

A BILL

23-232

IN THE COUNCIL OF THE DISTRICT OF COLUMBIA



To amend the Autonomous Vehicles Act of 2012 to establish an Autonomous Vehicles Testing Program to be administered by the District Department of Transportation, to authorize the District Department of Transportation to issue permits for the testing of autonomous vehicles on public roadways in the District, to authorize the District Department of Transportation to restrict testing under certain conditions, to establish operational standards for autonomous vehicles, to require an autonomous vehicle testing entity to report certain data and crash information to the District Department of Transportation, and to require the District Department of Transportation to provide a report with recommendations and a timeline to safely accommodate the full deployment of autonomous vehicles.

BE IT ENACTED BY THE COUNCIL OF THE DISTRICT OF COLUMBIA, That this act may be cited as the “Autonomous Vehicles Testing Program Amendment Act of 2020”.

Sec. 2. The Autonomous Vehicle Act of 2012, effective April 23, 2013 (D.C. Law 19-278; D.C. Official Code § 50-2351 *et seq.*), is amended as follows:

(a) Section 2 (D.C. Official Code § 50-2351) is amended as follows:

(1) Paragraph (1) is redesignated as paragraph (1C).

(2) New paragraphs (1), (1A), and (1B) are added to read as follows:

“(1) “Associated autonomous vehicle” means an autonomous vehicle that an autonomous vehicle testing entity identifies in its autonomous vehicle testing permit application

31 pursuant to section 3a, and any subsequent autonomous vehicles approved to operate pursuant to
32 section 3a(f)(5)(1) or permitted by law to operate without subsequent approval.

33 “(1A) “Autonomous driving system” means the combination of hardware and
34 software collectively capable of autonomous operation of a motor vehicle on a sustained basis
35 that meets the definition of Levels 3, 4, or 5 of the Society of Automotive Engineers
36 International’s Taxonomy and Definitions for Terms Related to Driving Automation Systems for
37 On-Road Motor Vehicles, standard J3016.

38 “(1B) “Autonomous operation” means the performance of the entire dynamic
39 driving task by an autonomous driving system, beginning upon the performance of the entire
40 dynamic driving task by an autonomous driving system and continuing until the autonomous
41 driving system is disengaged.”.

42 (3) The newly redesignated paragraph (1C) is amended to read as follows:

43 “(1C) “Autonomous vehicle” means a motor vehicle equipped with an
44 autonomous driving system, regardless of whether the vehicle is under autonomous operation.”.

45 (4) New paragraphs (1D) and (1E) are added to read as follows:

46 “(1D) “AV testing entity” means a person applying for or issued an AV testing
47 permit by the Department.”.

48 “(1E) “AV testing permit” means a permit issued by the Department pursuant to
49 section 3a.

50 (5) Paragraph (2) is repealed.

51 (6) New paragraphs (2A), (2B), (2C), (2D), (2E), and (2F) are added to read as
52 follows:

53 “(2A) “Department” means the District Department of Transportation.

54 “(2B) “Director” means the Director of the Department.

55 “(2C) “Dynamic driving task” means all of the real-time operational and tactical
56 functions collectively required to operate a vehicle in on-road traffic, including controlling
57 lateral and longitudinal vehicle motion, monitoring the driving environment, executing responses
58 to objects and events, planning vehicle maneuvers, and enhancing vehicle conspicuity. The term
59 “dynamic driving task” shall not include the strategic functions of driving, such as scheduling
60 trips, selecting destinations, and specifying routes.

61 “(2D) “Minimal risk condition” means a condition to which a test operator or
62 autonomous driving system brings a vehicle to reduce the risk of a crash when a trip cannot or
63 should not be completed, such as bringing the vehicle to a complete stop.

64 “(2E) “Operate” means collectively, the activities performed by a test operator or
65 an autonomous driving system to perform the entire dynamic driving task for an associated
66 autonomous vehicle.

67 “(2F) “Operational design domain” means the environmental, geographic, time-
68 of-day, traffic, infrastructure, and other conditions under which an autonomous driving system is
69 specifically designed to function.”.

70 (7) New paragraphs (3A), (3B), and (3C) are added to read as follows:

71 “(3A) “Remote operator” means an employee, contractor, or other designee of the
72 autonomous testing entity who is not physically present in an associated autonomous vehicle, but
73 is actively monitoring the autonomous operation of the vehicle in real time and is able to operate
74 the vehicle or is able to communicate with occupants of the vehicle.

75 “(3B) “Testing” means the operation of an associated autonomous vehicle on
76 public roadways to assess or demonstrate the associated autonomous vehicle’s capabilities,
77 including operating an associated autonomous vehicle with occupants other than a test operator.

78 “(3C) “Test operator” means an employee, contractor, or other designee of the
79 autonomous vehicle testing entity who engages an autonomous driving system and performs, in
80 real time, part or all of the dynamic driving task.”.

81 (b) Section 3 (D.C. Official Code § 50-2352) is repealed.

82 (c) New sections 3a, 3b, 3c, 3d, 3e, 3f, and 3g are added to read as follows:

83 “Sec. 3a. Autonomous Vehicle Testing Program.

84 “(a) There is established an Autonomous Vehicle Testing Program (“AV Testing
85 Program”), which shall be administered by the Department. The Department shall set the term
86 for which an AV testing permit lasts before requiring renewal and the fees associated with
87 testing an autonomous vehicle in the District.

88 “(b) The Department shall create an application process for an AV testing entity to obtain
89 an AV testing permit issued by the Department.

90 “(c) As part of its application, an AV testing entity shall submit the following to the
91 Department for approval:

92 “(1) The name, address, and principal point-of-contact for the AV testing entity
93 applying for the AV testing permit;

94 “(2) Vehicle information for each associated autonomous vehicle used for testing,
95 such as tag number and state of issuance, vehicle information number, vehicle make, model, and
96 year, and proof of current vehicle registration;

97 “(3) A safety and risk mitigation assessment that addresses functional safety and
98 cybersecurity risks, in a form to be determined by the Department, or the AV testing entity’s
99 most recent Voluntary Safety Self-Assessment, as described by the National Highway Traffic
100 Safety Administration;

101 “(4) A description of the operational design domain in which an AV testing entity
102 intends to test, including the circumstances under which testing would occur with a remote
103 operator, if applicable; and

104 “(5) A certification that the AV testing entity and its associated autonomous
105 vehicles comply with the following requirements:

106 “(A) When required by federal law, each associated autonomous vehicle
107 shall bear the required manufacturer’s certification label indicating that at the time of the
108 vehicle’s manufacture it was certified to comply with all applicable Federal Motor Vehicle

109 Safety Standards, including reference to an applicable exemption granted by the National
110 Highway Traffic Safety Administration, if any;

111 “(B) Each associated autonomous vehicle shall be capable of being
112 operated in compliance with the applicable traffic and motor vehicle laws of the District,
113 regardless of whether the vehicle is under autonomous operation;

114 “(C) Each associated autonomous vehicle shall be tested with either a test
115 operator physically present in the vehicle or with a remote operator;

116 “(D) Each associated autonomous vehicle shall:

117 “(i) When a test operator is physically present in the autonomous
118 vehicle, safely alert the test operator of a performance-relevant failure that renders the
119 autonomous driving system unable to safely perform the entire dynamic driving task or when the
120 vehicle operates outside of its operational design domain, and when the alert is given, achieve a
121 minimal risk condition or require the test operator to take control of the vehicle; or

122 “(ii) When a test operator is not physically present in the
123 autonomous vehicle, achieve a minimal risk condition in the event of a performance-relevant
124 failure that renders the autonomous driving system unable to safely perform the entire dynamic
125 driving task or if the vehicle operates outside of its operational design domain;

126 “(E) Before testing an associated autonomous vehicle when a test operator
127 is not physically present in the vehicle, the autonomous driving system shall have been
128 previously tested with a test operator physically present in the vehicle within the operational

129 design domain in which the AV testing entity has been permitted to operate, and the autonomous
130 vehicle testing entity shall have reasonably determined that the vehicle is capable of safe
131 operation within the parameters of the operational design domain without a test operator
132 physically present;

133 “(F) Each associated autonomous vehicle shall be equipped with a
134 mechanism to capture and store sensor data from the relevant period preceding a crash between
135 the vehicle and another vehicle, object, or person while the vehicle is under autonomous
136 operation;

137 “(G) The AV testing entity shall create a test operator training program
138 that meets minimum requirements as set by the Department or is reasonably equivalent thereto
139 and each test operator or remote operator shall successfully complete the training program before
140 testing with an associated autonomous vehicle in the District; and

141 “(H) The AV testing entity shall have the ability to respond to a judgment
142 for damages, personal injury, death, or property damage from the operation of an autonomous
143 vehicle on public roadways in the amount of \$5 million in the form of:

144 “(i) An instrument of insurance issued by an insurer authorized to
145 issue insurance in the District;

146 “(ii) A surety bond issued by an admitted surety insurer or an
147 eligible surplus lines insurer, and not a deposit in lieu of bond; or

148 “(iii) A certificate of self-insurance issued or approved by the
149 Department of Insurance, Securities, and Banking.

150 “(d) A person shall not test or operate an autonomous vehicle on a District roadway
151 without an AV testing permit, unless the preexisting testing period applies pursuant to section 3e.

152 “(e) The AV testing entity associated with an autonomous vehicle shall be considered the
153 operator of the vehicle while the vehicle is under autonomous operation.

154 “(f)(1) After approval of an AV testing permit, an AV testing entity shall receive
155 approval from the Department for the following changes to its approved application:

156 “(A) The scope of its operational design domain;

157 “(B) Its test locations;

158 “(C) A change from testing with an in-vehicle test operator to testing with
159 no test operator physically present in the vehicle;

160 “(D) A change to the make or type of vehicle in which testing occurs; and

161 “(E) An increase in the number of vehicles tested that is 50% more than
162 the amount approved for on its most recent permit application, unless a greater percentage for
163 subsequent approvals is stipulated to by the Department through rulemaking.

164 “(2) The Department shall review any proposed changes for which approval is
165 required pursuant to paragraph (1) of this subsection and shall approve or deny the changes no
166 later than 10 business days after the proposed changes are received.

167 “(g) An AV testing entity shall submit an associated autonomous vehicle inventory list to
168 the Department on a quarterly basis that includes the relevant registration information, such as
169 vehicle tag number and state of issuance, vehicle information number, vehicle make, model, and
170 year, and proof of current vehicle registration.

171 “(h) Any records provided to the Department by an applicant or AV testing entity under
172 this act shall not be disclosed to a third party by the Department, including through a request
173 submitted pursuant to the Freedom of Information Act of 1976, effective March 29, 1977 (D.C.
174 Law 1-96; D.C. Official Code § 2-531 *et seq.*), except as required to:

175 “(1) Comply with a subpoena or active law enforcement or other government
176 investigation; or

177 “(2) Comply with section 3c(b).

178 “Sec. 3b. Restrictions on testing.

179 ““The Department may order an AV testing entity to temporarily restrict testing on select
180 roadways, or District-wide, under certain circumstances identified by the Department pursuant to
181 rules, including emergencies, special events, or specific roadway conditions that raise safety
182 concerns. To the maximum extent practicable, the Department shall provide an AV testing entity
183 with reasonable notice about how, where, and when testing will be restricted, and the reasons for
184 such restriction. This section shall only apply to associated autonomous vehicles when under
185 autonomous operation.

186 “Sec. 3c. Data and crash reporting.

187 “(a) On a semi-annual basis, an AV testing entity shall provide to the Department, in a
188 form to be determined by the Department, the following information from each reporting period:

189 “(1) The vehicle miles traveled, in the aggregate, by its associated autonomous
190 vehicles;

191 “(2) The number of crashes involving an associated autonomous vehicle on a
192 public roadway while under autonomous operation in the District that resulted in property
193 damage, bodily injury, or death, if any;

194 “(3) A description of changes, if any, the AV testing entity has implemented or
195 intends to implement following a crash that occurred during the reporting period, such as
196 changes to the autonomous vehicle’s hardware or software systems, changes to the AV testing
197 entity’s test operator training program, or changes to the AV testing entity’s policies or
198 procedures, or an explanation of why the AV testing entity has not implemented or does not
199 intend to implement changes;

200 “(4) A description of the locations tested in, including specific roadways;

201 “(5) A description of the operational design domain in which testing occurred;

202 “(6) A description of the most common unplanned circumstances under which the
203 autonomous driving system ceased autonomous operation, or where a test operator took over
204 manual control of an associated autonomous vehicle, if any; and

205 “(7) Any other information the Department may require; provided, that such
206 information is necessary to evaluate the safety of autonomous vehicles on public roadways or to
207 evaluate the feasibility of the full deployment of autonomous vehicles in the District.

208 “(b) The Department shall publish the reports required by subsection (a) of this section on
209 its website upon their receipt. The Department shall publish the safety and risk mitigation
210 assessments, or the Voluntary Safety Self-Assessments, submitted pursuant to section 3a(c)(3),
211 on its website upon approval of the AV testing entity's permit application; provided, that no
212 proprietary or confidential business information shall be publicly disclosed by the Department.

213 “(c)(1) An AV testing entity shall notify the Department of a crash involving an
214 associated autonomous vehicle while under autonomous operation that results in property
215 damage, bodily injury, or death as soon as possible, but in no case more than 12 hours following
216 the crash. At the time notification is provided pursuant to this paragraph, the AV testing entity
217 shall provide, to the extent known:

218 “(A) The name of the AV testing entity;

219 “(B) The general location of the crash;

220 “(C) The date and approximate time of the crash;

221 “(D) The severity of the crash; and

222 “(E) The name, title, and contact information of the AV testing entity
223 representative reporting the crash.

224 “(2) Within 5 business days of the crash, the AV testing entity shall submit a
225 crash report to the Department that contains the following information:

226 “(A) The names of the test operators involved in the crash, if applicable;

227 “(B) The date, time, location, type of roadway, weather conditions, and a
228 brief description of the event;

229 “(C) A summary of the movement of the vehicle preceding the crash, such
230 as stopped, proceeding straight, making a turn, or reversing;

231 “(D) Whether the autonomous driving system was engaged;

232 “(E) Whether the test operators, if any, attempted to intervene; and

233 “(F) The name, title, and contact information for the AV testing entity
234 representative submitting the crash report.

235 “(d) At its discretion, and in coordination with a law enforcement or government
236 investigative entity, the Department may require an AV testing entity to submit additional
237 information necessary to investigate a crash. Such information shall be requested, stored,
238 maintained, and transmitted pursuant to Department rules and applicable law.

239 “Sec. 3d. Report on full deployment of autonomous vehicles.

240 Within one year after the applicability date of the Autonomous Vehicles Testing Program
241 Amendment Act of 2020, as approved by the Committee on Transportation and the Environment
242 on July 10, 2020 (Committee print of Bill 23-232), the Department shall transmit to the Council
243 a report that provides recommendations to safely accommodate the deployment of autonomous

244 vehicles on public roadways for commercial, personal, and any other use the Department
245 determines. The report may include draft legislation or regulations.

246 “Sec. 3e. Preexisting testing or operation before testing permit availability.

247 “(a) An entity operating or testing autonomous vehicles in the District before the
248 Department makes an AV testing permit application available pursuant to section 3a may
249 continue operating or testing autonomous vehicles in the District until 60 days after the permit
250 application becomes available.

251 “(b) Within 60 days after the Department makes an AV testing permit available, an entity
252 operating or testing autonomous vehicles in the District pursuant to subsection (a) shall:

253 “(1) Apply for an AV testing permit; or

254 “(2) Cease operating or testing autonomous vehicles in the District.

255 “(c) An entity who applies for an AV testing permit pursuant to subsection (b)(1) of this
256 section may continue operating or testing autonomous vehicles in the District while its
257 application is pending, but the entity shall immediately cease operating or testing autonomous
258 vehicles in the District if its application is denied.

259 “Sec. 3f. Civil penalties and other sanctions.

260 “(a)(1) An AV testing entity that violates this act, or a regulation promulgated pursuant to
261 this act, shall be subject to a civil penalty of not more than \$1,000 per offense.

262 “(2) Each day of a violation of this act, or a regulation promulgated pursuant to
263 this act, shall constitute a separate offense, and the penalties set forth in this subsection shall be
264 applicable to each separate offense.

265 “(b) In addition to, or in lieu of, the civil penalty described in subsection (a) of this
266 section, the Department may modify, suspend, revoke, or deny an AV testing permit issued by
267 the Department for a violation of this act, or a regulation promulgated pursuant to this act, after
268 notice and opportunity for a hearing pursuant to section 3g.

269 “Sec. 3g. Administrative appeals.

270 “(a) A person aggrieved by an action of the Department taken pursuant to this act, or a
271 regulation promulgated pursuant to this act, may appeal the action of the Department to the
272 Office of Administrative Hearings, pursuant to section 6(a) of the Office of Administrative
273 Hearings Establishment Act of 2001, effective March 6, 2002 (D.C. Law 14-76; D.C. Official
274 Code § 2-1831.03(a)). The Office of Administrative Hearing shall provide a de novo hearing and
275 shall determine whether the Department’s action was legally proper.

276 “(b) An appeal shall be filed within 15 days after the adverse action of the Department,
277 or, if notice of the adverse action is served by the United States mail or commercial carrier,
278 within 20 days after the adverse action of the Department.”.

279 (d) Section 5 (D.C. Official Code § 50-2354) is amended to read as follows:

280 “Sec. 5. Rules.

281 The Department, pursuant to Title I of the District of Columbia Administrative
282 Procedure Act, approved October 21, 1968 (82 Stat. 1204; D.C. Official Code § 2-501 *et seq.*),
283 shall issue rules implementing the provisions of this act.”.

284 Sec. 3. Applicability.

285 (a) This act shall apply upon the date of inclusion of its fiscal effect in an approved
286 budget and financial plan.

287 (b) The Chief Financial Officer shall certify the date of the inclusion of the fiscal effect in
288 an approved budget and financial plan and provide notice to the Budget Director of the Council
289 of the certification.

290 (c)(1) The Budget Director shall cause the notice of the certification to be published in
291 the District of Columbia Register.

292 (2) The date of publication of the notice of the certification shall not affect the
293 applicability of this act.

294 Sec. 4. Fiscal impact statement.

295 The Council adopts the fiscal impact statement in the committee report as the fiscal
296 impact statement required by section 4a of the General Legislative Procedures Act of 1975,
297 approved October 16, 2006 (120 Stat. 2038; D.C. Official Code § 1-301.47a).

298 Sec. 5. Effective date.

299 This act shall take effect following approval by the Mayor (or in the event of veto by the
300 Mayor, action by the Council to override the veto), a 30-day period of congressional review as

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301 provided in section 602(c)(1) of the District of Columbia Home Rule Act, approved December
302 24, 1973 (87 Stat. 813; D.C. Official Code § 1-206.02(c)(1)), and publication in the District of
303 Columbia Register.