



General Assembly

January Session, 2021

Raised Bill No. 6486

LCO No. 3438



Referred to Committee on TRANSPORTATION

Introduced by:
(TRA)

AN ACT CONCERNING AUTOMATED DRIVING SYSTEM EQUIPPED VEHICLES.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. Section 13a-260 of the general statutes is repealed and the
2 following is substituted in lieu thereof (*Effective July 1, 2021*):

3 (a) For the purposes of this section:

4 (1) ["Fully autonomous vehicle"] "ADS-equipped vehicle" means a
5 motor vehicle that is equipped with an automated driving system; [,
6 designed to function without an operator and classified as level four or
7 level five by SAE J3016;]

8 (2) "Automated driving system" or "ADS" means the hardware and
9 software that are collectively capable of performing the entire dynamic
10 driving task on a sustained basis, regardless of whether the automated
11 driving system is limited to a specific operational design domain;

12 (3) "Driver" means a user who performs in real-time part or all of the
13 dynamic driving tasks or dynamic driving tasks fallback for a vehicle;

14 (4) "Driving automation" means the performance by hardware and
15 software of part or all of the dynamic driving tasks on a sustained basis;

16 (5) "Driving automation system" means the hardware and software
17 that are collectively capable of performing part or all of the dynamic
18 driving tasks on a sustained basis;

19 [(3)] (6) "Dynamic driving task" means the real-time operational and
20 tactical functions required to operate a motor vehicle on highways,
21 excluding the strategic functions such as trip scheduling and selection
22 of destinations and waypoints;

23 (7) "Dynamic driving task fallback" means the response by the user
24 to either perform the dynamic driving task or achieve a minimal risk
25 condition after occurrence of a dynamic driving task performance-
26 relevant system failure or upon operational design domain exit, or the
27 response by an automated driving system to achieve minimal risk
28 condition;

29 (8) "Fallback-ready user" means the user of a vehicle equipped with
30 an engaged level three or conditional driving automation system who is
31 able to (A) operate the vehicle and is receptive to automated driving
32 system-issued requests to intervene, and (B) evident dynamic driving
33 task performance-relevant system failures in the vehicle compelling the
34 user to perform the dynamic driving task fallback;

35 (9) "Level three or conditional driving automation" means the
36 sustained and operational design domain-specific performance by an
37 automated driving system of the entire dynamic driving task with the
38 expectation that the dynamic driving task fallback-ready user is
39 receptive to automated driving system-issued requests to intervene and
40 to dynamic driving task performance-relevant system failures in other
41 vehicle systems and will respond appropriately;

42 (10) "Minimal risk condition" means a condition to which a user or an
43 automated driving system may bring a vehicle after performing the
44 dynamic driving task fallback to reduce the risk of a crash when a given

45 trip cannot or should not be completed;

46 (11) "Operate" means the activities performed by an operator or by an
47 automated driving system to perform the entire dynamic driving task
48 for a vehicle during a trip;

49 [(4)] (12) "Operational design domain" means [a description of the
50 operating domains in which an automated driving system is] the
51 operating conditions under which a driving automation system, or
52 feature of such system, is specifically designed to function, including,
53 but not limited to, [geographic, roadway,] environmental, [and speed
54 limitations] geographical and time-of-day restrictions and the requisite
55 presence or absence of certain traffic or roadway conditions;

56 [(5) "SAE J3016" means the "Taxonomy and Definitions for Terms
57 Related to Driving Automation Systems for On-Road Motor Vehicles"
58 published by SAE International in September 2016;]

59 [(6)] (13) "Operator" means [the person who causes the automated
60 driving system to engage while physically inside the fully autonomous
61 vehicle] a driver or automated driving system that operates a motor
62 vehicle;

63 [(7) "Autonomous vehicle tester" means an autonomous vehicle
64 manufacturer, institution of higher education, fleet service provider or
65 automotive equipment or technology provider;

66 (8) "Fleet service provider" means a person or entity that owns or
67 leases a fully autonomous vehicle and operates such fully autonomous
68 vehicle for commercial or public use;

69 (9) "Autonomous vehicle manufacturer" means: (A) A person or
70 entity that builds or sells fully autonomous vehicles; (B) a person or
71 entity that installs automated driving systems in motor vehicles that are
72 not originally built as fully autonomous vehicles; or (C) a person or
73 entity that develops automated driving systems in fully autonomous
74 vehicles or motor vehicles that are not originally built as fully

75 autonomous vehicles;

76 (10) "Secretary" means the Secretary of the Office of Policy and
77 Management; and]

78 (14) "Request to intervene" means notification by an automated
79 driving system to a fallback-ready user indicating that the fallback-
80 ready user should promptly perform the dynamic driving task fallback,
81 which may entail resuming manual operation of the vehicle or achieving
82 a minimal risk condition;

83 (15) "System failure" means a malfunction in a driving automation
84 system or other vehicle system that prevents the driving automatic
85 system from reliably performing the portion of the dynamic driving task
86 on a sustained basis, including the complete dynamic driving task, that
87 it would otherwise perform;

88 (16) "Testing" means operating a motor vehicle equipped with an
89 automated driving system for the purpose of demonstrating or
90 evaluating the automated driving system on highways;

91 (17) "Trip" means the traversal of an entire travel pathway by a
92 vehicle from the point of origin to a destination;

93 (18) "User" means a person who performs the human role in driving
94 automation; and

95 [(11)] (19) "Highway", ["limited access highway", and] "motor
96 vehicle", "operator's license" and "owner" have the same meanings as
97 defined in section 14-1.

98 [(b) The Office of Policy and Management, in consultation with the
99 Departments of Motor Vehicles, Transportation and Emergency
100 Services and Public Protection, shall establish a pilot program for not
101 more than four municipalities to allow autonomous vehicle testers to
102 test fully autonomous vehicles on the highways of such municipalities.
103 Municipalities shall apply to the Secretary of the Office of Policy
104 Management in the manner and form directed by the secretary for

105 inclusion in the pilot program. The secretary shall select at least one
106 municipality with a population of at least one hundred twenty
107 thousand, but not more than one hundred twenty-four thousand, and
108 one municipality with a population of at least one hundred thousand,
109 as enumerated in the 2010 federal decennial census.

110 (c) The chief elected official or chief executive officer of a municipality
111 selected by the secretary shall select and enter into a written agreement
112 with an autonomous vehicle tester or autonomous vehicle testers to test
113 fully autonomous vehicles on the highways of the municipality. Such
114 agreement shall, at a minimum: (1) Specify the locations and routes
115 where such fully autonomous vehicles may operate; (2) prohibit the
116 operation of such fully autonomous vehicles outside such locations and
117 routes except in the case of an emergency; (3) identify each fully
118 autonomous vehicle to be tested by vehicle identification number, make,
119 year and model; and (4) specify the hours of operation of such fully
120 autonomous vehicles.

121 (d) An autonomous vehicle tester shall not test a fully autonomous
122 vehicle in a municipality unless:

123 (1) The operator is: (A) Physically inside the fully autonomous
124 vehicle; (B) monitoring the operation of such fully autonomous vehicle;
125 (C) capable of taking immediate manual control of such fully
126 autonomous vehicle; (D) an employee, independent contractor or other
127 person designated and trained by the autonomous vehicle tester
128 concerning the capabilities and limitations of such fully autonomous
129 vehicle; and (E) a holder of an operator's license;

130 (2) The autonomous vehicle tester: (A) Registers each fully
131 autonomous vehicle to be tested with the Commissioner of Motor
132 Vehicles pursuant to section 14-12; and (B) submits to the commissioner,
133 in a manner and form directed by the commissioner, proof of liability
134 insurance, self-insurance or a surety bond of at least five million dollars
135 for damages by reason of bodily injury, death or property damage
136 caused by a fully autonomous vehicle; and

137 (3) The operator and autonomous vehicle tester: (A) Comply with any
138 provision of the general statutes or any ordinance of a municipality
139 concerning the operation of motor vehicles; (B) comply with standards
140 established by the National Highway Traffic Safety Administration
141 regarding fully autonomous vehicles; and (C) satisfy any other
142 requirement as determined by the secretary, in consultation with the
143 Commissioners of Motor Vehicles, Transportation and Emergency
144 Services and Public Protection, as necessary to ensure the safe operation
145 of such fully autonomous vehicle.

146 (e) No autonomous vehicle tester shall test a fully autonomous
147 vehicle on any limited access highway.

148 (f) The secretary may immediately prohibit an operator or
149 autonomous vehicle tester from testing a fully autonomous vehicle if the
150 secretary, in consultation with the Commissioners of Motor Vehicles,
151 Transportation and Emergency Services and Public Protection,
152 determines that such testing poses a risk to public safety or that such
153 operator or autonomous vehicle tester fails to comply with the
154 provisions of this section or with the requirements of the pilot program.

155 (g) An autonomous vehicle tester that participates in the pilot
156 program shall provide information to the secretary and the task force
157 established pursuant to section 2 of public act 17-69* that the secretary
158 and task force deem to be appropriate for measuring the performance
159 of the pilot program. The autonomous vehicle tester may withhold any
160 commercially valuable, confidential or proprietary information.

161 (h) Not later than July 1, 2020, and annually thereafter, the secretary
162 shall submit a report to the joint standing committee of the General
163 Assembly having cognizance of matters relating to transportation, in
164 accordance with section 11-4a, concerning the implementation and
165 progress of the pilot program.]

166 (b) Not later than January 1, 2023, the Commissioner of
167 Transportation, in consultation with the Secretary of the Office of Policy
168 and Management and the Commissioners of Motor Vehicles, Insurance

169 and Emergency Services and Public Protection shall establish state-wide
170 guidelines and requirements for testing and operating ADS-equipped
171 vehicles on highways in the state. Such guidelines and requirements
172 shall (1) incorporate any provision of any statute or regulation of this
173 state or the federal government and national best practices regarding
174 testing and operating ADS-equipped vehicles on highways, (2) consider
175 recommendations from the task force established pursuant to section 2
176 of public act 17-69, municipalities and other interested stakeholders, and
177 (3) be reviewed and revised as necessary.

178 (c) Before an ADS-equipped vehicle is tested or operated on a
179 highway, the owner or the driver of the ADS-equipped vehicle shall:

180 (1) When required by federal law or regulation, (A) receive
181 certification that the ADS-equipped vehicle is in compliance with all
182 applicable federal motor vehicle safety standards and regulations, and
183 (B) place any required certification label, including any reference to an
184 exception granted under federal law or regulation, on the ADS-
185 equipped vehicle;

186 (2) Register the ADS-equipped vehicle with the Commissioner of
187 Motor Vehicles pursuant to section 14-12 or validly register the ADS-
188 equipped vehicle in another state; and

189 (3) Maintain an automobile liability insurance coverage or a surety
190 bond of at least five million dollars for damages by reason of bodily
191 injury, death or property damage caused by an ADS-equipped vehicle.

192 (d) An ADS-equipped vehicle shall comply with any provision of the
193 general statutes or any ordinance of a municipality concerning the
194 operation of a motor vehicle.

195 (e) When an ADS-equipped vehicle is testing or operating on the
196 highways of the state and the automated driving system is engaged:

197 (1) The automated driving system is the operator and shall perform
198 the entire dynamic driving task of the vehicle;

199 (2) The automated driving system is not required to obtain or possess
200 an operator's license;

201 (3) The owner of the ADS-equipped vehicle is responsible for
202 ensuring the compliant operation of the vehicle;

203 (4) The ADS-equipped vehicle shall operate within the operational
204 design domain designated by the manufacturer, unless the ADS-
205 equipped vehicle is granted an exemption under federal law or
206 regulation; and

207 (5) The automated driving system shall achieve a minimal risk
208 condition or make a request to intervene if an operational design
209 domain exit occurs or a system failure occurs that renders the ADS-
210 equipped vehicle unable to perform the entire dynamic driving task
211 relevant to the intended operational design domain.

212 (f) If an ADS-equipped vehicle is involved in a crash, the ADS-
213 equipped vehicle shall achieve a minimal risk condition and remain at
214 the scene of the crash. The owner of the ADS-equipped vehicle, or a
215 person on behalf of such owner, shall (1) immediately report the crash
216 to a law enforcement officer and remain at the scene of the crash until
217 the arrival of a law enforcement officer, and (2) provide the following
218 information upon request to the law enforcement officer: (A) Proof of
219 registration and insurance, (B) the driver's operator's license, (C) specific
220 details of the crash, including the possible cause of the crash, (D)
221 whether the automated driving system was engaged prior to and at the
222 time of the crash, and (E) any other information as requested by the law
223 enforcement officer.

This act shall take effect as follows and shall amend the following sections:		
Section 1	July 1, 2021	13a-260

Statement of Purpose:

To permit the testing and operation of automated driving system equipped vehicles on state highways.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]