

HOUSE BILL NO. 1125  
AMENDMENT IN THE NATURE OF A SUBSTITUTE  
(Proposed by the House Committee on Transportation  
on \_\_\_\_\_)  
(Patron Prior to Substitute—Delegate Reid)

*A BILL to amend the Code of Virginia by adding in Title 46.2 a chapter numbered 14.2, consisting of sections numbered 46.2-1419 through 46.2-1429, relating to commercial use of fully autonomous vehicles.*

**Be it enacted by the General Assembly of Virginia:**

**1. That the Code of Virginia is amended by adding in Title 46.2 a chapter numbered 14.2, consisting of sections numbered 46.2-1419 through 46.2-1429, as follows:**

*CHAPTER 14.2.*

*COMMERCIAL USE OF FULLY AUTONOMOUS VEHICLES.*

**§ 46.2-1419. Definitions.**

*As used in this chapter, unless the context requires a different meaning:*

*"Automated driving system" means 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.*

*"DDT fallback" means the response by:*

- 1. The person or human driver to either perform the DDT or achieve a minimal risk condition after the occurrence of a DDT performance relevant system failure, or upon operational design domain exit; or*
- 2. An automated driving system to achieve minimal risk condition, given the same circumstances identified in subdivision 1.*

*"Dynamic driving task" or "DDT" means all of the real-time operational and tactical functions required to operate a vehicle in on-road traffic, including:*

- 1. Lateral vehicle motion control via steering;*
- 2. Longitudinal motion control via acceleration and deceleration;*
- 3. Monitoring the driving environment via object and event detection, recognition, classification, and response preparation;*
- 4. Object and event response execution;*
- 5. Maneuver planning; and*
- 6. Enhancing conspicuity via lighting, signaling, and gesturing.*

*"Dynamic driving task" or "DDT" does not include strategic functions such as trip scheduling and the*

33 *selection of destinations and waypoints.*

34 *"Fully autonomous vehicle" means a motor vehicle equipped with an automated driving system designed*  
35 *to function without a human driver as a level 4 or 5 system under SAE J3016.*

36 *"Human driver" means a natural person in the vehicle with a valid driver's license who controls all or*  
37 *part of the dynamic driving task.*

38 *"Minimal risk condition" means a condition to which a person, a human driver, or an automated driving*  
39 *system may bring a vehicle after performing the DDT fallback in order to reduce the risk of a crash when a*  
40 *given trip cannot or should not be completed.*

41 *"On-demand autonomous vehicle network" means a digital network that connects passengers to fully*  
42 *autonomous vehicles or ADS-equipped vehicles for compensation.*

43 *"Operational design domain" means the operating conditions under which a given automated driving*  
44 *system is specifically designed to function, including (i) environmental, geographical, and time-of-day*  
45 *restrictions and (ii) the requisite presence or absence of certain traffic and roadway characteristics.*

46 *"Remote operator" means a natural person who (i) monitors and is capable of controlling an autonomous*  
47 *vehicle and (ii) is not physically located in such vehicle.*

48 *"Request to intervene" means a notification by an automated driving system to a human driver that the*  
49 *human driver should promptly begin or resume performance of part of or all of the dynamic driving task.*

50 *"SAE J3016" means the "Taxonomy and Definitions for Terms Related to Driving Automation Systems for*  
51 *On-Road Motor Vehicles" published by SAE International on April 29, 2021, or its successor.*

52 **§ 46.2-1420. Scope.**

53 *Unless expressly stated to the contrary, the provisions of this chapter shall only apply to fully autonomous*  
54 *vehicles operated to transport property or passengers in furtherance of a commercial enterprise.*

55 *Nothing in this chapter shall be construed to (i) prohibit a human driver from operating a fully*  
56 *autonomous vehicle equipped with controls that allow for the human driver to perform the DDT, (ii) prohibit*  
57 *a human driver from operating a vehicle with an automated driving system that is not a fully autonomous*  
58 *vehicle with such system engaged or disengaged, (iii) apply to fully autonomous vehicles operated for*  
59 *personal use, or (iv) apply to toy vehicles.*

60 **§ 46.2-1421. Use of fully autonomous vehicles to transport property or passengers permissible.**

61 *A. A person may operate on the highways in the Commonwealth a fully autonomous vehicle to transport*  
62 *property or passengers in furtherance of a commercial enterprise without a human driver if the vehicle meets*  
63 *the following conditions:*

1. The vehicle meets the requirements of this chapter and has been issued an autonomous operation license by the Department;

2. If a failure of the automated driving system occurs that renders that system unable to perform the entire dynamic driving task relevant to its intended operational design domain, the vehicle will achieve a minimal risk condition and, if there is a human driver physically present in the vehicle, issue a request to intervene with the expectation that the human driver will respond appropriately to such request;

3. The vehicle is capable of operating in compliance with the applicable traffic and motor vehicle safety laws and regulations of the Commonwealth when reasonable to do so, unless an exemption has been granted by the Department;

4. When required by federal law, the vehicle bears the required manufacturer's certification label indicating that at the time of its manufacture it has been certified to be in compliance with all applicable federal motor vehicle safety standards, including any exemptions granted by the National Highway Traffic Safety Administration;

5. The manufacturer of such vehicle certifies that it has taken reasonable action to protect the automated driving system from cybersecurity threats, including unauthorized access or interference; and

6. If such vehicle is operated by a remote operator at any time, such remote operator shall (i) possess the proper class of license of the vehicle being operated remotely, (ii) be able to communicate with vehicle occupants in real time through a communication link, and (iii) be capable of performing the entire dynamic driving task or achieving a minimal risk condition.

B. Prior to operating a fully autonomous vehicle in the Commonwealth without a human driver, a person shall submit a law-enforcement interaction plan to the Department, the Department of Transportation, and the Department of State Police that describes (i) how to communicate with a fleet support specialist who is available during the times the vehicle is in operation, (ii) how to safely remove the fully autonomous vehicle from the highway and steps to safely tow the vehicle, (iii) how to recognize whether the automated driving system is engaged on the fully autonomous vehicle, (iv) any additional information the manufacturer or owner deems necessary regarding hazardous conditions or public safety risks associated with the operation of the fully autonomous vehicle, and (v) that the person shall forward to the Department any crash report required to be sent to the National Highway Traffic Safety Administration related to an incident in the Commonwealth, provided that any proprietary or confidential business information within such crash reports shall be exempt from disclosure under the Virginia Freedom of Information Act (§ 2.2-3700 et seq.).

**§ 46.2-1422. Licensing, titling, and registration.**

95       A. The Department shall issue autonomous operation licenses for fully autonomous vehicles operated to  
96       transport property or passengers in furtherance of a commercial enterprise in the Commonwealth. The  
97       Department shall only issue such autonomous operation licenses to fully autonomous vehicles that meet the  
98       requirements of this chapter. No license shall be issued pursuant to this section unless the manufacturer of  
99       such vehicle submits to the Department a safety management plan for such fully autonomous vehicle and its  
100       automated driving system.

101       B. A fully autonomous vehicle shall be properly titled and registered in accordance with the requirements  
102       of Chapter 6 (§ 46.2-600 et seq.). If a fully autonomous vehicle is registered in the Commonwealth, the  
103       vehicle shall be identified on the registration as a fully autonomous vehicle. The requirements under this title  
104       relating to exhibiting a driver's license and registration card are satisfied if the autonomous operation  
105       license and vehicle registration card are in the fully autonomous vehicle and available for inspection by a  
106       law-enforcement officer.

107       C. When an automated driving system installed on a motor vehicle is engaged, the automated driving  
108       system is considered the driver or operator for the purpose of assessing compliance with applicable traffic or  
109       motor vehicle laws and shall be required to satisfy all physical acts required by a driver or operator of the  
110       vehicle. However, if a remote operator is actively controlling the vehicle, the remote operator is considered  
111       the driver or operator for the purpose of assessing compliance with applicable traffic or motor vehicle laws.

112       **§ 46.2-1423. Financial responsibility requirements.**

113       A. Fully autonomous vehicles shall maintain proof of financial responsibility in the same form and at the  
114       same minimum limits required under § 46.2-472 and shall also satisfy uninsured motorist benefits as  
115       required by § 38.2-2206.

116       B. An autonomous vehicle with its automated driving system engaged shall maintain proof of financial  
117       responsibility in an amount not less than \$1 million combined single limit per occurrence for third-party  
118       liability. Proof of financial responsibility under this subsection shall also apply to uninsured motorist benefits  
119       as required by § 38.2-2206 when those requirements are not satisfied by insurance or self-insurance under  
120       subsection A. Insurers providing insurance policies and self-insurance under subsection A and this  
121       subsection may contract and coordinate with each other to determine which will satisfy personal injury  
122       protection and uninsured motorist benefit requirements. The satisfaction of financial responsibility under this  
123       subsection shall be deemed to satisfy financial responsibility under subsection A.

124       C. Financial responsibility under subsection B may be satisfied by (i) an insurance policy issued by an  
125       insurer licensed in the Commonwealth or (ii) a policy issued by an eligible nonadmitted insurer authorized

under Chapter 48 (§ 38.2-4805.1 et seq.) of Title 38.2.

**§ 46.2-1424. On-demand autonomous vehicle network.**

An on-demand autonomous vehicle network shall be permitted to operate in the same manner as, and subject to the same requirements of Chapter 20 (§ 46.2-2000 et seq.) that apply to, transportation network companies, except that (i) any provision that reasonably applies only to a human driver shall not apply to the operation of fully autonomous vehicles with the automated driving system engaged on an on-demand autonomous vehicle network and (ii) any provision of this title that would not apply to the operation of fully autonomous vehicles with the automated driving system engaged on an on-demand autonomous vehicle network shall not apply to such vehicles. The Department shall issue guidance on the application of requirements for transportation network companies to an on-demand autonomous vehicle network pursuant to this section. On-demand autonomous vehicle networks shall not be considered a common carrier as defined in § 46.2-2000 and shall not be subject to the requirements of Article 6 (§ 46.2-2074 et seq.) or Article 7 (§ 46.2-2096 et seq.) of Chapter 20.

**§ 46.2-1425. Operation of commercial motor vehicles.**

A fully autonomous vehicle that is also a commercial motor vehicle, as that term is defined in § 46.2-341.4, may be operated with the automated driving system engaged, provided that such operation complies with all requirements of this title related to the operation of commercial motor vehicles, except that any provision that by its nature reasonably applies only to a human driver shall not apply to such a vehicle operating with the automated driving system engaged. Any operation of a fully autonomous vehicle that is also a commercial motor vehicle shall comply with any applicable federal requirements for the operation of commercial motor vehicles.

**§ 46.2-1426. Vehicle equipment standards.**

A fully autonomous vehicle that is designed to be operated exclusively by the automated driving system for all trips shall not be subject to the provisions of this title, or any regulations promulgated pursuant to such provisions, that both (i) relate to the operation of a motor vehicle by a human driver seated in such vehicle and (ii) do not, by their nature, apply to an automated driving system.

**§ 46.2-1427. Duties following crashes.**

In the event of a crash involving a fully autonomous vehicle subject to the provisions of this chapter, the fully autonomous vehicle shall remain at the scene of the crash when required to by state law. The license holder for the fully autonomous vehicle, or a person acting on behalf of the license holder, shall report any crash as required pursuant to Article 11 (§ 46.2-371 et seq.) of Chapter 3.

**§ 46.2-1428. Penalties and suspension or revocation of autonomous operation licenses; civil penalty.**

A. 1. A person or entity that violates this chapter, or a regulation promulgated pursuant to this chapter, in addition to any other penalties provided by law, shall be subject to a civil penalty of not more than \$1,000 per offense.

2. Each day of a violation of this chapter, or a regulation promulgated pursuant to this chapter, shall constitute a separate offense, and the penalties set forth in this subsection shall be applicable to each separate offense.

B. If the Department determines that a fully autonomous vehicle operating under an autonomous operation license is not in safe operational condition and the operation of such vehicle on the highways of the Commonwealth endangers the public, the Department shall provide to the license holder a notice of intent to (i) suspend or revoke the autonomous operation license or (ii) impose restrictions on the operation of such vehicle. For purposes of this subsection, the operation of an autonomous vehicle endangers the public when the operation of such vehicle has resulted in or has a substantial risk of causing serious injury or death. The provisions of this subsection are in addition to, not in place of, the authority of a law-enforcement officer to remove a vehicle from the highway as authorized in § 46.2-1001.

C. A notice of intent under subsection B shall (i) include a summary of the Department's determination and evidence supporting the determination, (ii) provide the autonomous operation license holder with a reasonable period to (a) correct the issues identified in the Department's determination and (b) provide to the Department the certification described in clause (ii) of subsection D, and (iii) specify which enforcement actions described by subsection B the Department will take if the autonomous operation license holder fails to provide the required certification within the specified period.

D. Before the expiration of the period specified in a notice of intent under subsection B, the autonomous operation license holder shall (i) ensure the issues identified by the Department in the notice are corrected and (ii) provide to the Department a certification acknowledging that the issues identified by the Department in the notice have been corrected and explaining how the issues have been corrected, including identifying operational measures implemented.

E. The Department may extend the period specified in a notice of intent pursuant to subsection D on a written request for an extension that the Department determines is reasonable.

F. If the autonomous operation license holder fails to comply with subsection D, the Department shall (i) issue a decision, as specified in the notice of intent, that (a) suspends or revokes the autonomous operation license for the vehicle or (b) imposes restrictions on the operation of the vehicle and (ii) notify the

autonomous operation license holder of such decision.

G. An autonomous operation license holder who is notified pursuant to subsection F shall be considered aggrieved and entitled to an administrative appeal. If an appeal is filed, it shall be scheduled not later than 60 days after the date of the Department's final determination under this section. If a hearing is not scheduled during the period required by this subsection, the autonomous operation license issued under this chapter shall be automatically reinstated or the restriction imposed automatically removed, as applicable.

**§ 46.2-1429. Local regulation prohibited.**

Notwithstanding the provisions of § 15.2-2028, no locality may impose additional requirements on or prohibit the operation of fully autonomous vehicles. Fully autonomous vehicles shall be subject to all local ordinances and regulations applicable to a similar motor vehicle operated by a human driver.

**2. That the Department of Motor Vehicles shall promulgate regulations consistent with the provisions of this act.**

**3. That the provisions of this act may result in a net increase in periods of imprisonment or commitment. Pursuant to § 30-19.1:4 of the Code of Virginia, the estimated amount of the necessary appropriation cannot be determined for periods of imprisonment in state adult correctional facilities; therefore, Chapter 725 of the Acts of Assembly of 2025 requires the Virginia Criminal Sentencing Commission to assign a minimum fiscal impact of \$50,000. Pursuant to § 30-19.1:4 of the Code of Virginia, the estimated amount of the necessary appropriation cannot be determined for periods of commitment to the custody of the Department of Juvenile Justice.**