

2018

# The Autonomous Vehicle Legislative Survey

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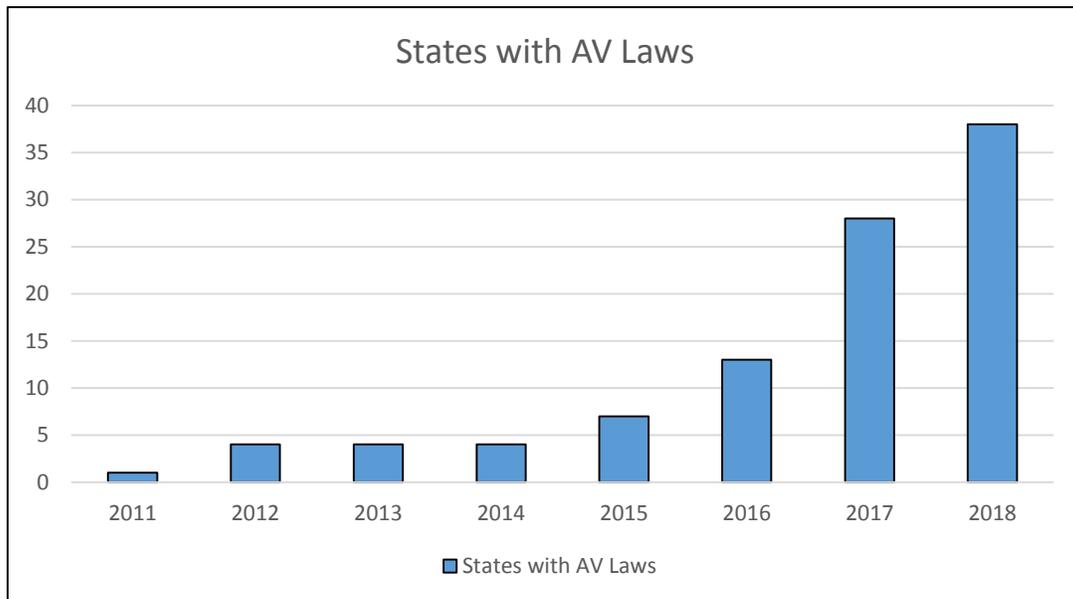
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## By the Numbers

States take a wide array of approaches to AV regulation.<sup>2</sup> The graph below displays the total number of states with AV laws including legislation, regulation, and executive orders for platooning and AV testing, deployment, and operation.



- 37 states have laws relating to AVs.
- 30 states have legislation relating to AVs.
- 12 states have executive orders relating to AVs.
- 24 states have laws regulating AV testing or operation.
- 17 states have laws relating to vehicle platooning.
- 11 states have laws including insurance requirements for AVs.
- 11 states have laws allocating liability for AVs in defined circumstances.
- 19 states have a committee, task force, or working group dedicated to AV technology.
- 20 states have AV Pilot Programs.
- 4 states have laws including AV data recording requirements.
- 51 states have universities conducting AV research.

<sup>2</sup> States includes the District of Columbia for purposes of this analysis. Information for this analysis is derived from The Autonomous Vehicle Statutory Database (on file with Eckert Seamans).

## Federal Legislative Actions

## United States

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The United States Government has yet to enact legislation relating to AVs. Instead, the United States leaves the decision to regulate AVs to respective state governments. However, the Federal Government has proposed legislation in both the House and Senate relating to AV regulation. Indeed, the House passed the SELF Drive Act, [H.R. No. 3388](#) in September 2017. Further, the Senate introduced the [AV START Act](#) in October of 2017. However neither proposed piece of legislation became law.

Additionally, the United States Department of Transportation (“USDOT”) provides guidance to states for the regulation of the AV industry. Indeed, in October of 2018 USDOT issued Federal AV guidance: [Preparing for the Future of Transportation: Automated Vehicles 3.0](#). The guidance states:

*“Preparing for the Future of Transportation: Automated Vehicles 3.0 advances U.S. DOT’s commitment to supporting the safe, reliable, efficient, and cost-effective integration of automation into the broader multimodal surface transportation system.”*

The guidance is designed to prioritize safety, encourage a consistent

regulatory environment, prepare proactively for automation, and promote the modernization of regulatory frameworks.

## Territories of the United States

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None of the Territories of the United States (“Territories”) have taken action toward adopting AV related legislation. The Territories are:

- American Samoa
- Guam
- Northern Mariana Islands
- Puerto Rico
- United States Virgin Islands

In terms of AV legislation, there is no information available to suggest AV legislation will be adopted in the Territories in the future. Although, Puerto Rico appears to have the most promise to regulate AVs. Indeed, Puerto Rico recently announced its plans to collaborate with the [Smart Cities Council](#) to rebuild its infrastructure with innovative technologies. Further, Puerto Rico was a 2018 winner of the Smart Cities Council [Humanitarian Grant](#).

## State Legislative Actions

## Alabama

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Alabama has two active laws relating to AV technology. The first, [SJR No. 81](#), was passed in 2016 and establishes a Joint Legislative Committee to study self-driving vehicles. The goals of the Committee are to study all aspects of self-driving cars, including issues of public safety and economics. The Committee is required to report their findings to the Alabama legislature.

The second, [Senate Bill No. 125](#), defines and allows for truck platooning in the state. According to the law, a truck platoon is:

*“a group of individual commercial trucks traveling in a unified manner at electronically coordinated speeds at following distances that are closer than would be reasonable and prudent without the electronic equipment.”*

Further, the law explains the legislature’s intent to provide research opportunities for truck platooning technology.

Alabama is also home to two major research institutions that receive State financial aid to study AV technology. Auburn University is home to a GPS and Vehicle Dynamics Laboratory, which partners with the American Center for Mobility. Additionally, the University of Alabama is home to the Center for Advanced Vehicle Technologies, which takes an interdisciplinary approach to developing innovative solutions for the automotive industry.

## Alaska

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Alaska has yet to enact AV legislation. However, in 2016 a State Legislature Joint Meeting was held between the House Transportation Standing Committee and the Senate Transportation Standing Committee. The [Meeting](#) involved discussions relating to the integration of driverless cars in Alaska. Additionally, the Meeting’s participants discussed the issue of liability for AVs at a general level, as well as the difficulties associated with deploying AVs in cold weather environments.

## Arkansas

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In 2017 Arkansas enacted [House Bill No. 1754](#), which allows for the use of driver-assistive vehicle platooning. The law defines a driver-assistance truck platooning system as:

*“technology that integrates sensor array, wireless communication, vehicle controls, and specialized software to synchronize acceleration and breaking between two or more vehicles while leaving each vehicle’s steering control and systems monitoring and intervention in the control of its human operator.”*

However, to operate a truck platooning system the operator must first file a plan for general platoon operations with the State Highway Commission.

## Arizona

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In 2015 Arizona Governor Doug Ducey, signed [Executive Order No. 2015-09](#), directing various agencies to:

*“undertake any necessary steps to support the testing and*

*operation of self-driving vehicles on public roads within Arizona.”*

Further, the Executive Order allows the operation of self-driving vehicle pilot programs, where an operator may control an AV without being present in the vehicle. Indeed, Uber and Waymo both operate pilot programs in Arizona.

In response to the Executive Order, the Arizona Department of transportation formed the Arizona Self-Driving Oversight Committee, which is designed to support Arizona in research and development of self-driving technology. In March 2018, Governor Ducey signed [Executive Order No. 2018-04](#), which served as a general update to the 2015 Executive Order. Notably, the Executive Order requires any entity wishing to test an AV without a driver to first submit a written statement to the Arizona Department of Transportation certifying compliance with the rules of the Executive Order.

Lastly, in October of 2018, Governor Ducey signed [Executive Order No. 2018-09](#), creating the Institute of Automated Mobility (“IAM”). The IAM seeks to unite global companies and Arizona Universities with partners from the public and private sectors by providing AV testing facilities and resources.

## California

California has the most comprehensive body of AV law. California passed [Senate Bill No. 1298](#) in 2012, which authorizes AV testing on public roads. Additionally, California law also includes [Driverless Testing Regulations](#). Indeed, manufacturers must provide CalDOT with the following items in writing to conduct testing on an AV:

- the vehicle make;
- the vehicle model;
- the vehicle year;
- the vehicle’s full identification number; and
- the vehicle license plate number.

Additionally, California AV law provides specific requirements for testing an AV without a human driver. Further, California’s [Application Requirements](#) for the Driverless Autonomous Vehicle Tester Program, include: \$5 million in insurance coverage, CalDOT compliance certification, and a testing permit.

A unique feature of California AV law is the inclusion of a data

privacy clause which requires AV occupants to be informed about:

*“any information collected that is not necessary for the safe operation of the vehicle.”*

Indeed, AVs must include a data recorder to capture and store all of the data the AV records. And, the recorder must store the data in an accessible manner.

Additionally, California AV law defines requirements manufacturers must meet to advertise a vehicle as *autonomous*. Further, in 2017 California passed [Assembly Bill No. 669](#) allowing vehicle platoon testing in the State. The law states:

*“The department ... may conduct testing on technologies that enable drivers to safely operate motor vehicles with less than 100 feet between each vehicle or combination of those vehicles.”*

Lastly, in 2018 California passed [Assembly Bill No. 87](#), which allows California authorities to confiscate AVs operating on public roads without a proper permit.

## Colorado

In 2017 Colorado enacted [Senate Bill No. 213](#), allowing AVs to operate in the State. The law states:

*“A person may use an automated driving system to drive a motor vehicle ... if the system is capable of complying with every state and federal law that applies to the function that the system is operating.”*

Further, Colorado law addresses liability for a crash involving an AV. The law states:

*“Liability for a crash involving an automated driving system driving a motor vehicle that is not under human control is determined in accordance with applicable state law, federal law, or common law.”*

However, the law does not further specify how liability shall be allocated in such circumstances. Additionally, the Colorado Department of Transportation (“CDOT”) has initiated the RoadX plan. The RoadX plan is a collaborative enterprise focusing on building partnerships between CDOT and businesses delivering innovative transportation solutions.

## Connecticut

Connecticut enacted [Senate Bill No. 260](#) in 2017, which establishes a Task Force to study AV technology and make recommendations related to AV regulation. Additionally, the law lists multiple testing requirements for AVs. Three of the testing requirements are:

- an operator seated in the driver’s seat;
- properly filed registration requirements; and
- proof of liability insurance.

Further, the law calls for the establishment of a [Pilot Program](#) allowing up to four municipalities to test AVs. The Office of Policy and Management is tasked with oversight of the Pilot Program in conjunction with the Department of Motor Vehicles, Department of Transportation and other relevant agencies. The Pilot Program includes a required minimum framework for agreements between municipalities and AV testers and an application process. Ultimately, the Program’s goal is to allow for a variety of AV testing on Connecticut public roads.

## Delaware

Delaware Governor John C. Carney signed [Executive Order No. 14](#), in September 2017. The Executive Order establishes an Advisory Council on AVs. Further, the Executive Order provides that the Delaware Department of Transportation (“DelDOT”) will provide staff and fiscal support to the Advisory Council. The Advisory Council is tasked with developing recommendations for innovative tools and strategies to prepare Delaware’s transportation network for connected and autonomous vehicles.

Additionally, the University of Delaware’s Institute for Public Administration created a comprehensive [Report](#) on AV technology, law, and policy. The Report discusses the issue of liability for AVs and notes:

*“To avoid some uncertainty and clarify the liability landscape that will evolve in U.S. courts, some manufacturers are announcing that they will simply accept responsibility if there are incidents involving their autonomously operated vehicles.”*

The Report also discusses various cybersecurity and data privacy

concerns, explaining citizens need clear and plain language to describe data collection, storage, and protection policies.

## District of Columbia

Washington D.C. enacted [Bill No. 19-0931](#) in 2012, which permits AVs to operate on public roads under three conditions: the AV has a manual override, a driver is in the control seat, and the AV is capable of operating in compliance with traffic laws. Further, the D.C. law expressly insulates manufacturers from liability if a conventional vehicle is converted to an AV and causes an accident. The only exception to this law is if the alleged defect was present in the vehicle when it was originally manufactured. The law defines Autonomous Vehicle as:

*“a vehicle capable of navigating District roadways and interpreting traffic-control devices without a driver actively operating any of the vehicle’s control systems.”*

Additionally, D.C. enacted [Bill No. 22-0901](#) in 2018, which provides for the District Department of Transportation to create a [Working Group](#) to conduct a comprehensive study on AV technology, policy, and law.

## Florida

Florida enacted [House Bill No. 7027](#) in 2016, which allows a person who possesses a valid driver license to operate an AV on public roads in the State. Further, Florida law specifies that a person is the operator of an AV when the person causes the technology to engage, regardless of whether a person is present in the vehicle. Florida also enacted [House Bill No. 7061](#), which allows for vehicle platoons to operate in the State. Additionally, Florida law addresses liability by establishing that the person who engages autonomous technology is the operator, and the original manufacturer is not liable for a defect in autonomous technology unless the defect was present when the vehicle was manufactured.

Further, the Florida Department of Transportation created the Florida Automated Vehicles (“FAV”) program to educate the public by engaging stakeholders, developing research and pilot programs, and creating awareness of AV technologies. Lastly, the Florida Department of Highway Safety and Motor Vehicles issued an [Autonomous Vehicle Report](#), which discusses the impacts of AV technology in Florida.

## Georgia

In 2017 Georgia enacted [Senate Bill No. 219](#), which allows a person to operate an AV on public roads. One requirement to operate an AV in Georgia is that the vehicle is capable of achieving a minimal risk condition in the event of a failure. The law defines minimal risk condition as:

“a low-risk operating mode in which a fully autonomous vehicle operating without a human driver achieves a reasonably safe state, such as bringing the vehicle to a complete stop, upon experiencing a failure of the vehicle’s automated driving system that renders the vehicle unable to perform the entire dynamic driving task.”

Georgia law does not require the operator of an AV to have a valid driver’s license. Lastly, the Georgia House Autonomous Vehicle Technology Study Committee issued a [Report](#), which addressed AV technology, law, and policy. The Report identified privacy, cybersecurity, and radio frequency concerns as the most pressing issues related to AV deployment.

## Hawaii

Hawaii Governor, David Y. Ige, signed [Executive Order No. 17-07](#), directing the Hawaii Department of Transportation to develop testing mechanisms for autonomous vehicles in 2017. Further, the Executive Order establishes the position of Administrative Director in the Office of the Governor to serve as the AV contact for companies seeking to test self-driving vehicles in Hawaii.

Subsequently, the Hawaii legislature introduced [House Bill No. 2253](#), which set forth a plan for the development of optimal testing requirements and application approval processes. Further, the Bill also provided manufacturers with liability protection if a third party caused an accident by converting a conventional vehicle to an AV. However, the Bill did not ultimately become law. Additionally, the [Hawaii AV Institute](#) was created as a collaborative effort with the University of Hawaii's Manoa iLab to study and address all aspects of AVs including: technology, social impacts, economic impacts, law, and policy.

## Idaho

In 2018 Idaho Governor, C.L. “Butch” Otter, signed [Executive Order No. 2018-01](#), which calls for the creation of a [Committee](#) devoted to AV testing. The Committee’s stated mission includes:

- Identifying pertinent agencies to support the testing and deployment of AV technology;
- Coordinating with identified agencies to develop strategies for law and policy development;
- Reviewing existing State law to identify laws that impede AV progress; and
- Identifying strategic partnerships to leverage the social, economic, and environmental benefits of AV technology.

Further, the Committee has four central focus areas: State/Federal Activity, Safety and Infrastructure, Security and Privacy, and Testing and Deployment. The first Committee Report is due to the Governor’s office November 1, 2018.

## Illinois

Illinois enacted [House Bill No. 0791](#) in 2017. The law defines Automated Driving System Equipped Vehicle as:

*“any vehicle equipped with an Automated Driving System of hardware and software that are collectively capable of performing the entire dynamic driving task on a sustained basis, regardless of whether it is limited to a specific operational domain.”*

Additionally, the Illinois Center for Transportation (“ICT”) is a premier transportation research center that involves a collaborative effort between the Illinois Department of Transportation (“IDOT”) and several universities in Illinois. The ICT is developing the Illinois Automated and Connected Track (“I-ACT”). The I-ACT is a proposed test track facility to allow the State, universities, and the private sector to engage in a collaborative effort to research, test, and develop AV technology. In October of 2018, Governor Bruce Rauner signed [Executive Order No. 2018-13](#), to support the Autonomous Illinois Initiative.

## Indiana

In 2018 Indiana enacted [House Bill No. 1290](#), which defines and allows for vehicle platooning. The law defines Vehicle Platoon as:

*“a group of motor vehicles that are traveling in a unified manner under electronic coordination at speeds and following distances that are faster and closer than would be reasonable and prudent without electronic coordination.”*

Additionally, the law specifies the proper filing system to obtain a platoon permit. Further, Representative ED Soliday, of the Indiana House of Representatives Roads and Transportation Committee published a brief [Report](#) and overview of AV technology, law, and policy. The Report suggests the two main objectives for AV legislation should be to ensure public safety, and develop structure to encourage AV innovation, research, and development. Lastly, Indiana is home to the University of Notre Dame’s [Interdisciplinary Studies in Intelligent Systems Group](#), a pioneer in AV research and development.

## Iowa

Iowa has yet to pass law related to AV technology. However, in January 2017, the U.S. Department of Transportation named Iowa City and the University of Iowa's National Advanced Driving Simulator as one of ten designated automated vehicle proving ground sites. The [Iowa Automated Vehicle Proving Ground](#) ("AVPG") facilitates: simulations, on-road testing, and closed-course testing of AVs.

Additionally, the State partners with Iowa State University and the University of Iowa. Indeed, the Iowa Department of Transportation and the two Universities are the authors of a comprehensive plan for accelerating AV progress in Iowa. The [Plan](#) generally:

*"sets out a comprehensive vision for the Iowa Department of Transportation's role in the future of transportation environment, and a plan for accelerating progress towards the future."*

Further, the Plan explains the key benefits of AV technology lie in its ability to enhance mobility, safety, and freight movement.

## Kansas

Kansas has yet to pass law with respect to AVs. However Mike Floberg, Director of Innovative Technologies for the Kansas Department of Transportation ("KDOT"), provided [Testimony](#) to the Kansas Senate Transportation Committee ("KSTC") in 2018. According to Floberg's Testimony:

*"KDOT is developing the Division of Innovative Technologies, which will provide guidance on the rapidly evolving world of technology in transportation."*

Further, Captain Christopher Turner of the Kansas Highway Patrol provided [Testimony](#) to the KSTC in 2018. Captain Turner testified:

*"As this Committee moves forward with legislation setting a state framework to guide the deployment of autonomous vehicles ... consideration must be given to the commercial motor vehicle industry."*

Captain Turner further expressed the need for the development of a statutory framework designed to benefit all stakeholders and emphasized the importance of related cybersecurity issues.

## Kentucky

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In 2018 Kentucky passed [Senate Bill No. 116](#), which allows for vehicle platooning subject to specific requirements. For example, a platoon operator must provide notification and a general plan to the Kentucky State Police prior to operation. Further, vehicles in a platoon are required to display warnings for other motorists and law enforcement. Additionally, the University of Kentucky issued a comprehensive Report on AV technology, law, and policy.

The [Report](#) provides a review of all Kentucky laws and regulations relating to AVs and found an apparent need for future changes to laws respecting vehicle: licensing, registration, cell phone usage, and traffic enforcement. Additionally, the Report expresses a need for the legislature to develop a definition of operator, in the context of AVs. The Report also explains liability allocation is a major concern for manufacturers and the way in which liability is allocated could slow development and implementation of AVs in Kentucky.

## Louisiana

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Louisiana passed [House Bill No. 1143](#) in 2016, which defines

Autonomous Technology. The law defines Autonomous Technology as:

*“technology installed on a motor vehicle that has the capability to drive the vehicle on which the technology is installed in high-or full-automation mode, without any supervision by a human operator... including the ability to automatically bring the motor vehicle into a minimal-risk condition in the event of a critical vehicle or system failure.”*

Further, in response to a request of the State Legislature, the Department of Civil and Environmental Engineering at Louisiana State University (“LSU”) developed a comprehensive Report on AV technology, policy, and law.

LSU’s [Report](#) made several recommendations to the legislature. First, the Report recommends AVs be allowed on public roads for testing only, and should not be allowed for public use. Second, the Report recommends operators of AVs be required to obtain an AV license before operating an AV. Third, the Report recommends AVs be required to have an Event Data Recorder capable of storing and recording data prior to a collision.

## Maine

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Maine Governor, Paul R. LePage executed [Executive Order No. 2018-001](#) establishing the Maine Highly Automated Vehicles Advisory Committee in 2018. The Committee is designed to act as the State’s official review and advisory board for AV testing, deployment, operation, and related infrastructure. Further, the Committee is tasked with monitoring compliance with Federal and State AV regulations. And, the Committee is tasked with making recommendations regarding existing and proposed State law that would govern AV testing, deployment, and operation. In addition, the Executive Order also directs the Committee to evaluate and make recommendations regarding AV pilot projects. Lastly, the Executive Order directs the Committee to consider safety as the most important factor in its evaluation of proposed pilot projects.

Additionally, the Maine Legislature passed [H.P. 1204 – L.D. 1724](#), which creates the Commission on Autonomous Vehicles. The [Commission](#) is designed to allow AV testing, demonstration, and deployment in Maine. Further, the Commission is tasked with developing recommendations to the legislature for AV testing. And, the

Commission is also tasked with reviewing current State laws, recommending new legislation, and monitoring State compliance with Federal regulations.

## Maryland

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Maryland has yet to pass law with respect to AV technology. However, [House Bill No. 1013](#), the Safe Autonomous Vehicles (“SAVE”) Act was introduced by the legislature in 2017, but the bill was not enacted as law. Interestingly, the University of Maryland is home to the [Autonomous Vehicle Laboratory](#), which conducts research and development in the area of biologically inspired design and robotics.

Further, companies wishing to collaborate with the state of Maryland in order to test AV technologies are first required to complete an [Expression of Interest](#) with the Maryland Motor Vehicles Administration. Additionally, Maryland established a Connected and Automated Vehicles Working Group to coordinate the development and deployment of AV technology in Maryland. Lastly, the Maryland Department of Transportation (“MDOT”) has established a number of [Locations to Enable Testing Sites](#) for AV technologies.

## Massachusetts

Massachusetts Governor Charlie Baker executed [Executive Order No. 572](#) in 2016, to promote AV testing and deployment. The Executive Order calls for the establishment of the [AVs Working Group](#) to consult with AV experts and the Massachusetts Legislature. Further, the Working Group is tasked with supporting *Memorandum of Understanding* agreements, which include a process for companies to follow to obtain approval for AV testing including an [Application for AV Testing](#).

The AVs Working Group issued a [Report](#) in September 2018. The Report recommended regulations for testing including a requirement that a backup driver be present in AVs. Further, the Report recommended the establishment of a Committee comprised of members of the AVs Working Group, municipalities, law enforcement agencies, and first responders. According to the Report, the Committee should be tasked with supporting the evaluation of testing applications, monitoring in-state testing and reporting, proposing revisions in the permitting process, assessing pilot programs, and other general activities.

## Michigan

In 2017 Michigan passed comprehensive AV legislation including, [Senate Bill No. 995](#), [Senate Bill No. 996](#), [Senate Bill No. 997](#), and [Senate Bill No. 998](#). Michigan law allows AV operation without a driver present. The central goal of Michigan's AV legislation is to stimulate Michigan businesses that develop AV technologies. Indeed, Senator Mike Kowall introduced the legislation:

*“to attract jobs stemming from this developing industry.”*

Michigan law also allows for the operation of vehicle platoons. Further, manufacturers are not liable for AV incidents resulting from a modification made to an AV without the manufacturer's consent.

Michigan law calls for the creation of the [Michigan Council on Future Mobility](#) within MDOT, to provide annual recommendations on AV technology. Michigan law also initiates the SAVE project, an initiative that authorizes eligible motor vehicle manufacturers to make available to the public on-demand AV networks. Lastly, vehicle mechanics are not liable in products liability actions for faulty AV repairs, as long as repairs are made according to manufacture specifications.

## Minnesota

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Minnesota Governor Mark Dayton issued [Executive Order No. 18-04](#) in March of 2018, establishing a Governor’s Advisory Council on AVs. The Advisory Council will provide advice and support to the Governor, the Department of Transportation, the Department of Public Safety, and other governmental entities to support AV testing and deployment. Additionally, the Executive Order directs the Advisory Council to submit a comprehensive report related to AV technology, policy, economics, and law by December 1, 2018.

The Executive Order also calls for the formation of the [Interagency Connected and Automated Vehicle Team](#) (“I-CAV Team”). The I-CAV Team is responsible for:

- implementing the Executive Order;
- ensuring interagency coordination; and
- providing operational support to the Advisory Council.

Additionally, the University of Minnesota Transportation Policy and Economic Competitiveness (“TPEC”) Program has been publishing research

on AV policy issues in Minnesota since 2004. [TPEC](#) receives funding from the Minnesota Department of Transportation.

## Mississippi

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Mississippi passed [House Bill No. 1343](#) in 2018, which allows vehicle platoons to operate in the State. However, the operation of vehicle platoons is conditional upon approval of a platoon application from the Mississippi Department of Transportation. And, the application must include a platoon plan. Further, the law calls for the Motor Carrier Division of the Department of Public Safety to develop the acceptable standards required for each portion of platoon plans.

Additionally, the Mississippi State University’s Center for Advanced Vehicular Systems (“CAVS”) hosted the 3<sup>rd</sup> annual Roundtable on the Purpose of Autonomous Driving (“ROAD”). [ROAD](#) is an international conference that discusses issues relating to advanced AV systems. CAVs is an interdisciplinary research center with a focus on off-road autonomous vehicles, pedestrian-vehicle interactions, and developing autonomous systems for industrial purposes.

## Missouri

Missouri has yet to pass law with respect to AV technology. However, the Missouri Department of Transportation (“MoDOT”) identified assessing infrastructure standards to interface with AVs as a [2019 Project of Priority](#). Further, [Senate Bill No. 811](#) is currently in the Missouri legislature and would allow for the operation of AVs without a human driver, as well as AV ride sharing. Indeed, the Bill states:

*“driverless-capable vehicles may provide transportation of persons or goods for compensation.”*

Further, the Bill also states:

*“An entity may connect passengers to driverless-capable vehicles exclusively or as part of a digital network.”*

Additionally, MoDOT’s [Long Range Transportation Plan](#) sets out a twenty-five-year vision for the State’s transportation system.

## Montana

In 2017, Montana passed [Joint Resolution No. 40](#) to promote the study of AV technology, policy, and law. The Joint Resolution states:

*“More study is needed to determine whether laws need changing to accommodate autonomous vehicles.”*

Further, the Joint Resolution calls for the establishment of a Passenger Transportation Commission dedicated to AV technology.

Additionally, Montana State University collaborates on research with the Western Transportation Institute to conduct research in the field of AVs through the [Mobility and Public Transportation](#) program. The Mobility and Public Transportation program is a collaborative effort focusing on rural AV and transportation research. The program facilitates mobility improvements in Montana for individuals of all ages and abilities by focusing on innovative transportation solutions.

## Nebraska

Nebraska approved [Legislative Bill No. 989](#) in April of 2018. The law is designed to allow AVs to operate in the state. First, the law allows for AVs to operate on public roads without a driver subject to certain conditions. The law states:

*“the operation on the public roads of this state of an automated-driving-system-equipped vehicle capable of performing the entire dynamic driving task within its operational design domain while a conventional driver is present is lawful.”*

And, Nebraska law also specifies AV operators must demonstrate satisfactory financial stability and compliance with state insurance requirements before operating the vehicle. In the event of an accident involving an AV, the owner of the AV is required to report the accident. Further, Nebraska law clearly states that no additional liability will be imposed on the manufacturers, developers, or AV owners beyond what the State already allows.

## Nevada

In 2011, Nevada passed [Assembly Bill No. 511](#), and became the first state to authorize AV testing on public roads. Additionally, in 2013 Nevada passed [Senate Bill No. 313](#), which provides that manufacturers are not liable for AV accidents if a third party converted the vehicle to an AV. Further, Nevada law requires that an entity must provide proof of \$5 million in insurance coverage before testing an AV.

In 2017, Nevada enacted [Assembly Bill No. 69](#), which changes the previous testing directives from 2011 by allowing manufacturers and developers to self-certify compliance with current testing requirements to the [Nevada Department of Motor Vehicles](#) (“NDMV”). Manufacturers and developers need to submit an [Autonomous Vehicle Testing Registry Application](#) to the NDMV to self-certify compliance for AV testing. Once the application is approved, the NDMV issues a certificate of compliance for testing along with license plates designated for AVs. Lastly, Nevada law allows for vehicle platooning.

## New Hampshire

New Hampshire has yet to pass law regarding AVs. However, [House Bill No. 314](#) passed both the House and Senate in July 2018. The Bill stated:

*“Vehicles equipped with autonomous technology may be operated on roads in this state”*

But, Governor Chris Sununu vetoed the Bill. The [Governor’s Veto Message](#) cited a lack of account for public safety in the Bill as the main reason for the veto. Indeed, the Veto Message stated:

*“House Bill No. 314 is a flawed bill that does not adequately account for public safety.”*

The Veto Message warned as written, the Bill may attract less responsible actors to the State to develop AVs. Governor Sununu further stated the Bill was well intentioned, and expressed his desire for the House and Senate continue to work together to pass a bill encouraging the development of AV technologies.

## New Jersey

New Jersey has not passed law relating to AVs. However, [Senate Bill No. 2149](#) is currently pending in the New Jersey Legislature. The Bill is designed to permit AV testing and use in New Jersey, subject to certain circumstances. Indeed, the Bill states:

*“An autonomous vehicle may be operated on any public highway, road, or street within the State for testing purposes.”*

Further, the Bill defines Autonomous Vehicle as:

*“a motor vehicle that uses autonomous technology... or any other technology to perform the mechanical operations of driving.”*

The Bill also requires manufacturers performing testing to provide proof of insurance for at least \$5,000,000. Lastly, the New Jersey Center for Autonomous Vehicle Research and Development pioneers research in AV technology as part of a collaborative effort between Princeton University and the Fort Monmouth Economic Revitalization Authority.

## New Mexico

New Mexico has yet to pass law relating to AVs. However, New Mexico has begun discussions with respect to how the state will regulate AVs. In 2018, the New Mexico Department of Transportation (“NMDOT”) held a summit to discuss AVs. Indeed, according to NMDOT Secretary, Tom Church:

*“By the time the industry hits us, even if we can participate in some of the test, we’ll have laws in place.”*

Further, the [Intelligent Transportation Systems](#) program is run under the direction of NMDOT. The Intelligent Transportation Systems program seeks to improve transportation safety and mobility through the use of advanced communications technologies and data collection.

## New York

In 2017, New York enacted [Senate Bill No. 2005](#), which allows

for the State Commissioner of Motor Vehicles to approve AV testing. Indeed, the law states:

*“the New York state commissioner of motor vehicles may approve demonstrations and tests consisting of the operation of a motor vehicle equipped with autonomous vehicle technology.”*

The law also specifies certain AV application requirements. For example, to receive approval for testing, AVs must:

- comply with federal and state safety standards;
- have a person with a valid driver’s license seated in the driver’s seat; and
- have at \$5 million in insurance coverage.

Further, the law specifies that tests and demonstrations must be conducted under the supervision of the New York State Police. Lastly, the New York Department of Motor Vehicles accepts [Applications for Testing](#) of AV technology.

## North Carolina

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In 2017, North Carolina passed [House Bill No. 469](#), titled *An Act to Regulate the Operation of Fully Autonomous Motor Vehicles on the Public Highways of this State*. The North Carolina law established the AV Committee within the Department of Transportation to provide insight, analysis, and recommendations related to AV deployment. AVs are permitted to operate in North Carolina if they satisfy the following requirements:

- compliance with state and federal motor vehicle standards;
- the vehicle is capable of stopping at the scene if involved in an accident;
- the vehicle is capable of stopping if the automated system fails;
- the vehicle is covered by a vehicle liability policy; and
- the vehicle is lawfully registered.

Interestingly, the operator of a fully autonomous AV is not required to be licensed to drive, however the operator must be at least 12 years old to travel unsupervised in an AV.

Further, the owner of an AV is responsible if an AV commits any traffic violations. Lastly, in 2017 North Carolina also enacted [House Bill No. 716](#), allowing vehicle platooning in the State.

## North Dakota

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In 2015 North Dakota enacted [House Bill No. 1065](#), which called for a legislative management study to analyze whether laws needed to be put in place for AV deployment. Additionally, the law defines Automated Motor Vehicle as:

*“a vehicle capable of operating in a full automation mode where full automation mode is defined... as the unconditional, full-time performance by an automated driving system of all aspects of the dynamic driving task.”*

Further, in 2017 North Dakota passed [House Bill No. 1202](#), which called for the Department of Transportation to conduct a study in conjunction with the AV industry. The purpose of the proposed study is to analyze AV technology and report findings with legislative proposals to the State legislature.

## Ohio

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In 2018, Ohio Governor John Kasich signed [Executive Order No. 2018-01K](#), which established the DriveOhio plan. [DriveOhio](#) is designed to allow for intelligent technologies to be incorporated in Ohio transportation vehicles and infrastructure. Indeed, the DriveOhio program calls for the creation of an Expert Advisory Board (“Board”) to review progress in technological advancements in smart mobility, data analytics, data security, workforce development, funding and research opportunities, and regulatory developments. Further, the Board is tasked with reporting its findings and making recommendations on regulatory policies to help integrate smart mobility technologies in Ohio. And, Governor Kasich signed [Executive Order 2018-04K](#), which authorizes testing and pilot programs for AVs on any public road in Ohio.

Companies need to provide the Ohio Department of Transportation with the following information: business name and address, vehicle make, model, and license plate number, contact information for the operator, proof of insurance, the municipalities where the vehicle will be tested, and safety certification to operate an AV in Ohio. Additionally,

companies may enter into the DriveOhio Pilot Program, to test AVs to meet State requirements. Ultimately, testing on public roads and highways in Ohio is permitted, regardless of participation in the pilot program.

## Oklahoma

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Oklahoma has yet to enact law regarding AVs. However, the Oklahoma Department of Transportation recently published a [Freight Transportation Plan](#). The Plan seeks to provide a framework for a safe, reliable, and productive freight transportation system. The Glossary of the plan defines autonomous vehicle technology as a:

*“Robotic vehicle that is designed to travel between destinations without a human operator. To qualify as fully autonomous, a vehicle must be able to navigate without human intervention to a predetermined destination over roads that have not been adapted for its use.”*

Further, the plan discusses the importance of incorporating both AVs and vehicle platoon systems in the future of freight transportation.

## Oregon

In 2018, Oregon enacted [House Bill No. 4063](#), which establishes a [Task Force](#) dedicated to the coordination of AV programs and policies. In September of 2018, the Task Force issued a comprehensive Report, which makes certain recommendations to the Oregon Legislature. The [Report](#) recommends a permitting process for testing AVs in Oregon. The proposed permitting process would:

- collect information about vehicles and drivers involved in testing;
- set minimum insurance requirements;
- require safety assurances; and
- direct testing entities to engage with law enforcement.

Currently, Oregon has a [Voluntary Testing Notification Process](#). The testing process is voluntary, but allows companies to work with the Oregon Department of Transportation to provide feedback and establish working relationships. Additionally, Oregon enacted [House Bill No. 4059](#) in 2018, allowing vehicle platooning in the State.

## Pennsylvania

Pennsylvania passed [Senate Bill No. 1267](#) in 2016. The law allows for the allocation of up to \$40 million in state funds to local governments for upgrading and implementing intelligent transportation system applications. Additionally, the Pennsylvania Department of Transportation (“PennDOT”) issued [Guidance for AV Safety](#). The Guidance recommends PennDOT collect mandatory data from all AV testers. However, Pennsylvania testing requirements are currently voluntary. To comply with the voluntary procedures to conduct testing, entities must complete a [Notice of Testing Form](#) and if necessary, a [Notice of Testing Supplement](#).

Further, Pennsylvania created a [Task Force](#), which issued a Report on Autonomous Vehicle Policy. The [Report](#) suggests minimum approval requirements for AV testing. In 2018, Pennsylvania passed [House Bill No. 1958](#), which allows certain vehicle platoons to operate in the Commonwealth. Lastly, Carnegie Mellon University (“CMU”) in Pittsburgh, Pennsylvania is the birthplace of AV technology. Indeed, the CMU Robotics Institute is home to the General Motors-Carnegie Mellon Autonomous Driving Collaborative Research Lab.

## Rhode Island

Rhode Island has yet to pass law relating to AVs. [Senate Bill No. 2514](#) was introduced in 2016 and defined *autonomous vehicle* as:

*“Any vehicle equipped with autonomous technology.”*

The bill would have allowed AVs to operate in the state. Additionally, the bill included a provision that required the Division of Motor Vehicles to prepare an AV report to the State Legislature. However, the Bill did not become law.

The Rhode Island Department of Transportation (“RIDOT”) recently released a request for proposals to test AVs. RIDOT Chief Operating Officer Shoshana Lew stated:

*“We at the department are very focused on managing the assets that we have for now, but we want to have our eye on the future, recognizing that there are a lot of changes that are coming fast.”*

RIDOT’s efforts are part of the [Rhode Island Transportation Innovation Partnership](#) (“TRIP”) program. TRIP is designed to improve mobility and safe transportation in Rhode Island.

## South Carolina

South Carolina passed [House Bill No. 3289](#) in 2017, allowing vehicle platooning systems on public roads. Additionally, in 2017 South Carolina received a \$4 million grant from the Federal Highway Administration. The [Award](#) was made to Greenville County to deploy an automated transit system. County Officials will allocate funds to deploy a system of taxi-shuttles called A-Taxis providing shuttle services for residents. Further, the South Carolina Department of Transportation (“SCDOT”) issued a Report on the structural efficiencies of South Carolina transportation. The [Report](#) defines Autonomous Vehicles as:

*“Vehicles in which operation occurs without direct driver input to control the steering, acceleration, and braking and are designed so that the driver is not expected to constantly monitor the roadway while operating in the self-driving mode.”*

Further, the Report discusses AVs and other innovative technologies as part of a South Carolina’s strategic plan to rebuild transportation infrastructure and provide adequate, safe, and efficient transportation services to the people of the State.

## South Dakota

South Dakota has yet to pass law relating to AVs. [Senate Bill No. 139](#) was introduced in 2014. Interestingly, the Bill defined *operator* to mean:

*“Any individual seated in the driver’s seat, or, alternately, the person who causes the technology of an autonomous motor vehicle to engage.”*

Further, the Bill proposed fees and application requirements for manufacturers wishing to test AVs. Additionally, the Bill included operational requirements for AV testing. However, the bill did not become law.

## Tennessee

In 2015, Tennessee passed [Senate Bill No. 598](#), which prohibits local governments from banning the use of AVs. Further, in 2017 Tennessee enacted [Senate Bill No. 151](#), which is titled the Automated Vehicles Act (“AV Act”). The AV Act defines Automated Driving System (“ADS”) as:

*“Technology installed on a motor vehicle that has the capability to drive the vehicle*

*on which the technology is installed in high or full automation mode, without any supervision by a human operator... including the ability to automatically bring the motor vehicle into a minimal risk condition in the event of a critical vehicle or system failure or other emergency event”*

Interestingly, the AV Act allows an ADS to operate on the streets and highways of Tennessee without a human driver physically present in the vehicle. However, to operate without a driver present an AV must meet certain requirements:

- the vehicle is capable of compliance with Federal and State law;
- the vehicle is capable achieving a minimal risk condition in the event of ADS failure;
- the vehicle is registered; and
- the vehicle has insurance coverage.

Finally, the AV Act explains liability for accidents involving an AV is determined in accordance with product liability law, common law, or other applicable federal or state law.

## Texas

Texas passed [Senate Bill No. 2205](#) in 2017, which allows for AV operation in the State. The Texas law concisely defines automated motor vehicle:

*“a motor vehicle on which an automated driving system is installed.”*

Further, the Texas law allows an AV to operate regardless of whether someone is present in the vehicle. However, an unmanned AV must:

- be in compliance with traffic laws;
- include a recording device for vehicle data;
- be registered and titled in the state; and
- be covered by liability insurance.

Additionally, Texas enacted [House Bill No. 1791](#), which allows for vehicle platooning through the use of connected braking systems.

## Utah

Utah has enacted three laws with respect to AVs. First, in 2015 Utah passed [House Bill No. 373](#), which authorizes the Department of Transportation to conduct a connected vehicle testing program. Second, in 2016 Utah enacted [House Bill No. 280](#), which requires each agency in the State with regulatory authority impacting AVs to facilitate and encourage the responsible testing and operation of AV technology. Pursuant to the passing of HB No. 280, a [Report](#) to the Utah Legislature establishes best practices for AV regulation. The Report states:

*“The primary recommendation of this report is that the State continue studying the issues surrounding ... AVs as the landscape continues to rapidly evolve.”*

Further, the Report suggests that implementing new policies or legislation now would be premature. Lastly, in 2018 Utah enacted [Senate Bill No. 56](#), which allows for the operation of vehicle platooning systems in the State.

## Vermont

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In 2017 Vermont enacted [House Bill No. 494](#), which calls for the Secretary of Transportation to convene a meeting of public and private stakeholders with AV expertise. Subsequently, a Report to the Vermont General Assembly was prepared regarding policy and planning for AV development. The [Report](#) recommends a focus on facilitating the transition to AVs for Vermonters in a safe and efficient way by:

- providing the statutory authority for a permit process that allows and regulates AV testing in Vermont; and
- providing the statutory authority to explicitly accommodate and specifically regulate automated driving on public roads in Vermont by the general public.

Currently, there are no laws in Vermont that explicitly prohibit or allow the testing of AVs. Indeed, an AV can legally travel on a road in VT if it complies with current state law, [VSA Title 23](#), which regulates:

- vehicle registration;
- driver licensing;
- vehicle on the road operation;
- insurance requirements; and
- vehicle inspection.

Lastly, the Report recommends assigning a legal obligation for compliance with Title 23.

## Virginia

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Virginia has yet to pass legislation relating to AVs. In 2015, Governor Terry McAuliffe announced the opening of the Virginia Automated Corridors (“AVCs”), a 70-mile network of highways and arterial roads in Northern Virginia. The AVCs are outfitted with high-definition mapping and data acquisition systems to support AV testing. The AVCs are operated and maintained by the Virginia Department of Transportation, Department of Motor Vehicles and Virginia Tech. Further, Virginia established the [Connected and Autonomous Vehicle Program](#) to guide the Department in the deployment of AV technologies.

## Washington

In 2017 Washington Governor Jay Inslee enacted [Executive Order 17-02](#), calling for the establishment of an AV Work Group to advance AV technology and policy within the State. According to the Executive Order, entities conducting AV testing with a human present in the vehicle must self-certify compliance to Department of Labor (“DOL”) with testing requirements, including:

- possessing a valid driver’s license;
- proof of financial responsibility; and
- the operator’s ability to direct the vehicle.

Additionally, entities conducting AV testing without a human present in the vehicle must self-certify compliance to the DOL with additional testing requirements. For example, the automated driving system must have the ability to bring the AV to a safe condition in the event of failure. After providing certification to the DOL, entities may immediately begin testing pilot programs.

Subsequent to the Executive Order, Washington enacted [House](#)

[Bill No. 2970](#), establishing an AV Work Group. The AV Work Group is designed to develop and make recommendations to the Transportation Commission (“WSTC”) regarding AV development. The AV Work Group has three primary responsibilities. First, the Work Group serves as the central clearing house for all AV related issues. Second, the Work Group is tasked with following developments in AV technology, law, and policy and identifying potential improvements. Third, the Work Group is tasked with making recommendations to WSTC.

## West Virginia

West Virginia has yet to pass legislation related to AVs. [House Bill No. 2910](#) was introduced in 2017. The Bill was designed to allow AV operation in West Virginia. Indeed, the Bill stated:

*“A person who possesses a valid driver license may operate an autonomous vehicle in autonomous mode on roads and highways in this state.”*

However, the Bill did not ultimately become law.

## Wisconsin

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Wisconsin is home to one of ten U.S. Department of Transportation Proving Grounds. Indeed, the University of Wisconsin Madison is a major research and development center for AV technology. Governor Scott Walker signed [Executive Order No. 245](#) in May 2017, which created the Governor’s Steering Committee on AVs. The Committee is tasked with advising the Governor on how to best advance AV testing and operation in Wisconsin. In response to the Executive Order, the Governor’s Steering Committee issued a comprehensive AV Report, which states:

*“The ongoing deployment of ... AVs has the potential to provide Wisconsin residents, visitors and businesses with enhanced mobility, safer travel and economic opportunities.”*

The [Report](#) makes two primary recommendations.

First, the Report recommends the removal or modification of all Wisconsin laws that are barriers to safe AV testing and deployment. Further, the Report stresses the importance of writing clear laws allowing Wisconsin residents and

businesses to realize the potential and advantages of AV technology. Second, the Report recommends the State continue to monitor AV technologies by establishing an AV working group. Finally, Wisconsin enacted [Senate Bill No. 695](#) in 2018, which defines Vehicle Platoon as:

*“a group of individual motor vehicles traveling in a unified manner at electronically coordinated speeds.”*

Further, the law allows vehicle platoons to operate in the State.

## Wyoming

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The state of Wyoming has not yet enacted law relating to AVs. However in March of 2018, the Wyoming Department of Transportation issued a [Report](#), which discusses AV technology, policy, and law. Additionally, Wyoming has a [Pilot Program](#) dedicated to advancing connected vehicle technology. The Pilot Program seeks to improve the Wyoming Department of Transportation’s monitoring and reporting of road conditions to vehicles with vehicle-to-vehicle, vehicle-to-infrastructure, and infrastructure-to-vehicle communication technologies.

## Global Legislative Actions

## Canada

In 2017, Canada’s Information and Communications Technology Council issued a comprehensive report, [Autonomous Vehicles and the Future of Work in Canada](#). Further, the 2017 Canadian Budget committed \$76.7 million towards the modernization of Canada’s transportation system. A portion of the investment is appropriated to:

*“Fund the development of regulations for the safe adoption of connected and autonomous vehicles.”*

Further, the Department of Transport published [Guidelines for Trial Organizations](#) (“Guidelines”) for companies wishing to test AVs in Canada. The Guidelines establish voluntary minimum safety requirements that trial organizations are expected to follow when operating in Canada. Further, provincial and territorial jurisdictions are still responsible for approving requests from trial organizations, based on respective laws and regulations.

In June 2018 the Canadian Council of Motor Transport Administrators published the [Canadian Jurisdictional Guidelines for](#)

[the Safe Testing and Deployment of Highly Automated Vehicles](#) (“Jurisdictional Guidelines”). The Jurisdictional Guidelines focus on ensuring Canada works towards achieving the benefits of AVs while maintaining road safety during testing and deployment on public roads. Lastly, Southern Ontario serves as a hub for Canada’s AV industry. Indeed, Southern Ontario is the fourth largest exporter of vehicles in the world, including manufacturing facilities for GM and Ford.

## United Kingdom

According to the UK Department of Transport, it is legal in the United Kingdom to operate driverless cars on any public road without permits or extra insurance. The UK has established the [Centre for Connected and Autonomous Vehicles](#) (“Centre”) as part of the Department of Transport and Department of Energy. The Centre seeks to provide a single point of contact for the industry and to coordinate government activities relating to AVs. Additionally, the UK has six pilot programs. Further, in June of 2018 the UK allocated £30 million in funding to UK businesses and research organizations to advance the development of self-driving vehicles.

## The Netherlands

The Dutch Government approved AV testing in 2015. The [Dutch Vehicle Authority](#) (“RDW”) is responsible for the admission of AVs to public roads. The RDW provides various resources to companies using intelligent information and communication technologies on public roads. Additionally, the RDW provides [Application Requirements](#) for AV testing on its website. Dutch law was originally designed to allow companies to apply for a permit to conduct AV testing with a human driver at the wheel. However, in February 2017 the government approved a bill to allow AV trials without a driver. Before testing, companies must demonstrate testing will be conducted in a safe manner.

The Dutch established the [Declaration of Amsterdam](#) on connected and automated driving. Through the Declaration of Amsterdam, the European Commission and private sector agreed on joint goals and action to facilitate the introduction of AVs in Europe. The goal of the Declaration of

Amsterdam is to allow for constancy in legislation and policies to enable cross-border mobility across the EU.

## Singapore

Singapore amended the [Road Traffic Act](#) in 2017, allowing self-driving vehicles to be tested on public roads. Subsequently, Singapore’s Land Transport Authority (“LTA”) introduced a regulatory framework for AV testing. Further, all AV testing requires logging of travel data to enable accident investigations and liability claims. AV operators are required to:

- have a qualified safety driver who will be able to take control of the vehicle in an emergency;
- hold third-party liability insurance; and
- share data from the trials with the LTA.

Further, LTA has executed agreements with companies to develop autonomous truck platooning technologies.

## Appendix

## Laws by State

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<b>State</b>	<b>Law</b>	<b>Year</b>
Alabama	<a href="#"><u>SJR No. 81</u></a>	2016
	<a href="#"><u>Senate Bill No. 125</u></a>	2018
Arkansas	<a href="#"><u>House Bill No. 1754</u></a>	2017
Arizona	<a href="#"><u>Executive Order No. 2015-09</u></a>	2015
	<a href="#"><u>Executive Order No. 2018-04</u></a>	2018
	<a href="#"><u>Executive Order No. 2018-09</u></a>	2018
California	<a href="#"><u>Senate Bill No. 1298</u></a>	2012
	<a href="#"><u>Assembly Bill No. 669</u></a>	2017
	<a href="#"><u>Assembly Bill No. 87</u></a>	2018
Colorado	<a href="#"><u>Senate Bill No. 213</u></a>	2017
Connecticut	<a href="#"><u>Senate Bill No. 260</u></a>	2017
Delaware	<a href="#"><u>Executive Order No. 14</u></a>	2017
District of Columbia	<a href="#"><u>Bill No. 19-0931</u></a>	2012
	<a href="#"><u>Bill No. 22-0901</u></a>	2018
Florida	<a href="#"><u>House Bill No. 7027</u></a>	2016
	<a href="#"><u>House Bill No. 7061</u></a>	2016
Georgia	<a href="#"><u>Senate Bill No. 219</u></a>	2017
Hawaii	<a href="#"><u>Executive Order No. 17-07</u></a>	2017
	<a href="#"><u>House Bill No. 2253</u></a>	2018
Idaho	<a href="#"><u>Executive Order No. 2018-01</u></a>	2018

Illinois	<a href="#"><u>House Bill No. 0791</u></a>	2017
	<a href="#"><u>Executive Order No. 2018-13</u></a>	2018
Indiana	<a href="#"><u>House Bill No. 1290</u></a>	2018
Kentucky	<a href="#"><u>Senate Bill No. 116</u></a>	2018
Louisiana	<a href="#"><u>House Bill No. 1143</u></a>	2016
Maine	<a href="#"><u>Executive Order No. 2018-001</u></a>	2018
	<a href="#"><u>H.P. 1204 – L.D. 1724</u></a>	2018
Massachusetts	<a href="#"><u>Executive Order No. 572</u></a>	2016
Michigan	<a href="#"><u>Senate Bill No. 995</u></a>	2016
	<a href="#"><u>Senate Bill No. 996</u></a>	2016
	<a href="#"><u>Senate Bill No. 997</u></a>	2016
	<a href="#"><u>Senate Bill No. 998</u></a>	2016
Minnesota	<a href="#"><u>Executive Order No. 18-04</u></a>	2018
Mississippi	<a href="#"><u>House Bill No. 1343</u></a>	2018
Montana	<a href="#"><u>Joint Resolution No. 40</u></a>	2017
Nebraska	<a href="#"><u>Legislative Bill No. 989</u></a>	2018
Nevada	<a href="#"><u>Assembly Bill No. 511</u></a>	2011
	<a href="#"><u>Senate Bill No. 313</u></a>	2013
	<a href="#"><u>Assembly Bill No. 69</u></a>	2017
New York	<a href="#"><u>Senate Bill No. 2005</u></a>	2017
North Carolina	<a href="#"><u>House Bill No. 469</u></a>	2017
	<a href="#"><u>House Bill No. 716</u></a>	2017

North Dakota	<a href="#">House Bill No. 1065</a>	2015
	<a href="#">House Bill No. 1202</a>	2017
Ohio	<a href="#">Executive Order No. 2018-01K</a>	2018
	<a href="#">Executive Order No. 2018-04K</a>	2018
Oregon	<a href="#">House Bill No. 4059</a>	2018
	<a href="#">House Bill No. 4063</a>	2018
Pennsylvania	<a href="#">Senate Bill No. 1267</a>	2016
	<a href="#">House Bill No. 1958</a>	2018
South Carolina	<a href="#">House Bill No. 3289</a>	2017
Tennessee	<a href="#">Senate Bill No. 598</a>	2015
	<a href="#">Senate Bill No. 151</a>	2017
Texas	<a href="#">House Bill No. 1791</a>	2017
	<a href="#">Senate Bill No. 2205</a>	2017
Utah	<a href="#">House Bill No. 373</a>	2015
	<a href="#">House Bill No. 280</a>	2016
	<a href="#">Senate Bill No. 56</a>	2018
Vermont	<a href="#">House Bill No. 494</a>	2017
Washington	<a href="#">Executive Order 17-02</a>	2017
	<a href="#">House Bill No. 2970</a>	2018
Wisconsin	<a href="#">Executive Order No. 245</a>	2017
	<a href="#">Senate Bill No. 695</a>	2018

## Laws by Year

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<b>Year</b>	<b>State</b>	<b>Law</b>
2011	Nevada	<a href="#"><u>Assembly Bill No. 511</u></a>
2012	California	<a href="#"><u>Senate Bill No. 1298</u></a>
	District of Columbia	<a href="#"><u>Bill No. 19-0931</u></a>
2013	Nevada	<a href="#"><u>Senate Bill No. 313</u></a>
2014	N/A	N/A
2015	Arizona	<a href="#"><u>Executive Order No. 2015-09</u></a>
	North Dakota	<a href="#"><u>House Bill No. 1065</u></a>
	Tennessee	<a href="#"><u>Senate Bill No. 598</u></a>
	Utah	<a href="#"><u>House Bill No. 373</u></a>
2016	Alabama	<a href="#"><u>SJR No. 81</u></a>
	Florida	<a href="#"><u>House Bill No. 7027</u></a>
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Utah	<a href="#"><u>House Bill No. 280</u></a>	

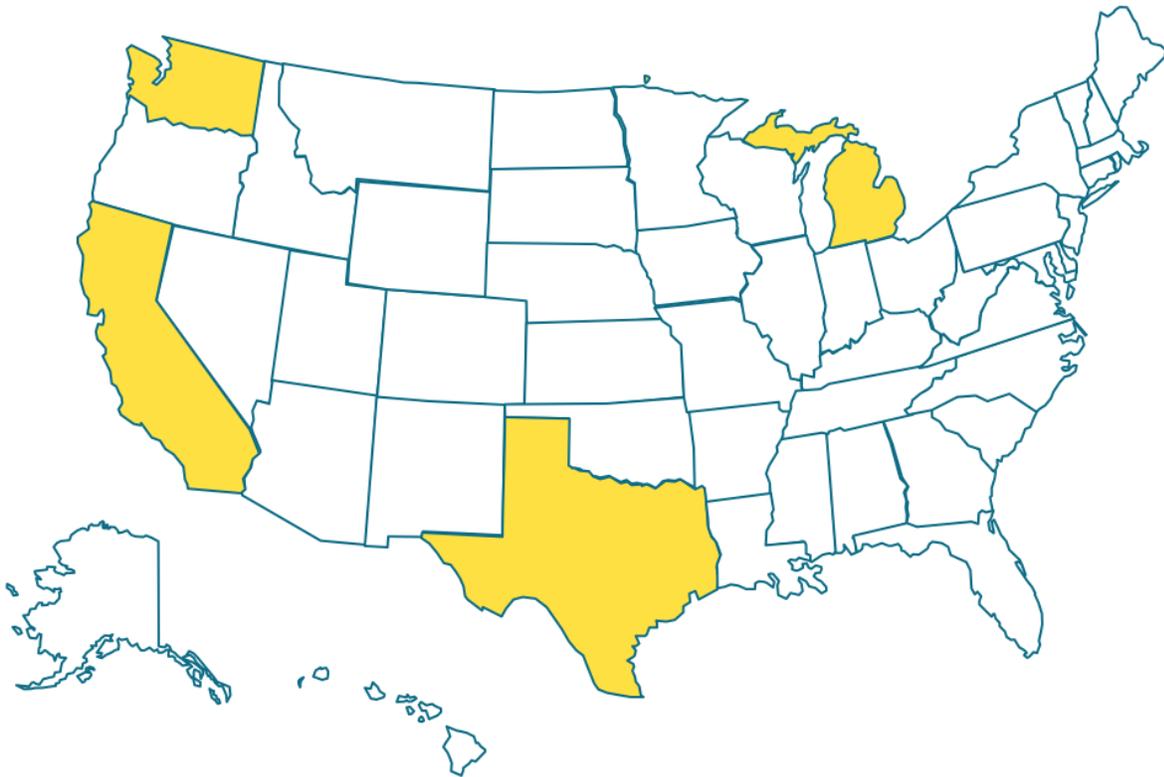
2017	Arkansas Arkansas California Colorado Connecticut Delaware Georgia Hawaii Illinois Montana Nevada New York North Carolina North Carolina North Dakota South Carolina Tennessee Texas Texas Vermont Wisconsin	<a href="#">House Bill No. 1754</a> <a href="#">House Bill No. 1754</a> <a href="#">Assembly Bill No. 669</a> <a href="#">Senate Bill No. 213</a> <a href="#">Senate Bill No. 260</a> <a href="#">Executive Order No. 14</a> <a href="#">Senate Bill No. 219</a> <a href="#">Executive Order No. 17-07</a> <a href="#">House Bill No. 0791</a> <a href="#">Joint Resolution No. 40</a> <a href="#">Assembly Bill No. 69</a> <a href="#">Senate Bill No. 2005</a> <a href="#">House Bill No. 469</a> <a href="#">House Bill No. 716</a> <a href="#">House Bill No. 1202</a> <a href="#">House Bill No. 3289</a> <a href="#">Senate Bill No. 151</a> <a href="#">House Bill No. 1791</a> <a href="#">Senate Bill No. 2205</a> <a href="#">House Bill No. 494</a> <a href="#">Executive Order No. 245</a>
2018	Alabama Arizona	<a href="#">Senate Bill No. 125</a> <a href="#">Executive Order No. 2018-04</a>

	Arizona	<a href="#"><u>Executive Order No. 2018-09</u></a>
	California	<a href="#"><u>Assembly Bill No. 87</u></a>
	District of Columbia	<a href="#"><u>Bill No. 22-0901</u></a>
	Hawaii	<a href="#"><u>House Bill No. 2253</u></a>
	Idaho	<a href="#"><u>Executive Order No. 2018-01</u></a>
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	Indiana	<a href="#"><u>House Bill No. 1290</u></a>
	Kentucky	<a href="#"><u>Senate Bill No. 116</u></a>
	Maine	<a href="#"><u>Executive Order No. 2018-001</u></a>
	Maine	<a href="#"><u>H.P. 1204 – L.D. 1724</u></a>
	Minnesota	<a href="#"><u>Executive Order No. 18-04</u></a>
	Mississippi	<a href="#"><u>House Bill No. 1343</u></a>
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	Pennsylvania	<a href="#"><u>House Bill No. 1958</u></a>
	Utah	<a href="#"><u>Senate Bill No. 56</u></a>
	Washington	<a href="#"><u>House Bill No. 2970</u></a>
	Wisconsin	<a href="#"><u>Senate Bill No. 695</u></a>

## Data Recording, Privacy & Security

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States have also begun to recognize the increasing need to develop regulatory frameworks for the data recording, privacy, and security issues surrounding AV technology. The map below includes the four states with laws relating to AV data recording, privacy, and security.

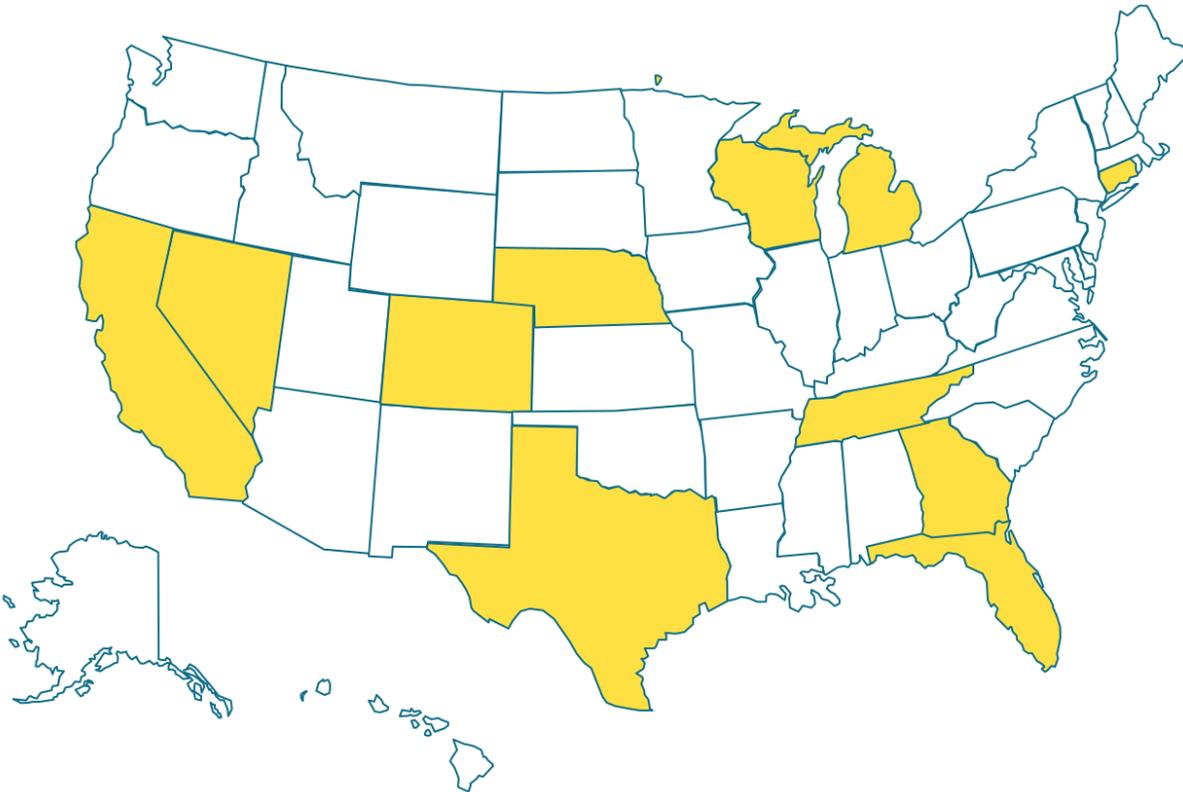


Interestingly, there are a wide diversity of approaches to regulating AV data. For example, California requires AV occupants to be informed of any information collected not necessary for the safe operation of the vehicle. However, the scope of what data are necessary for the safe operation of the vehicle is not further explained.

## Liability Allocation

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Several states have passed laws including clauses allocating liability in certain circumstances pertaining to AVs. Indeed, the map below includes all states that have passed such law.

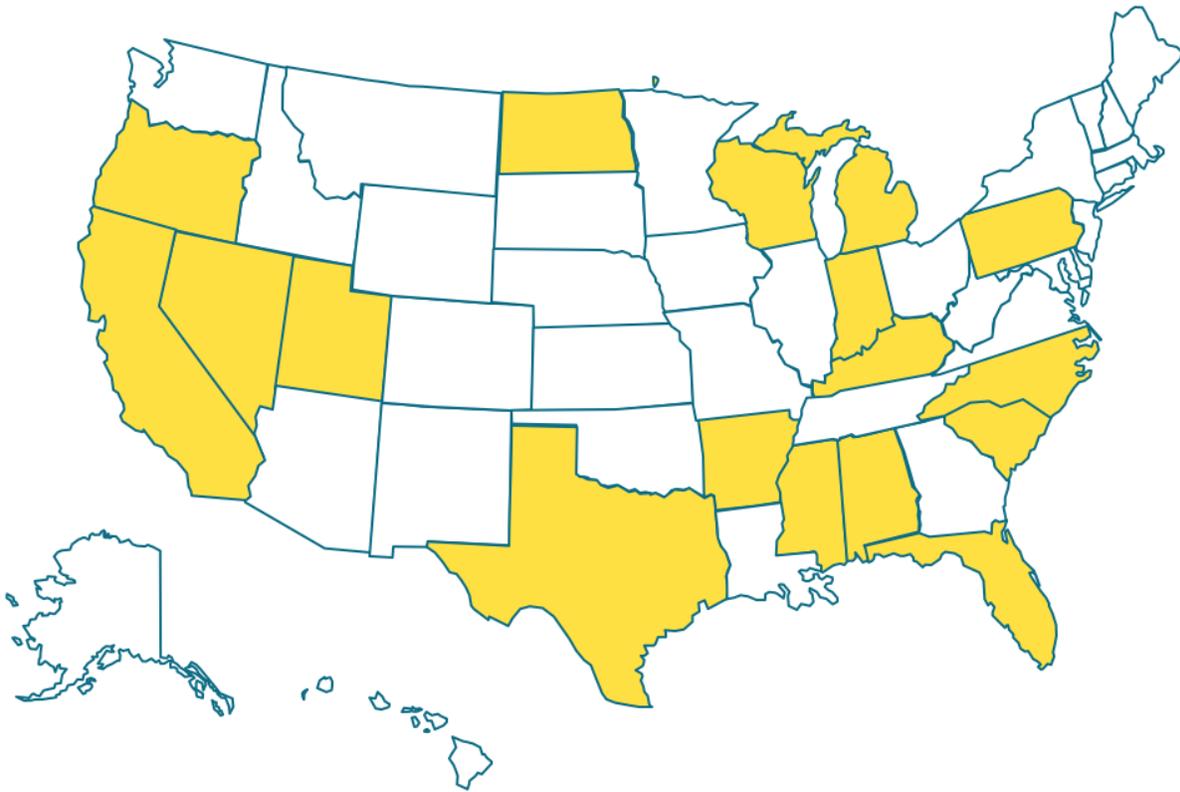


Liability allocation for AV collisions and defects is a hot topic in state legislatures across the country. State laws allocating liability are generally narrow in scope. Indeed, most liability clauses have the effect of insulating auto manufactures from liability if a third party converts a conventional vehicle to an AV causing an accident. Additionally, some states require AV testers purchase liability insurance as a prerequisite to testing.

## Vehicle Platooning

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Vehicle platooning is an emerging technology in the AV space. Indeed, trucking companies use platoons to automate portions of the driving process. Platooning technology allows a lead car or truck to wirelessly guide and control cars or trucks following behind it, similar to the way in which a locomotive pulls railcars. The map below shows states with legislation relating to vehicle platooning.



Generally, state platooning laws provide an exemption from otherwise applicable traffic laws. Indeed, most states have laws that require a minimum distance between vehicles. Thus, states provide an exemption to such laws for platoons, allowing platoon operation in the state.