PREPARING FOR AUTOMATED VEHICLES IN VERMONT

2019 Vermont Municipal Day Training

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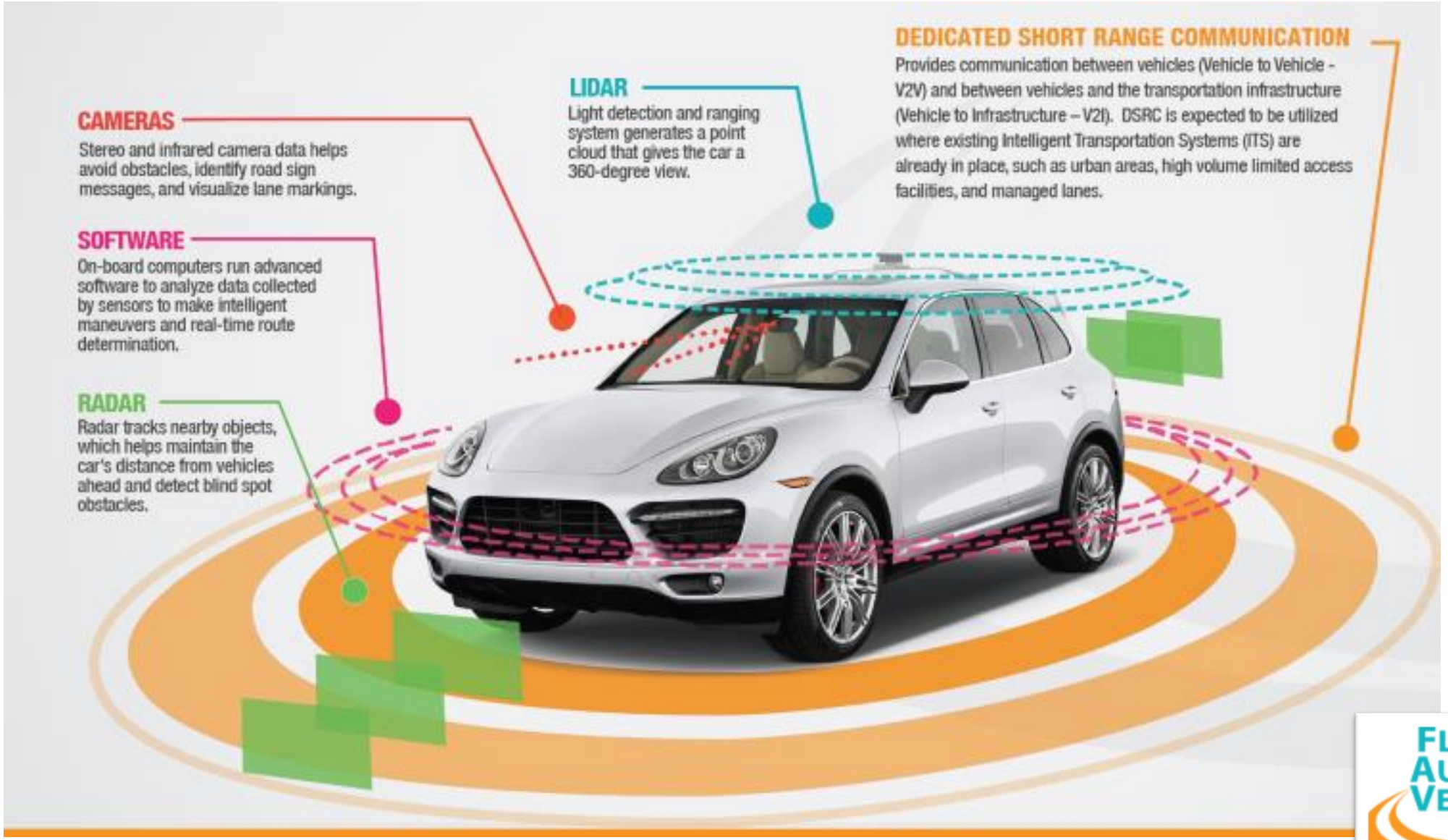
PRESENTATION

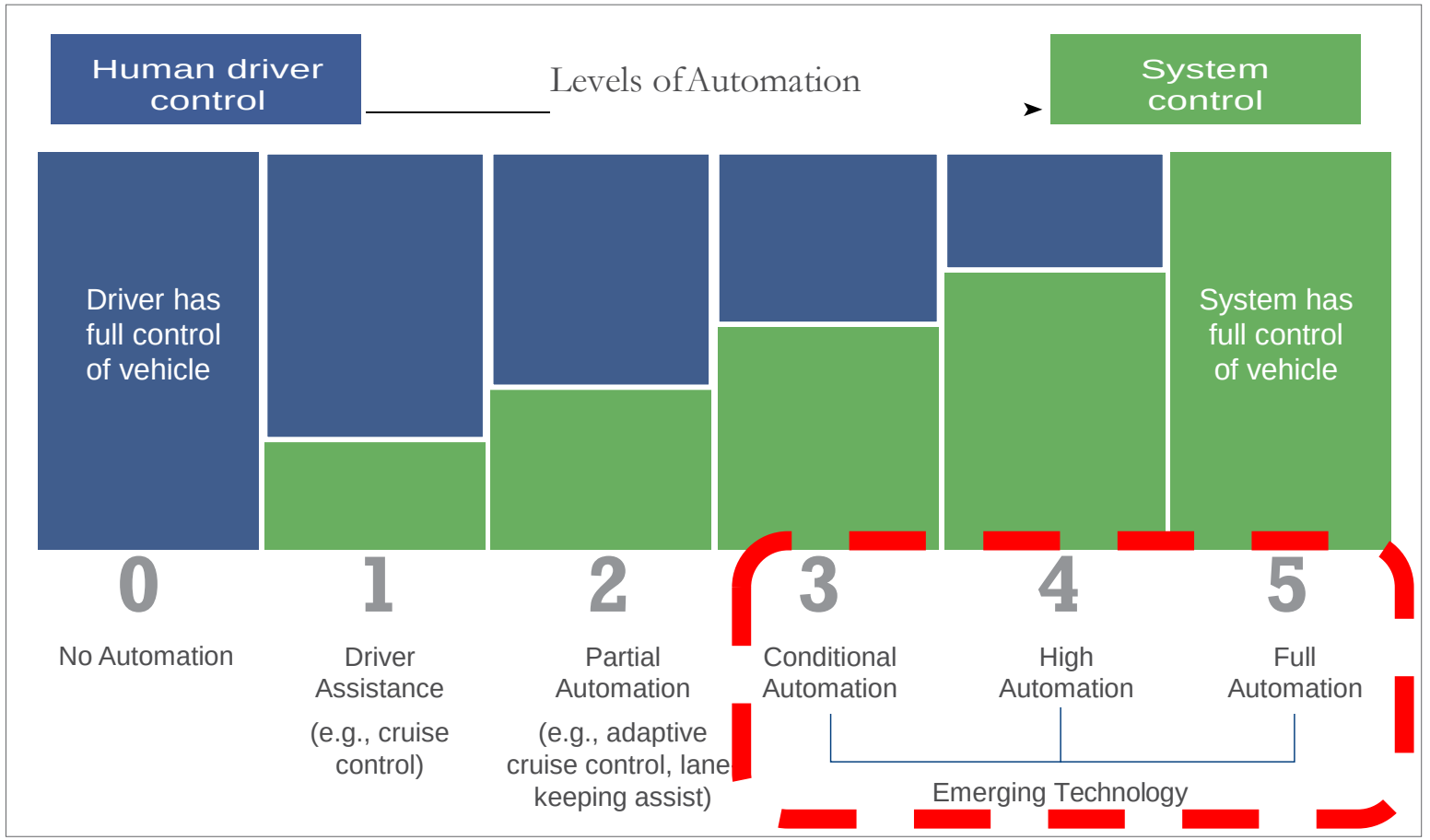
- Automated Vehicles Overview
- Potential Benefits and Consequences
- Federal and State Roles
- VT AV Testing Act
  - State and Municipal Roles



FLORIDA AUTOMATED VEHICLES

VERMONT

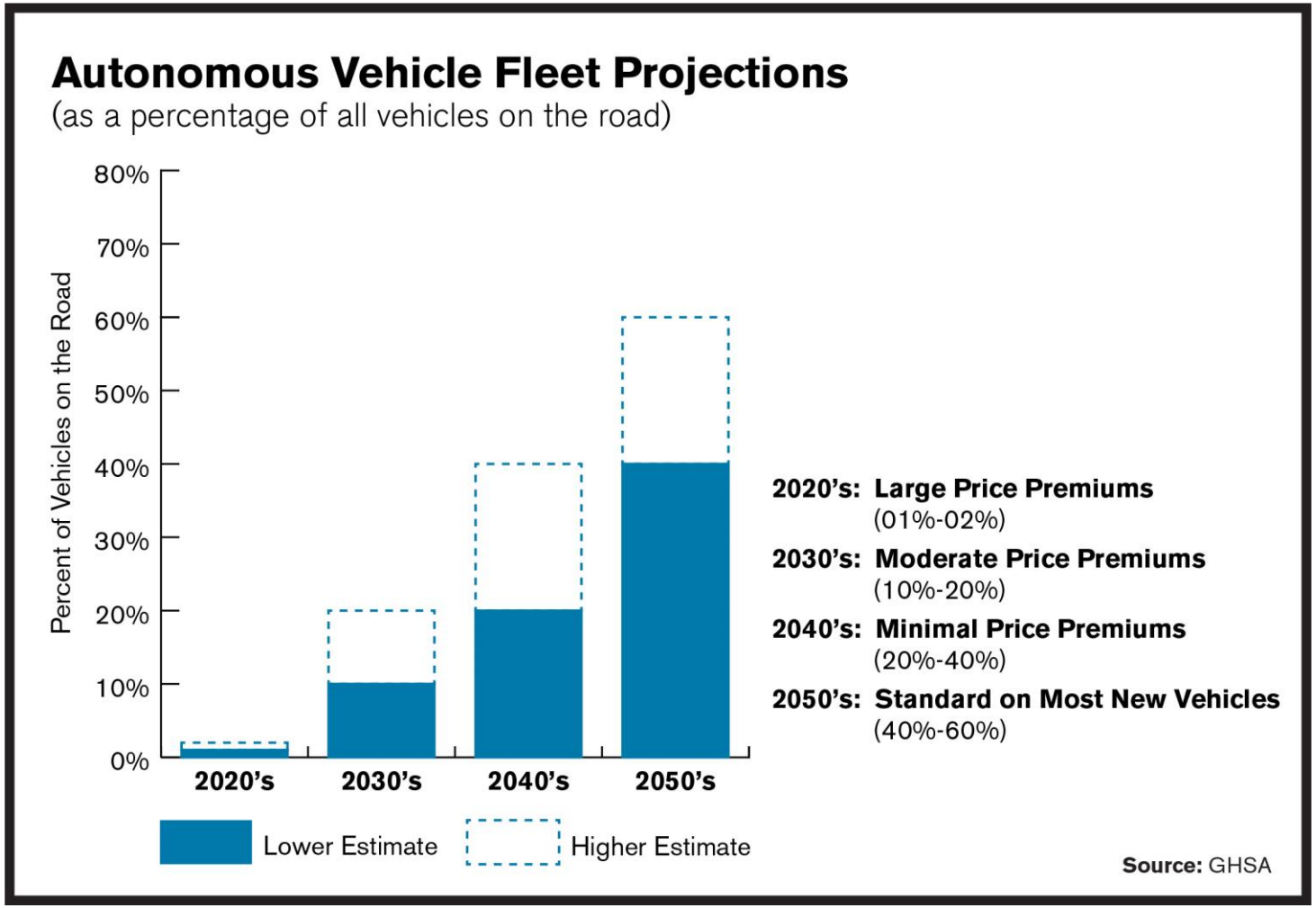
AUTOMATED VEHICLE TESTING ACT



AV TEST PERMIT REQUIRED FOR VEHICLES WITH LEVEL 3-5 AUTOMATED DRIVING SYSTEMS

SOURCE: Liberty Mutual "Automated Vehicles: Changing Role of the Driver"

AUTOMATED VEHICLES ON THE ROAD
(CONSERVATIVE FORECAST)



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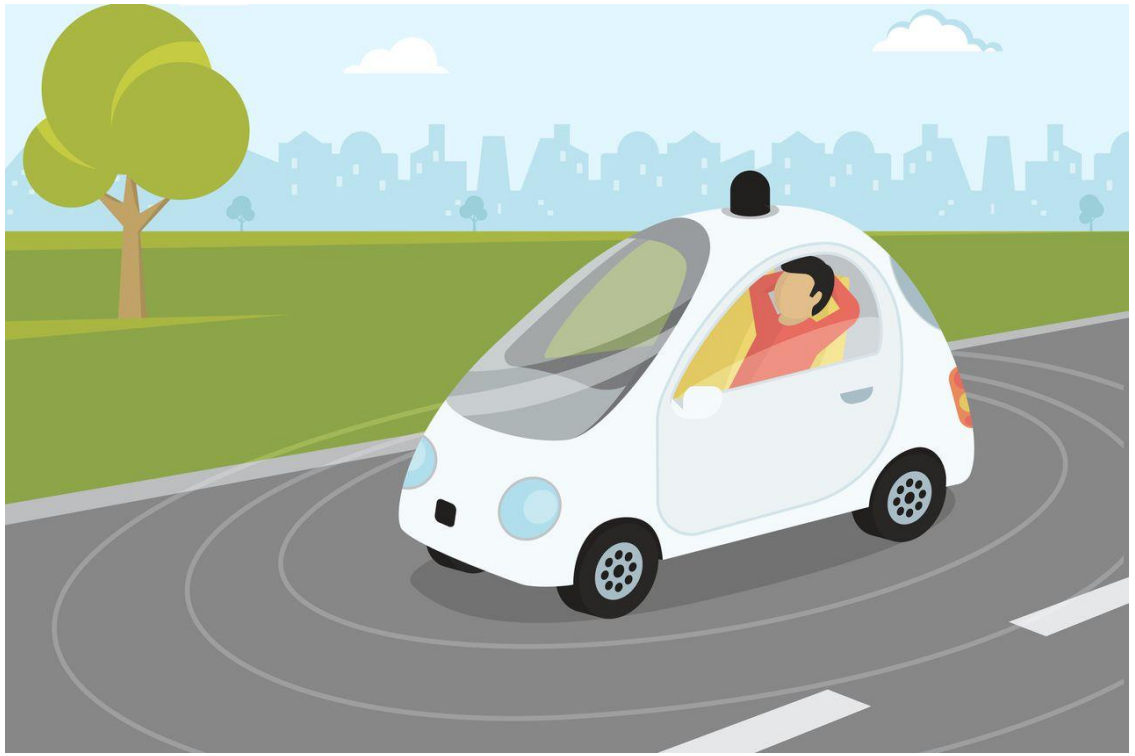
IMPACTS DEPEND ON OWNERSHIP MODEL

Individual Ownership



Shared Ownership & Mobility as a Service

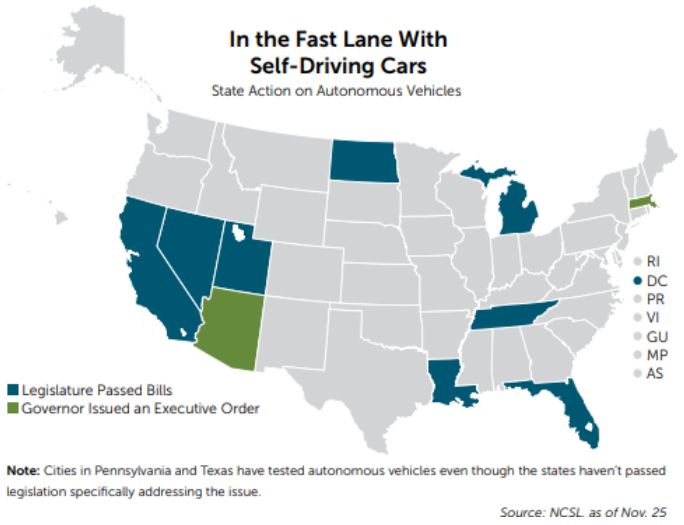
FEDERAL AND STATE ROLES

Federal (NHTSA) Role	State Role
• Set Federal Motor Vehicle Safety Standards (FMVSS) • Ensuring compliance with FMVSS • Investigating & managing recalls • Communicating & educating the public on motor vehicle safety issues • Issuing guidance for vehicle and equipment manufacturers to follow	• Operator licensing • Operator education & training • Vehicle registration • Regulate motor vehicle insurance and liability • Vehicle safety inspection • Establish & enforce traffic laws* • Build and operate infrastructure*

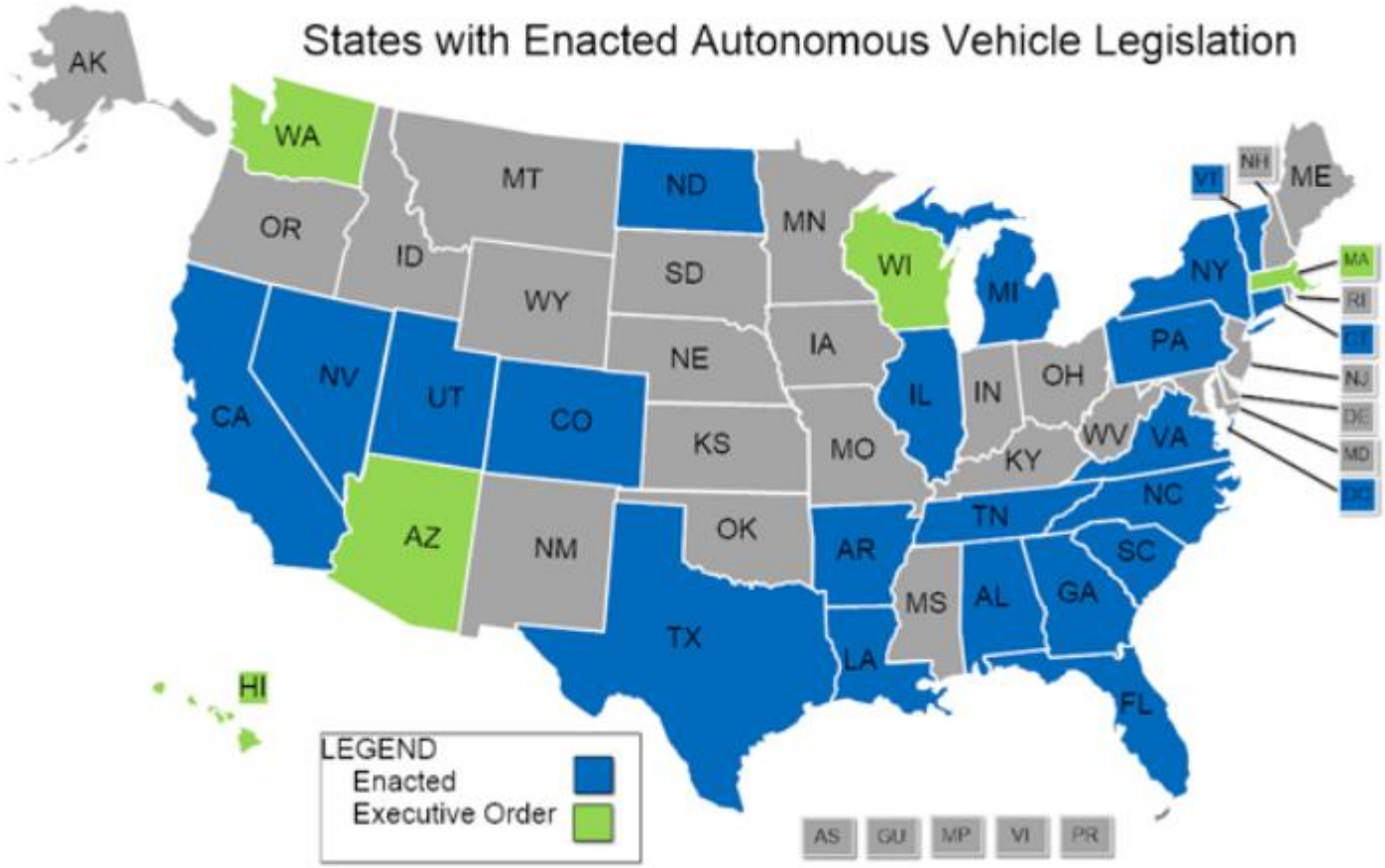
* Municipalities also establish and enforce traffic laws, build and operate infrastructure

STATE LEGISLATION

Nov. 2016



Feb. 2018



SOURCE: National Conference of State Legislatures

WHY ALLOW TESTING ON VT ROADS?

- Facilitate deployment in VT
- Build public confidence
- Provide clear process for testers
- Provide a publicly transparent process that facilitates safe testing

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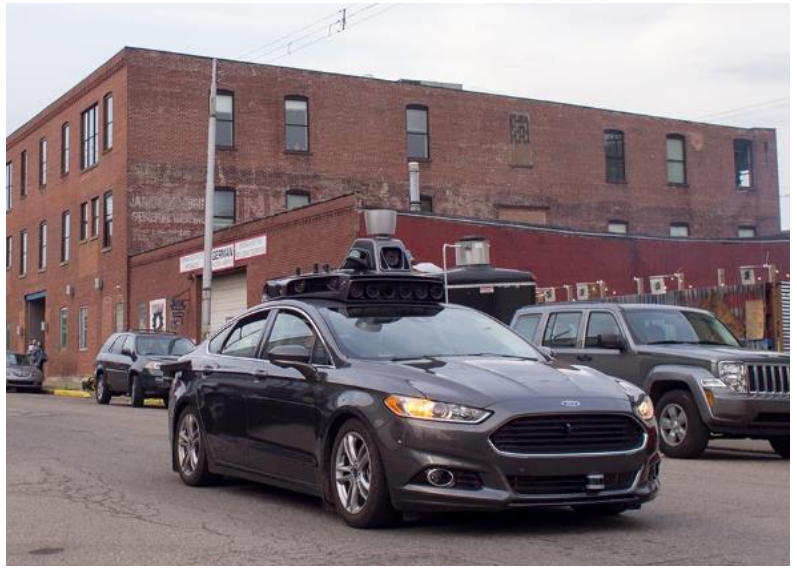
WHAT WOULD A TEST LOOK LIKE?



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AV TESTING ACT APPROVAL PROCESS

TRAFFIC COMMITTEE HAS SOLE AUTHORITY TO APPROVE, MODIFY OR REVOKE AV TESTING PERMITS

State Roles and Responsibilities	Municipal Roles and Responsibilities
• State can approve testing on all state highways and Class 1 Town Highways • VTrans must develop testing application guide by January 2021 • **In consultation with RPCs,** VTrans must identify municipalities that have "pre-approved" testing • VTrans must maintain list of municipalities that have pre-approved testing in testing application guide	• Municipal approval required if testing involves Class 2, 3 and 4 Town Highways • Municipalities will be asked to pre-approve testing • Municipalities can withdraw approval at any time • Municipal approval of specific testing permits not required • Municipalities can not approve testing on Town Highways without Traffic Committee approval • Municipalities are not responsible for modifying roadways or other infrastructure to accommodate a test, or for any costs related to conducting the test.

- Any state or local law enforcement officer may stop a specific AV test vehicle due to permit condition violation or if there are safety concerns

ACT 60 AV TESTER REQUIREMENTS

- Human operator required in driver seat and must be able to take physical control of the vehicle
  - Operator must be at least 21 years old
  - Operator must pass a background check
  - Blood alcohol content less 0.02
- $5 Million Liability Insurance
- Vehicle must be able to comply with all state and local traffic laws
- AV Testing Vehicle must be clearly identifiable

TESTING APPLICATION GUIDANCE

- Experience with Autonomated Vehicles
- Applicant's Voluntary Safety Self-Assessment
- Testing Plan
- First Responders Interaction Plan
- Summary of Training and Operations Protocol
- Motor Vehicles in Testing Program
- Drivers in Testing Program
- Insurance Requirement
- Additional Questions

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NEXT STEPS

- **Recruit AV Testing Municipalities**
  - Develop Municipal Approval Form Template
  - Meet with RPC TACs/Commissions to Spread Word
  - Follow-up with Interested Municipalities

- **Complete AV Testing Guidance and Permit Application**

- **In partnership with interested stakeholders, explore AOT Lead AV Pilot**

Questions?

VERMONT
AGENCY OF TRANSPORTATION