



General Assembly

Substitute Bill No. 6486

January Session, 2021



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 Section 13a-260 of the general statutes is repealed and the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 task fallback for a vehicle;

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

17 [(3)] (5) "Dynamic driving task" means the real-time operational and
18 tactical functions required to operate a motor vehicle on highways,
19 excluding the strategic functions such as trip scheduling and selection
20 of destinations and waypoints;

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

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

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

40 (9) "Minimal risk condition" means a condition to which a user or an
41 automated driving system may bring a vehicle after performing the
42 dynamic driving task fallback to reduce the risk of a crash when a given
43 trip cannot or should not be completed;

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

47 [(4)] (11) "Operational design domain" means [a description of the

48 operating domains in which an automated driving system is] the
49 operating conditions under which a driving automation system, or
50 feature of such system, is specifically designed to function, including,
51 but not limited to, [geographic, roadway,] environmental, [and speed
52 limitations] geographical and time-of-day restrictions and the requisite
53 presence or absence of certain traffic or roadway conditions;

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

57 [(6)] (12) "Operator" means [the person who causes the automated
58 driving system to engage while physically inside the fully autonomous
59 vehicle] a driver or automated driving system that operates a motor
60 vehicle;

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

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

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

74 (10) "Secretary" means the Secretary of the Office of Policy and
75 Management; and]

76 (13) "Request to intervene" means notification by an automated
77 driving system to a fallback-ready user indicating that the fallback-

78 ready user should promptly perform the dynamic driving task fallback,
79 which may entail resuming manual operation of the vehicle or achieving
80 a minimal risk condition;

81 (14) "System failure" means a malfunction in an automated driving
82 system or other vehicle system that prevents the automated driving
83 system from reliably performing the portion of the dynamic driving task
84 on a sustained basis, including the complete dynamic driving task, that
85 it would otherwise perform;

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

89 (16) "Trip" means the traversal of an entire travel pathway by a
90 vehicle from the point of origin to a destination;

91 (17) "User" means a person who performs the human role in driving
92 automation; and

93 ~~[(11)]~~ (18) "Highway", ["limited access highway", and] "motor
94 vehicle", "operator's license" and "owner" have the same meanings as
95 defined in section 14-1.

96 [(b) The Office of Policy and Management, in consultation with the
97 Departments of Motor Vehicles, Transportation and Emergency
98 Services and Public Protection, shall establish a pilot program for not
99 more than four municipalities to allow autonomous vehicle testers to
100 test fully autonomous vehicles on the highways of such municipalities.
101 Municipalities shall apply to the Secretary of the Office of Policy
102 Management in the manner and form directed by the secretary for
103 inclusion in the pilot program. The secretary shall select at least one
104 municipality with a population of at least one hundred twenty
105 thousand, but not more than one hundred twenty-four thousand, and
106 one municipality with a population of at least one hundred thousand,
107 as enumerated in the 2010 federal decennial census.

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

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

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

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

135 (3) The operator and autonomous vehicle tester: (A) Comply with any
136 provision of the general statutes or any ordinance of a municipality
137 concerning the operation of motor vehicles; (B) comply with standards
138 established by the National Highway Traffic Safety Administration
139 regarding fully autonomous vehicles; and (C) satisfy any other

140 requirement as determined by the secretary, in consultation with the
141 Commissioners of Motor Vehicles, Transportation and Emergency
142 Services and Public Protection, as necessary to ensure the safe operation
143 of such fully autonomous vehicle.

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

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

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

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

164 (b) Not later than January 1, 2023, the Commissioner of
165 Transportation, in consultation with the Secretary of the Office of Policy
166 and Management and the Commissioners of Motor Vehicles, Insurance
167 and Emergency Services and Public Protection, shall establish a
168 program to test and operate ADS-equipped vehicles on highways in the
169 state. The commissioners and secretary shall (1) consider
170 recommendations from municipalities and other interested

171 stakeholders in establishing such program, (2) require an owner of an
172 ADS-equipped vehicle to submit an application with a safety plan, and
173 (3) approve an application prior to permitting an owner or driver to test
174 and operate an ADS-equipped vehicle.

175 (c) The commissioners and secretary shall jointly adopt regulations,
176 in accordance with the provisions of chapter 54, establishing the
177 requirements of such program. Such regulations shall, at a minimum,
178 (1) incorporate any provision of any statute or regulation of this state or
179 the federal government and national best practices regarding testing
180 and operating ADS-equipped vehicles on highways, (2) establish
181 procedures for an application to be submitted by the owner of an ADS-
182 equipped vehicle, (3) require such application to include a safety plan to
183 manage the risks associated with crashes and driver inattentiveness and
184 list countermeasures to be undertaken by the owner or the driver of the
185 ADS-equipped vehicle to manage such risks, and (4) criteria for the
186 approval or denial of any such application.

187 (d) Before an ADS-equipped vehicle is tested or operated on a
188 highway, the owner or the driver of the ADS-equipped vehicle shall:

189 (1) When required by federal law or regulation, (A) receive
190 certification that the ADS-equipped vehicle is in compliance with all
191 applicable federal motor vehicle safety standards and regulations, and
192 (B) place any required certification label, including any reference to an
193 exception granted under federal law or regulation, on the ADS-
194 equipped vehicle;

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

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

201 (e) An ADS-equipped vehicle shall comply with any provision of the

202 general statutes or any ordinance of a municipality concerning the
203 operation of a motor vehicle.

204 (f) When an ADS-equipped vehicle is testing or operating on the
205 highways of the state and the automated driving system is engaged:

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

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

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

212 (4) The ADS-equipped vehicle shall operate within the operational
213 design domain designated by the manufacturer, unless the ADS-
214 equipped vehicle is granted an exemption under federal law or
215 regulation; and

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

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

232 enforcement officer.

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

Statement of Legislative Commissioners:

In Subsec. (a), the term "driving automation" was deleted to remove redundant language and the subdivisions were renumbered accordingly, in Subsec. (a)(7), "evident" was changed to "identify" for clarity, in Subsec. (a)(14), "driving automation" was changed to "automated driving" for accuracy, in Subsec. (b)(3), "from testing and operating" was changed to "to test and operate" for clarity and in Subsec. (c), "jointly" was added and "such applications" was changed to "any such application" for clarity.

TRA *Joint Favorable Subst.*