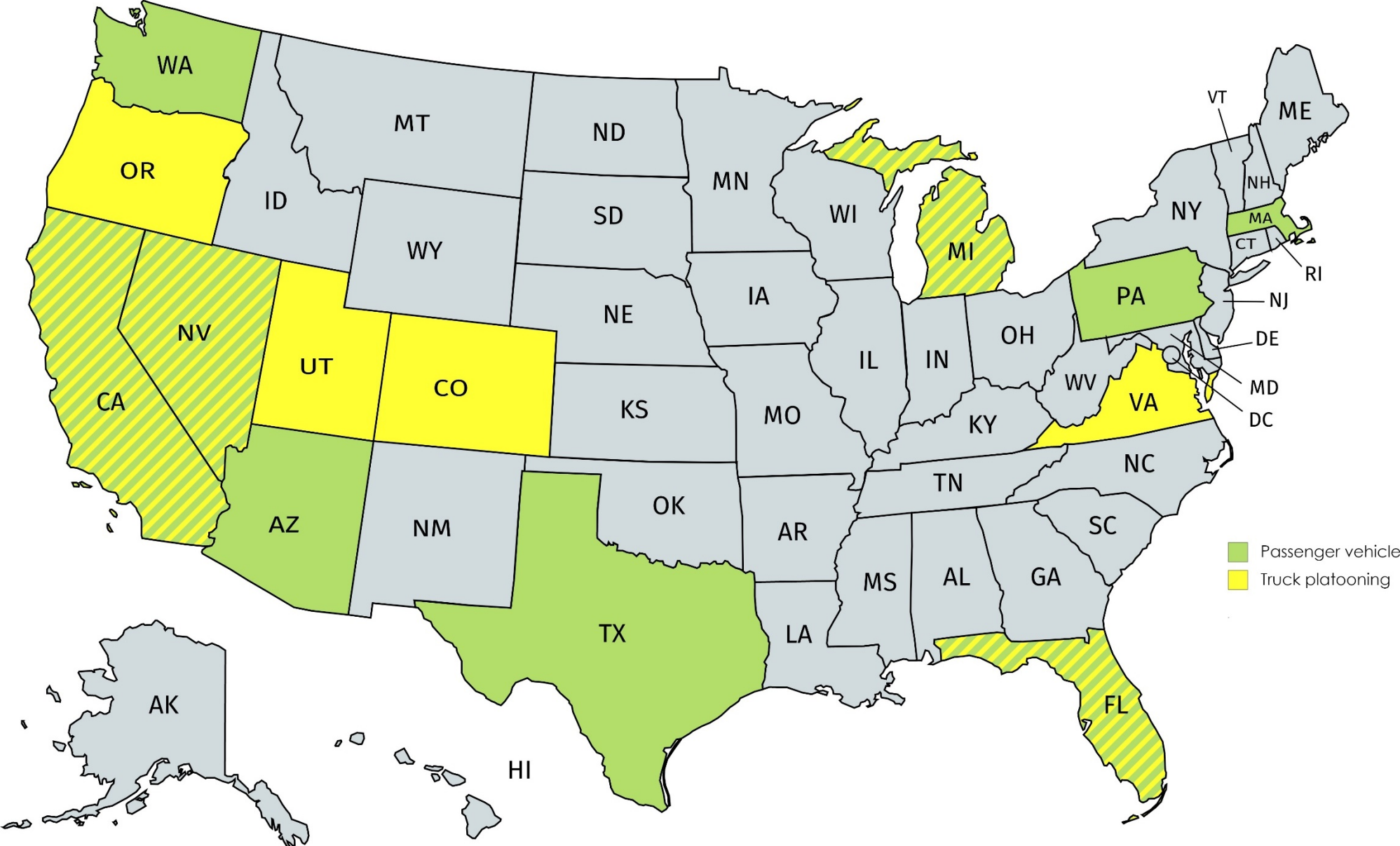
States with AV Task Forces or Work Groups



States That Allow AV Testing and/or Deployment



States Where Testing Has Occurred on Public Roads



California's Autonomous Vehicle Regulations



- Allows testing of AVs with human drivers or remote operators in the vehicle through a permit process.
 - Manufacturers or testing entities must meet safety, insurance, operator training, and reporting requirements. The manufacturer must also have a plan for law enforcement interaction.
- Allows deployment of completely driverless AVs through a permit process.
 - Manufacturers must certify that AVs meet safety requirements, including the presence of an autonomous technology data recorder and periodic updates to software and mapping information.



Nevada's Autonomous Vehicle Regulations



- Allows testing of AVs on public roads through a self-certification process.
 - Testing entity must meet insurance, registration, and federal and state safety requirements.
- Allows deployment of AVs on public roads through a self-certification process.
 - Testing entity must meet insurance, registration, and federal safety requirements.
- Allows transportation network companies (TNCs) to operate autonomous vehicles through a permit process.
 - The permit includes requirement for insurance, disclosing fares, reporting crashes, annual reports, and providing service to passengers with disabilities.



Arizona's Autonomous Vehicle Regulations



- Allows testing and operation of AVs with human backup drivers on public roads.
- Allows testing and operation of AVs with no backup drivers if tester provides written statement acknowledging that the AV meets basic safety, registration, and licensing requirements.
- In the process of establishing mandatory law enforcement interaction plans.

DMV and AAMVA: Automated Vehicles and Considerations for the Vehicle Code

Tom McClellan,
Oregon Department of Transportation DMV Administrator
April 18, 2018



Oregon DMV has identified sections of the vehicle code that may be impacted by automated vehicle deployment

- **Definitions**
 - “Driver” or “Operator”
- **Driver Licensing**
 - Licensing requirements may depend on the capabilities of the automated vehicle
- **Vehicle Registration**
 - Identification of vehicle as an AV
- **Financial Responsibility**
 - Insurance coverage requirements
 - What party assumes liability
- **Crash Reporting**
 - Process and responsibility for exchanging insurance information and alerting DMV
 - How to keep records of incidents and traffic violations involving highly automated vehicles
- **Vehicle Design**
 - Lack of federal safety standards for automated vehicles





**American Association
of Motor Vehicle
Administrators**

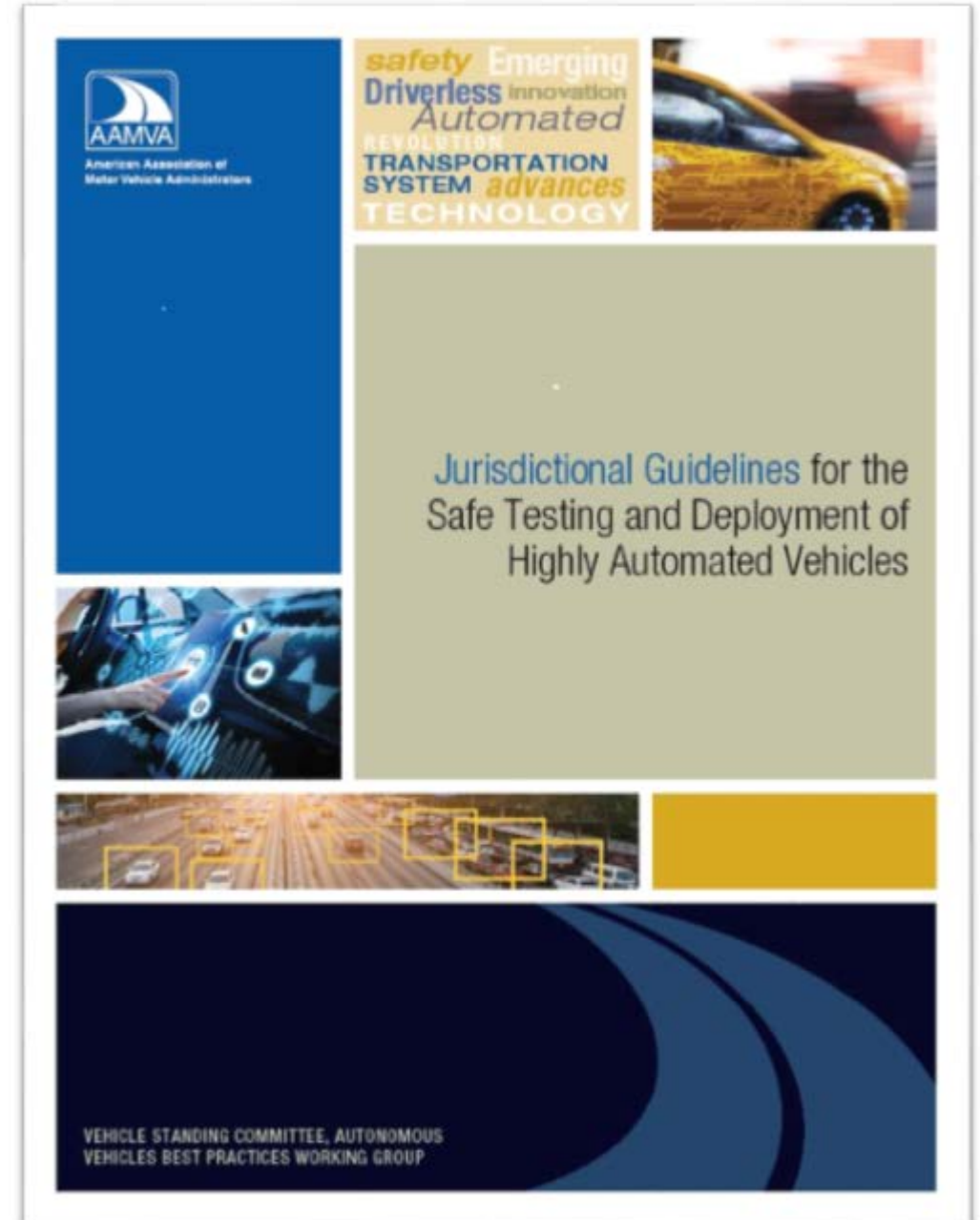
About AAMVA

- Represents Motor Vehicle Administrators of all 69 states, provinces and territories of the United States and Canada
- Supports uniformity and reciprocity among jurisdictions
- Focuses on safety
- Contributed to federal guidance on model state policy for automated vehicles



AAMVA Guidelines for the Regulation of Highly Automated Vehicles

- Provides voluntary recommended guidelines for safe testing and deployment
- Complements the federal guidance on model state policy
- AAMVA has shared outline and is finalizing the draft
- Final version will be published next month, May 2018



AAMVA guidelines will focus on five key areas:

1. Administration

- Lead agency
- Automated vehicle committee
- Establishing regulatory authority

2. Vehicle Credentialing Considerations

- Application for testing permit
- Vehicle registration
- Insurance

3. Driver Licensing Considerations

- Define driver and passenger roles
- Driver license requirements
- Driver training requirements
- Examiner training requirements

4. Law Enforcement Considerations

- Crash reporting
- Distracted driving
- First responder safety
- Law enforcement interaction
- Adherence to traffic laws

5. Topics for Future Versions

- Commercial motor vehicles
- Cybersecurity and data privacy
- Infrastructure
- Economic considerations
- Environmental impacts



Task Force Member Visioning



4/18/2018

Vision for Safety

- Safety is a high priority
- Testing before deployment
- Backup safety drivers
- Safety for vulnerable road users
- Quantitative goals for safety



Vision for Regulatory Approach

- Consistency with federal standards and preemption authority
- Unified requirements for interstate commerce
- Maintaining local governments' ability to manage AV use
- Clearly defined federal, state, and local roles



Vision for Licensing and Registration

- Licensing and registration is a high-priority
- Testing phase prior to deployment
- Licenses/permits should be revoked if AVs prove unsafe
- Special endorsements for vehicles that go in and out of automation
- Federal regulation of commercial licensing



Vision for Insurance and Liability

- Insurance and liability is a high priority
- Clearly assign liability for harms and losses
- Establish a chain of accountability
- Require adequate insurance coverage
- Ensure fair insurance products for Oregonians



Vision for Law Enforcement and Crash Reporting

- Clear procedures for crash reporting (Data from crash recorders & Real-time reporting of accident/law enforcement data)

- AV system disengagement reports

- Changes to distracted driving laws



Vision for Cybersecurity

- Preventing hacking and protecting privacy

- Consistency with federal cybersecurity requirements

- Safety inspections or security updates

- Adequate protections for consumer privacy in data shared with companies or government



Vision for Data Sharing



- Diverse opinions on appropriate level of data sharing



- Private companies concerned about intellectual property, administrative burden



- Public agencies seek data useful to planning efforts



- Suggestions for testing data requirements: disengagements, types of data collected, and with whom data is shared



Vision for Societal Effects

Impact areas addressed:

Equity

Land Use

Urban Design

**Safety for
Vulnerable
Road Users**

**Employment
Impacts and
Workforce
Displacement**

Sustainability

**Multimodal
Transportation
Choices**

**Economic
Development**



Task Force Member Roundtable



4/18/2018

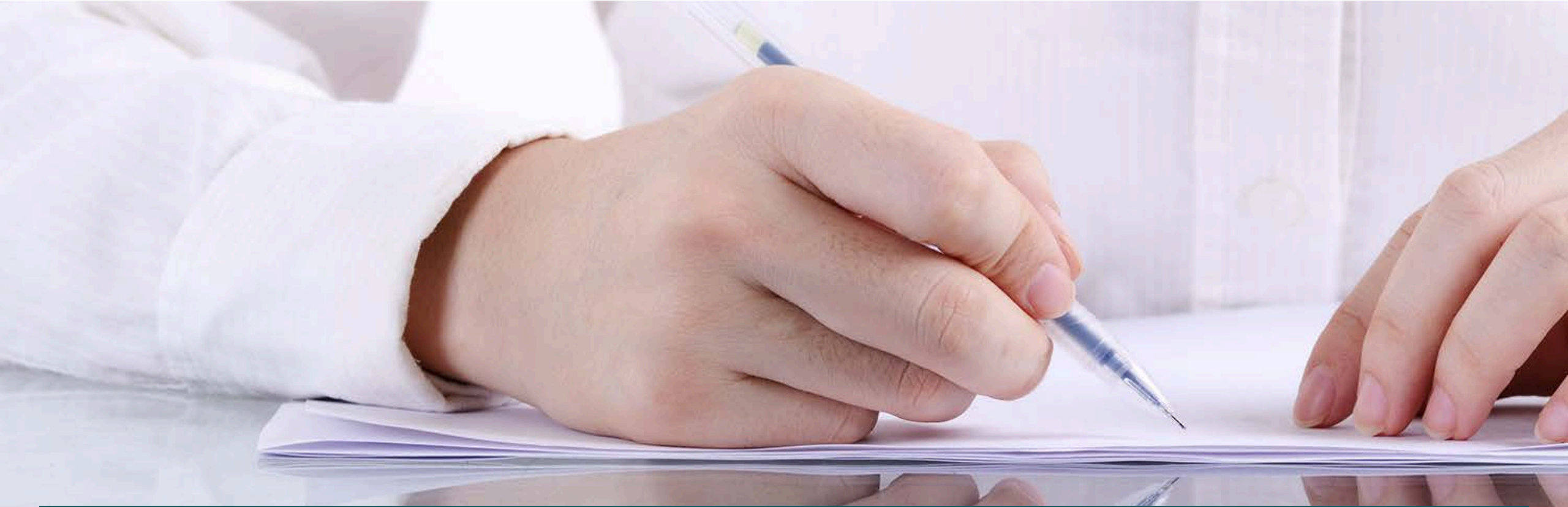
Workshop and Subcommittees



Subcommittee on Licensing and Registration



Subcommittee on Licensing and Registration



Objective: Develop potential legislative recommendations relating to licensing and registration procedures for users and operators of various types of autonomous vehicles.

Licensing and Registration

Topics for Consideration

- Registration and identification of autonomous vehicles
- Operation or testing of autonomous vehicles without a human in the driver's seat
- Driver's license requirements for drivers of vehicles with various levels of automation and for vehicles that can occasionally be operated by a human driver
- Grounds for suspending or revoking registration



Subcommittee on Licensing and Registration

Lead

- **Tom McClellan**, Oregon Department of Transportation

Membership

- **Jon Isaacs**, Transportation Network Companies
- **Eric Hesse**, League of Oregon Cities
- **Marie Dodds**, American Automobile Association
- **Steve Entler**, Taxicab Industry
- **Sean Waters**, Commercial Truck Manufacturing Industry
- **Jana Jarvis**, Oregon Trucking Association
- **Mark McPherson**, Transportation Union



Subcommittee on Law Enforcement and Crash Reporting



4/18/2018

Subcommittee on Law Enforcement and Crash Reporting

Objective: Examine how law enforcement procedures will change if a human driver is not present in a vehicle and develop legislative recommendations regarding requirements for information reporting for crashes involving autonomous vehicles.



Law Enforcement and Crash Reporting

Topics for Consideration

- Safety requirements (e.g., certification that the vehicle is capable of complying with laws of the road, complies with FMVSS, etc.)
- Requirement that the vehicle be equipped with a data recorder to record information shortly before and shortly after a crash
- Requirements for responding to a crash (e.g., alerting emergency responders, exchanging insurance and registration information, etc.)
- Reporting number of disengagements and miles traveled
- Distracted driving laws
- Age requirements for minors riding unattended in an autonomous vehicle
- Other driver responsibilities (e.g., ensuring minors and other passengers follow seat belt laws)



Subcommittee on Law Enforcement and Crash Reporting

Lead

- **Lt. Timothy Tannenbaum**, Washington County Sherriff's Office

Membership

- **Capt. Teresa Bloom**, Oregon State Police
- **Daniel Fernández**, Automotive Industry
- **Carly Riter**, Autonomous Vehicle Technology Industry
- **Sid Leiken**, Association of Oregon Counties
- **Jebediah Doran**, Oregon Transit Association



Subcommittee on Insurance and Liability



4/18/2018

Subcommittee on Insurance and Liability

Objective: Develop recommendations for potential statutory amendments relating to insurance and liability contemplating vehicles operating on public roadways without human drivers



Insurance and Liability

Topics for Consideration

- Minimum insurance requirements for autonomous vehicles
- Minimum insurance requirements for a fleet of autonomous vehicles
- Should insurance follow the person or the vehicle?
- Liability for a crash that occurs while the vehicle is operating autonomously



Subcommittee on Insurance and Liability

Lead

- **Richard Blackwell**, Oregon Department of Consumer and Business Services

Membership

- **Robert Nash**, Automotive Insurance Industry
- **Neil Jackson**, Trial Lawyers
- **Eliot Rose**, Metropolitan Planning Organization
- **Jeremiah Ross**, Consumer Protection
- **Chris Hagerbaumer**, Nonprofit Organization



Subcommittee on Cybersecurity and Long-Term Policy



4/18/2018

Subcommittee on Cybersecurity and Long-Term Effects



Objective: Assess potential cybersecurity risks and examine State vs. Federal roles in cybersecurity regulation, as well as data collection and consumer privacy.

Cybersecurity and Long-Term Effects

Topics for Consideration

- Federal and state role in establishing cybersecurity requirements
- Assessment of potential security risks
- Participation of fleets in a road usage charge program
- Information requirements



Subcommittee on Cybersecurity and Long-Term Effects

Lead

- **Cheryl Hiemstra**, Oregon Department of Justice

Membership

- **Jim Pfarrer**, Oregon Employment Department
- **Carrie MacLaren**, Oregon Department of Land Conservation and Development
- **David McMorries**, Cybersecurity
- **Graham Trainor**, Workers' Union
- **Jared Franz**, Transportation Union
- **Becky Steckler**, Public University



Next steps

Upcoming meetings

1. Task Force
Workshop

2. Subcommittee
Meetings

3. Second Task
Force Meeting

Deadline: Final report due to the Legislature by September 15, 2018



Public Comment



4/18/2018

Thank You

