

SENATE No. 2379

The Commonwealth of Massachusetts

PRESENTED BY:

William J. Driscoll, Jr.

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act relative to providing multimodal transportation technologies.

PETITION OF:

NAME:

William J. Driscoll, Jr.

DISTRICT/ADDRESS:

Norfolk, Plymouth and Bristol

SENATE No. 2379

By Mr. Driscoll, a petition (accompanied by bill, Senate, No. 2379) of William J. Driscoll, Jr. for legislation relative to fully autonomous vehicle and human drivers. Transportation.

The Commonwealth of Massachusetts

**In the One Hundred and Ninety-Fourth General Court
(2025-2026)**

An Act relative to providing multimodal transportation technologies.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. Chapter 90 of the General Laws is hereby amended by adding the following
2 new section: -

3 19L. As used in the chapter, the following words shall have the following meanings
4 unless the context clearly requires otherwise:

5 "Automated driving system" means hardware and software that are collectively capable
6 of performing the entire dynamic driving task on a sustained basis, regardless of whether it is
7 limited to a specific operational design domain.

8 "Department" The Massachusetts Department of Transportation established under the
9 provisions of Chapter 6C of the General laws.

10 "Dynamic driving task" or "DDT" means all of the real-time operational and tactical
11 functions required to operate a vehicle in on-road traffic, including i. Lateral vehicle motion
12 control via steering; ii. Longitudinal motion control via acceleration and deceleration; iii.

13 Monitoring the driving environment via object and event detection, recognition, classification,
14 and response preparation; iv. Object and event response execution; v. Maneuver planning; and
15 vi. Enhancing conspicuity via lighting, signaling, and gesturing. This definition shall not include
16 the strategic functions of trip scheduling and, or the selection of destinations and waypoints.

17 "DDT fallback" means the response by the person or human driver to either perform the
18 DDT or achieve a minimal risk condition after occurrence of a DDT performance relevant
19 system failure, or upon operational design domain exit; or the response by an automated driving
20 system to achieve minimal risk condition, given the same circumstances

21 "Fully autonomous vehicle" means a motor vehicle equipped with an automated driving
22 system designed to function without a human driver as a level 4 or 5 system under SAE J3016B
23 standards;

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

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

29 "On-Demand Autonomous Vehicle Network" means a transportation service network
30 that uses a software application or other digital means to dispatch or otherwise enable the pre-
31 arrangement of transportation with fully autonomous vehicles for purposes of transporting
32 passenger goods, including for-hire transportation of passengers or goods for compensation.

33 "Operational Design Domain" means the operating conditions under which a given
34 automated driving system is specifically designed to function, including but not limited to (i)
35 environmental, geographical, and time-of-day restrictions and (ii) the requisite presence or
36 absence of certain traffic and roadway characteristics.

37 "Person" means a natural person, corporation, business trust, estate, trust, partnership,
38 limited liability company, association, joint venture, governmental agency, public corporation or
39 any other legal or commercial entity.

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

43 "SAE J3016" means the "Taxonomy and Definitions for Terms Related to Driving
44 Automation Systems for On-Road Motor Vehicles" published by SAE International on June 15,
45 2018, as revised.

46 SECTION 2. A person may operate on the highways in the commonwealth a fully
47 autonomous vehicle or a motor vehicle equipped with an automated driving system capable of
48 performing the entire dynamic driving task with the automated driving system engaged without a
49 human driver if the vehicle meets the following conditions: i. the vehicle meets the requirements
50 of this chapter and has been issued an autonomous operation license by the Department; ii. if a
51 failure of the automated driving system occurs that renders that system unable to perform the
52 entire dynamic driving task relevant to its intended operational design domain, the vehicle will
53 achieve a minimal risk condition and, if there is a human driver physically present in the vehicle,
54 issue a request to intervene with the expectation that the human driver will respond appropriately

55 to such request; iii. the vehicle is capable of operating in compliance with the applicable traffic
56 and motor vehicle safety laws and regulations of the Commonwealth when it is reasonable to do
57 so unless an exemption has been granted by the Department; iv. when required by federal law,
58 the vehicle bears the required manufacturer's certification label indicating that at the time of its
59 manufacture it has been certified to be in compliance with all applicable federal motor vehicle
60 safety standards, including any exemptions granted by the National Highway Traffic Safety
61 Administration.

62 A fully autonomous vehicle for which the declared gross weight of the vehicle and any
63 towed unit is 10,000 pounds or heavier shall have a human driver, with the appropriate
64 credentials to operate the vehicle, physically present in the vehicle to monitor the performance of
65 the vehicle and intervene if necessary. Prior to operating a fully autonomous vehicle in the
66 Commonwealth without a human driver, a person shall submit a law-enforcement interaction
67 plan to the Department of Transportation, Department of Public Safety and the police department
68 of the city, town or jurisdiction where a vehicle will be operating that describes (i) how to
69 communicate with a fleet support specialist who is available during the times the vehicle is in
70 operation, (ii) how to safely remove the fully autonomous vehicle from the highway and steps to
71 safely tow the vehicle, (iii) how to recognize whether the automated driving system is engaged
72 on the fully autonomous vehicle, and (iv) any additional information the manufacturer or owner
73 deems necessary regarding hazardous conditions or public safety risks associated with the
74 operation of the fully autonomous vehicle. In the event of a crash the fully autonomous vehicle
75 shall remain on the scene in accordance with state law. The owner of the fully autonomous
76 vehicle, or a person on behalf of the vehicle owner, shall report any crashes or collisions in
77 accordance with state law.

78 SECTION 3. The Department shall develop and issue autonomous operation licenses for
79 fully autonomous vehicles and automated driving systems operated in the Commonwealth. The
80 Department shall only issue such autonomous operation licenses to fully autonomous vehicles
81 and automated driving systems that meet the requirements of this chapter. A fully autonomous
82 vehicle shall be properly titled and registered in accordance with the requirements of this
83 chapter. If a fully autonomous vehicle is registered in the Commonwealth, the vehicle shall be
84 identified on the registration as a fully autonomous vehicle. The requirements under this act
85 relating to exhibiting a driver's license and registration card are satisfied if the autonomous
86 operation license and vehicle registration card are in the fully autonomous vehicle and available
87 for inspection by a law-enforcement officer. When an automated driving system installed on a
88 motor vehicle is engaged, the automated driving system is considered the driver or operator for
89 the purpose of assessing compliance with applicable traffic or motor vehicle laws and shall be
90 required to satisfy all physical acts required by a driver or operator of the vehicle.

91 SECTION 4. Before operating a fully autonomous vehicle on public roads in the
92 commonwealth without a human driver, a person shall submit proof of financial responsibility to
93 the Department that the fully autonomous vehicle is covered by insurance or proof of self-
94 insurance in accordance with the provisions of Chapter 175 of the Massachusetts General Laws.
95 Such coverage shall be primary, however, and the minimum amount of liability coverage for
96 death, bodily injury, and property damage shall be \$1 million.

97 SECTION 5. Nothing in this chapter shall be construed to (i) prohibit a human driver
98 from operating a fully autonomous vehicle to control all or part of the DDT, (ii) prohibit a fully
99 autonomous vehicle from operating without a human driver except as provided in this Act, (iii)

100 prohibit a human driver from operating a vehicle with an automated driving system that is not a
101 fully autonomous vehicle with such system engaged or disengaged, or (iv) apply to toy vehicles.

102 SECTION 6. An on-demand autonomous vehicle network shall be permitted to operate in
103 the Commonwealth in accordance with the provisions of this Act under the jurisdiction of the
104 Department.

105 SECTION 7. A fully autonomous vehicle shall be properly registered in accordance with
106 the provisions of this Chapter. If a fully autonomous vehicle is registered in the Commonwealth,
107 the vehicle shall be identified on the title as a fully autonomous vehicle. A fully autonomous
108 vehicle shall be properly titled in accordance with the provisions of this Chapter. If a fully
109 autonomous vehicle is registered in the Commonwealth, the vehicle shall be identified on the
110 title as a fully autonomous vehicle.

111 SECTION 8. A person may operate a motor vehicle equipped with an automated driving
112 system capable of performing the entire dynamic driving task if (i) such automated driving
113 system will issue a request to intervene whenever the automated driving system is not capable of
114 performing the entire dynamic driving task with the expectation that the person will respond
115 appropriately to such a request; and (ii) the automated driving system is capable of being
116 operated in compliance with the provisions of this chapter.

117 Nothing in this Act shall prohibit or restrict a human driver from operating a fully
118 autonomous vehicle equipped with controls that allow the human driver to control all or part of
119 the dynamic driving task.

120 SECTION 9. A fully autonomous vehicle that is also a commercial motor vehicle
121 pursuant to the provisions of this chapter governing the operation of commercial motor vehicles,

122 except that any provision that by its nature reasonably applies only to a human driver does not
123 apply to such a vehicle operating with the automated driving system engaged.

124 SECTION 10. A fully autonomous vehicle that is designed to be operated exclusively by
125 the automated driving system for all trips is not subject to motor vehicle equipment laws or
126 regulations of this state that: (1) relate to or support motor vehicle operation by a human driver
127 seated in the vehicle; and (2) are not relevant for an automated driving system.

128 SECTION 11. Unless otherwise provided in this chapter and notwithstanding any other
129 provision of law, fully autonomous vehicles and automated driving systems are governed
130 exclusively by the provisions of this Act. No state agency, political subdivision, municipality, or
131 local entity may prohibit the operation of fully autonomous vehicles, automated driving systems,
132 or on-demand autonomous vehicle networks, or otherwise enact or keep in force rules or
133 ordinances that would impose taxes, fees, or other requirements (including performance
134 standards), specific to the operation of fully autonomous vehicles, automated driving systems, or
135 on-demand autonomous vehicle networks in addition to the requirements of this Act.