

As Passed Senate	VTrans Proposed Changes
<p align="center"><u>CHAPTER 41. AUTOMATED VEHICLE TESTING</u></p> <p><u>§ 4201. SHORT TITLE</u></p> <p><u>This chapter may be cited as the Automated Vehicle Testing Act.</u></p>	
<p><u>§ 4202. DEFINITIONS</u></p> <p><u>As used in this chapter:</u></p> <p><u>(1) “Automated driving system” means the 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 design domain. This term is used specifically to describe a level 3, 4, or 5 driving automation system.</u></p> <p><u>(2) “Automated vehicle” means a motor vehicle that is equipped with an automated driving system that is designed to function at a level of driving automation of level 3, 4, or 5 pursuant to SAE J3016. The term includes a highly automated vehicle.</u></p> <p><u>(3) “Automated vehicle tester” or “tester” means an individual, company, public agency, or other organization that is testing automated vehicles on public highways in this State pursuant to this chapter including but not limited to an automated vehicle manufacturer, municipal or State agency,</u></p>	<p><u>(1) “Automated driving system” means the hardware and software that are collectively capable of performing the entire dynamic driving task within its operational design domain, if any, including achieving a minimal risk condition, without any intervention or supervision by a conventional human driver.</u></p> <p><u>(2) “Automated vehicle” means a motor vehicle that is equipped with an automated driving system.</u></p>

institution of higher education, fleet service provider, or automotive equipment or technology provider.

(4) “Dynamic driving task” means all the real-time operational and tactical functions required to operate an automated vehicle in traffic on a highway. The term does not include functions relating to planning for the use of the vehicle, including the scheduling of a trip or the selection of a destination or way point.

(5) “Highly automated vehicle” means a vehicle equipped with an automated driving system that is designed to function at a level of driving automation of level 4 or 5 pursuant to SAE J3016.

(6) “Manufacturer” means an individual or company that designs, produces, or constructs vehicles or equipment. Manufacturers include original equipment manufacturers (OEMs), multiple and final stage manufacturers, individuals or companies making changes to a completed vehicle before first retail sale or deployment (upfitters), and modifiers (individuals or companies making changes to existing vehicles after first retail sale or deployment).

(3a) “Conventional human driver” means a natural person who manually engages in-vehicle braking, accelerating, steering, and transmission gear selection input devices in order to operate a vehicle.

(4) “Dynamic driving task” means all the real-time operational and tactical functions required to operate a vehicle in on-road traffic within its specific operational design domain, if any, excluding the strategic functions such as trip scheduling and selection of destinations and waypoints.

(5) “Highly automated vehicle” means a vehicle equipped with an automated driving system capable of performing all aspects of the dynamic driving task within its operational design domain, if any, including achieving a minimal risk condition, without any intervention or supervision by a conventional human driver.

(7) “Minimal risk condition” means a condition in which an automated vehicle operating without a human driver, upon experiencing a failure of its automated driving system that renders the automated vehicle unable to perform the dynamic driving task, achieves a reasonably safe state that may include bringing the automated vehicle to a complete stop.

(8) “Operational design domain” means a description of the specific domain or domains in which an automated driving system is designed to properly operate, including types of roadways, ranges of speed, weather, time of day, and environmental conditions.

(9) “Operator” means an individual employed by or under contract with an automated vehicle tester who has successfully completed the tester’s training on safe driving and the capabilities and limitations of the automated vehicle and automated driving system, can take immediate manual or remote control of the automated vehicle being tested, is 21 years of age or older, and holds an operator’s license for the class of vehicle being tested.

(10) “Public highway” means a State or municipal highway as defined in 19 V.S.A. § 1(12).

(11) “SAE J3016” means the document published by SAE International on September 30, 2016 as “Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles” and any subsequent versions.

(11) [Deleted.]

§ 4203. TESTING OF AUTOMATED VEHICLES ON
PUBLIC HIGHWAYS

(a) An automated vehicle shall not be operated on public highways for testing until the Traffic Committee as defined in 19 V.S.A. § 1(24) approves a permit application for automated vehicle testers that defines the scope and operational design domain for the test and demonstrates the ability of the automated vehicle tester to comply with the requirements of this section.

(b) Prior to approving a permit application, the Traffic Committee will conduct a hearing to provide for comments from the public.

(c) A person aggrieved by a decision of the Traffic Committee regarding an automated vehicle test permit may appeal to the Civil Division of the Superior Court of Washington County under Rule 74 of the Vermont Rules of Civil Procedure.

(d) Before a test commences, the automated vehicle tester shall make approved automated vehicle test permits readily available to law enforcement and municipalities within the operational design domain designated in the permit.

(b1) Legislative bodies of the municipalities where an automated vehicle will be tested shall be notified by the tester 30 calendar days prior to the Traffic Committee hearing when the geographic scope of the test includes Class 1, 2, 3 or 4 Town Highways as classified pursuant to 19 V.S.A. § 302.

(d) Before a test commences, the automated vehicle tester shall make approved automated vehicle test permits readily available to law enforcement and municipalities within the geographic scope of the operational design domain designated in the permit.

(e) Following completion of an automated vehicle test, the automated vehicle tester shall submit a report to the Traffic Committee summarizing results and observations related to safety, traffic operations, interaction with roadway infrastructure, comments from the public, and any other relevant matters.

(f) An automated vehicle tester shall not test an automated vehicle on a public highway unless:

(1) The operator is:

(A) seated in the driver's seat of the automated vehicle;

(B) monitoring the operation of the automated vehicle;

and

(C) capable of taking immediate manual control of such automated vehicle.

(2) The automated vehicle tester:

(A) registers each automated vehicle to be tested with the Commissioner pursuant to chapter 7 of this title;

(B) submits to the Commissioner, in a manner and form directed by the Commissioner, proof of liability insurance, self-insurance, or a surety bond of at least five million dollars for damages by reason of bodily injury, death, or property damage caused by an automated vehicle while engaged in automated vehicle testing;

(e) The automated vehicle tester shall submit a report to the Traffic Committee **annually, until all testing ceases,** summarizing results and observations related to safety, traffic operations, interaction with roadway infrastructure, comments from the public, and any other relevant matters.

<p><u>(C) has established and enforces a zero-tolerance policy for drug and alcohol use by operators while engaged in automated vehicle testing. The policy shall include provisions for investigations of alleged policy violations and the suspension of drivers under investigation;</u></p> <p><u>(D) has conducted background checks for all operators pursuant to section 751 of this title, which may be inspected by the Commissioner of Motor Vehicles or designee pursuant to section 752 of this title; and</u></p> <p><u>(E) has certified that the legislative bodies of the municipalities where an automated vehicle will be tested have approved the operational design domain for class 1, 2, 3, or 4 town highways as classified pursuant to 19 V.S.A. § 302 included in the test.</u></p> <p><u>(3) The operator and automated vehicle tester shall:</u></p> <p><u>(A) comply with standards established by the National Highway Traffic Safety Administration regarding automated vehicles and be capable of providing proof of exemptions or waivers to such standards;</u></p> <p><u>(B) report to the Agency of Transportation and the applicable law enforcement agency within 10 business days after any motor vehicle crash involving the testing of the automated vehicle that results in personal injury or property damage; and</u></p>	<p><u>(E) [Deleted.]</u></p> <p><u>(A) comply with applicable standards established by the National Highway Traffic Safety Administration regarding the testing of automated vehicles and be capable of providing proof of exemptions or waivers to such standards;</u></p>
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(C) satisfy any other requirements and permit conditions as determined by the Traffic Committee as necessary to ensure the safe operation of such automated vehicles.

(g) Notwithstanding subsection (f) of this section, a highly automated vehicle may be tested on a public highway without an operator inside the vehicle if the operator or automated vehicle tester can take immediate remote control of the highly automated vehicle being tested and the vehicle can achieve a minimal risk condition.

(h) An automated vehicle testing permit may be voided and invalidated for the trip by a law enforcement officer that determines there is a violation of any condition specified in the terms of the automated vehicle test permit or that the continuation of the trip would be unsafe.

(i) An automated vehicle testing permit may be suspended or revoked by the Traffic Committee if, after the opportunity for a hearing, the Traffic Committee determines that there is a violation of any condition or conditions specified in the terms of the automated vehicle test permit that warrants the suspension or revocation of the testing permit or that the continuation of the testing would be unsafe.

(j) Operating or testing in violation of a suspension or revocation order shall be a traffic violation for which there shall be a penalty of not more than \$1,000.00.

(g) Notwithstanding subsection (f) of this section, a highly automated vehicle may be tested on a public highway without an operator inside the vehicle if the operator or automated vehicle tester can take immediate remote control of the highly automated vehicle being tested or the vehicle is capable of achieving a minimal risk condition.

(k) Test vehicles must be capable of operating in compliance with applicable traffic and motor vehicle laws of this State, subject to this subchapter.

(l) An individual shall not operate, attempt to operate, or be in actual physical control of an automated vehicle being tested on a public highway when the individual's blood alcohol concentration is 0.02 or more.

(m) An automated vehicle being tested on a public highway shall be clearly identifiable by the public.