



TASK FORCE ON AUTONOMOUS VEHICLES

Framing the Future for Autonomous Vehicles in Oregon



Subcommittee Recommendations for Consideration by Task Force July 12, 2018

Note: At the July 12 task force meeting, highlighted items were referred back to the subcommittees for refinement.

Testing Permit Requirements

Subcommittee	Recommendation
<p>Licensing and Registration</p>	<p>A manufacturer or other testing entity must obtain a testing permit prior to testing automated vehicles on public roads. Testing permit requirements apply only to vehicles with an automation level 3 or higher, as defined by the Society of Automotive Engineers (SAE). Testing is defined as the operation of an autonomous vehicle on public roads by employees, contractors, or designees of a manufacturer for the purpose of assessing, demonstrating, and validating the autonomous technology’s capabilities. The permit application must contain a number of elements, consistent with recommendations from the American Association of Motor Vehicle Administrators or best practices in other states.</p> <p>Contact information:</p> <ul style="list-style-type: none"> • Name of manufacturer or other testing entity • Physical and mailing address(es) • Local address, if different • Name and contact information for program lead • Telephone number • Name and address of facility where company’s training, testing, and employment records are kept <p>Vehicle information:</p> <ul style="list-style-type: none"> • Vehicle Identification Number • Year • Make

Subcommittee	Recommendation
<p>Licensing and Registration (cont'd)</p>	<ul style="list-style-type: none"> • Model • License plate number and jurisdiction of issuance • Vehicle type (e.g., passenger or commercial) • SAE level of automation <ul style="list-style-type: none"> ○ Manufacturer should notify state of changes to SAE level, but is not required to begin new permit process <p>Driver information:</p> <ul style="list-style-type: none"> • Full name • Date of birth • Driver license number and jurisdiction of issuance <ul style="list-style-type: none"> ○ Principle: Protection of personal information • Summary of driver's training or copy of training materials • Only employees, contractors, or other designees can operate testing vehicles • Clean driving record • Passed background check <p>Prior testing:</p> <ul style="list-style-type: none"> • Disclosure of jurisdictions where application or issuance of testing has occurred or been denied • Disclosure of jurisdictions where testing permit has been revoked • Self-certification that technology to be used in test vehicles has been engineered to perform in any real-world conditions the manufacturer intends to subject the vehicle to on public roadways <p>Safety requirements:</p> <ul style="list-style-type: none"> • Certification that vehicles comply with Federal Motor Vehicle Safety Standards or Federal Motor Carrier Safety Regulations, or have an exemption • Certification that vehicle can comply with all state vehicle and traffic laws within its operational design domain • Certification that vehicle has means to engage and disengage autonomous technology that is easily accessible to operator • Certification that vehicle has a visual indicator inside the cabin to indicate when the autonomous technology is engaged, if the vehicle is designed to allow for a human driver in the vehicle

Subcommittee	Recommendation
<p>Licensing and Registration (cont'd)</p>	<ul style="list-style-type: none"> • Certification that a human driver will be ready to assume control or have the vehicle achieve minimal risk condition at all times <p>Additional safety requirements for testing without a human backup driver:</p> <ul style="list-style-type: none"> • Notification of local authorities where testing is to take place • Link to remote operator who can assume control of the vehicle or have the vehicle achieve minimal risk condition • Vehicle must comply with all federal and state safety standards unless manufacturer has an exemption • Certification that vehicle is capable of operating without a driver inside • Certification that vehicle meets the description of an SAE Level 4 or 5 vehicle • Operational design domain of vehicle • Law enforcement interaction plan • Training program for remote operators • Publicly disclosed assessment demonstrating safety approach • Manufacturer must revise permit application if technology changes significantly <p>Reporting requirements:</p> <ul style="list-style-type: none"> • Testing entity must report crashes that result in the damage of property or bodily injury to DMV <p>Fees and fines:</p> <ul style="list-style-type: none"> • Principles: Cost recovery and reducing administrative burden • Allow grace period to come into compliance
<p>Law Enforcement and Crash Reporting</p>	<p>The permit must require that manufacturers submit a law enforcement/first responder interaction plan.</p> <ul style="list-style-type: none"> • The law enforcement/first responder interaction plan must be shared with state police and with local law enforcement and first responders. • The law enforcement/first responder interaction plan must be made available to other local law enforcement agencies and first responders. • The subcommittee recommends that the law enforcement/first responder interaction plan include: <ul style="list-style-type: none"> ○ How to communicate with a remote operator; ○ Where in the vehicle to obtain owner information, vehicle registration, and proof of insurance; ○ How to safely remove the vehicle from the roadway; ○ How to recognize whether the vehicle is in autonomous mode;

Subcommittee	Recommendation
<p>Law Enforcement and Crash Reporting (cont'd)</p>	<ul style="list-style-type: none"> ○ If possible, how to safely disengage autonomous mode; ○ How to detect and ensure that autonomous mode has been deactivated; ○ When applicable, how to safely interact with hybrid and electric vehicles; and ○ A description of the operation design domain of the vehicle. <p>The AV manufacturer must display a small decal on the rear window of the testing vehicle to indicate to law enforcement that it is an automated testing vehicle. Consideration should be given to ensure that the decals are discreet and identifiable only by law enforcement.</p>
<p>Insurance and Liability</p>	<p>For automated vehicle testing, require \$5 million umbrella insurance per event with a caveat to maintain existing coverages. Umbrella coverage should include accommodation for business auto policies to cover less-than-catastrophic events. Coverage should not, however, be designed to roll back consumer protections in the Insurance Code or the Vehicle Code (e.g., personal injury protection, underinsured/uninsured motorist coverage).</p> <p>For automated vehicle testing, preserve and store some form of standardized, non-proprietary recorded data from a crash or incident involving an automated vehicle for the duration of the applicable statutes of limitation. Data should be capable of being shared with law enforcement, government entities, or parties involved in an incident, subject to appropriate legal process.</p>
<p>Cybersecurity and Long-Term Policy</p>	<p><i>(for testing on public roads)</i> The manufacturer shall certify that the autonomous vehicle meets appropriate and applicable current industry standards to help defend against, detect, and respond to cyber-attacks, unauthorized intrusions, or false vehicle control commands.</p>

Additional Policy Recommendations

Licensing and Registration – Additional Policy Recommendations

Topic Area	Recommendation
Definitions	AV legislation should direct ODOT to adopt definitions for automated vehicles and users that reflect the different roles and responsibilities of vehicle systems and human occupants at different levels of automation. The definitions from the SAE J3016 standard are currently the accepted industry and government standard for vehicles.
Licensing Drivers	ODOT should establish requirements that any user who performs any aspect of the driving task during a trip must be licensed. A Level 3 vehicle requires a licensed fallback-ready user. Level 4 and 5 vehicles may operate with or without a human driver, and may or may not have manual controls. In vehicles with manual controls, any user who performs any aspect of the driving task must be licensed. AV users who perform no aspect of the driving task are passengers and do not require a license.
Compliance with Oregon Laws	In order to operate in Oregon, vehicles must be capable of complying with the Oregon Vehicle Code and other relevant Oregon rules and statutes within their operational design domain.

Law Enforcement and Crash Reporting – Additional Policy Recommendations

Topic Area	Recommendation
Safety Standards	Oregon should continue to have a voice in the national discussion and to monitor future safety requirements for automated vehicles as determined by the National Highway Traffic Safety Administration and other federal transportation agencies.
Operation of AVs	Current seatbelt laws are sufficient and should apply to automated vehicles.
Operation of AVs	Current impaired driving laws are sufficient and should apply to automated vehicles.

Insurance and Liability – Additional Policy Recommendations

Topic Area	Recommendation
Insurance for AVs	For automated vehicle testing, it is agreed that the manufacturer maintains the insurance and the insurer of the motor vehicle is the primary insurance applicable to liabilities imposed by law for bodily injury or property damage arising out of the operation of the motor vehicle.
Insurance for Commercial Vehicles	Include a note in the report to the Legislature that states when the automated technology for commercial vehicles is more developed, the subcommittee recommends setting insurance minimums specifically for commercial vehicles equipped with automated technology levels 3 and higher.
Liability	Include a note in the report to the Legislature that encourages a testing environment in Oregon for automated vehicles which preserves the current legal and tort liability framework. The system must remain nimble to changes in the deployment environment.

Cybersecurity and Long-Term Policy – Additional Policy Recommendations

Topic Area	Recommendation
Data Privacy	A statement of principle in support of data privacy should be included in the 2018 report.