

Representative Karen Kwan proposes the following substitute bill:

AUTONOMOUS VEHICLE AMENDMENTS

2020 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Karen Kwan

Senate Sponsor: Wayne A. Harper

LONG TITLE

General Description:

This bill enacts provisions regarding the transportation of unaccompanied minors by a vehicle for hire operating in driverless operation.

Highlighted Provisions:

This bill:

- ▶ defines terms;
- ▶ prohibits a vehicle for hire in driverless operation from transporting an unaccompanied minor under eight years old or required to use a child restraint system;
- ▶ requires a parent or guardian sign a waiver and provide emergency contact information;
- ▶ requires proper use of safety belts;
- ▶ requires certain monitoring and emergency notification technology; and
- ▶ requires the vehicle be in safe operating condition.

Money Appropriated in this Bill:

None

Other Special Clauses:

None



26 **Utah Code Sections Affected:**

27 AMENDS:

28 **41-26-102.1**, as enacted by Laws of Utah 2019, Chapter 459

29 ENACTS:

30 **41-26-109**, Utah Code Annotated 1953

31

32 *Be it enacted by the Legislature of the state of Utah:*

33 Section 1. Section **41-26-102.1** is amended to read:

34 **41-26-102.1. Definitions.**

35 (1) "ADS-dedicated vehicle" means a vehicle designed to be operated exclusively by a
36 level four or five ADS for all trips within the given operational design domain limitations of
37 the ADS, if any.

38 (2) (a) "Automated driving system" or "ADS" means the hardware and software that
39 are collectively capable of performing the entire dynamic driving task on a sustained basis,
40 regardless of whether the ADS is limited to a specific operational design domain, if any.

41 (b) "Automated driving system" or "ADS" is used specifically to describe a level three,
42 four, or five driving automation system.

43 (3) "Commission" means the State Tax Commission as defined in Section **59-1-101**.

44 (4) "Conventional driver" means a human driver who is onboard the motor vehicle and
45 manually performs some or all of the following actions in order to operate a vehicle:

- 46 (a) braking;
- 47 (b) accelerating;
- 48 (c) steering; and
- 49 (d) transmission gear selection input devices.

50 (5) (a) "Dispatch" means to place an ADS-equipped vehicle into service in driverless
51 operation by engaging the ADS.

52 (b) "Dispatch" includes software-enabled dispatch of multiple ADS-equipped motor
53 vehicles in driverless operation that may complete multiple trips involving pick-up and
54 drop-off of passengers or goods throughout a day or other pre-defined periods of service, and
55 which may involve multiple agents performing various tasks related to the dispatch function.

56 (6) "Division" means the Motor Vehicle Division of the commission, created in

57 Section 41-1a-106.

58 (7) "Driverless operation" means the operation of an ADS-equipped vehicle in which:

59 (a) no on-board user is present; or

60 (b) no on-board user is a human driver or fallback-ready user.

61 (8) "Driverless operation dispatcher" means a user who dispatches an ADS-equipped
62 vehicle in driverless operation.

63 (9) "Driving automation system" means the hardware and software collectively capable
64 of performing part or all of the dynamic driving task on a sustained basis.

65 (10) "Driving automation system feature" means a specific function of a driving
66 automation system.

67 (11) (a) "Dynamic driving task" means all of the real-time operational and tactical
68 functions required to operate a motor vehicle in on-road traffic, including:

69 (i) lateral vehicle motion control through steering;

70 (ii) longitudinal motion control through acceleration and deceleration;

71 (iii) monitoring the driving environment through object and event detection,
72 recognition, classification, and response preparation;

73 (iv) object and event response execution;

74 (v) maneuver planning; and

75 (vi) enhancing conspicuity with lighting, signaling, and gesturing.

76 (b) "Dynamic driving task" does not include strategic functions such as trip scheduling
77 and selection of destinations and waypoints.

78 (12) "Engage" as it pertains to the operation of a vehicle by a driving automation
79 system means to cause a driving automation system feature to perform part or all of the
80 dynamic driving task on a sustained basis.

81 (13) "External event" is a situation in the driving environment that necessitates a
82 response by a human driver or driving automation system.

83 (14) "Fallback-ready user" means the user of a vehicle equipped with an engaged level
84 three ADS who is:

85 (a) a human driver; and

86 (b) ready to operate the vehicle if:

87 (i) a system failure occurs; or

88 (ii) the ADS issues a request to intervene.

89 (15) (a) "Human driver" means a natural person:

90 (i) with a valid license to operate a motor vehicle of the proper class for the motor
91 vehicle being operated; and

92 (ii) who performs in real-time all or part of the dynamic driving task.

93 (b) "Human driver" includes a:

94 (i) conventional driver; and

95 (ii) remote driver.

96 (16) "Level five automated driving system" or "level five ADS" means an ADS feature
97 that has the capability to perform on a sustained basis the entire dynamic driving task under all
98 conditions that can reasonably be managed by a human driver, as well as any maneuvers
99 necessary to respond to a system failure, without any expectation that a human user will
100 respond to a request to intervene.

101 (17) "Level four automated driving system" or "level four ADS" means an ADS feature
102 that, without any expectation that a human user will respond to a request to intervene, has:

103 (a) the capability to perform on a sustained basis the entire dynamic driving task within
104 its operational design domain; and

105 (b) the capability to perform any maneuvers necessary to achieve a minimal risk
106 condition in response to:

107 (i) an exit from the operational design domain of the ADS; or

108 (ii) a system failure.

109 (18) "Level three automated driving system" or "level three ADS" means an ADS
110 feature that:

111 (a) has the capability to perform on a sustained basis the entire dynamic driving task
112 within its operational design domain; and

113 (b) requires a fallback-ready user to operate the vehicle after receiving a request to
114 intervene or in response to a system failure.

115 (19) "Minimal risk condition" means a condition to which a user or an ADS may bring
116 a motor vehicle in order to reduce the risk of a crash when a given trip cannot or should not be
117 completed.

118 (20) "Object and event detection and response" means the subtasks of the dynamic

119 driving task that include:

120 (a) monitoring the driving environment; and

121 (b) executing an appropriate response in order to perform the dynamic driving task.

122 (21) (a) "On-demand autonomous vehicle network" means a transportation service
123 network that uses a software application or other digital means to dispatch or otherwise enable
124 the prearrangement of transportation with motor vehicles that have a level four or five ADS in
125 driverless operation for purposes of transporting persons, including for-hire transportation and
126 transportation for compensation.

127 (b) "On-demand autonomous vehicle network" does not include a vehicle operated by a
128 public transit district as defined in Section [17B-2a-802](#).

129 (22) "Operate" means the same as that term is defined in Section [41-1a-102](#).

130 (23) "Operational design domain" means the operating conditions under which a given
131 ADS or feature thereof is specifically designed to function, including:

132 (a) speed range, environmental, geographical, and time-of-day restrictions; or

133 (b) the requisite presence or absence of certain traffic or roadway characteristics.

134 (24) "Operator" means the same as that term is defined in Section [41-6a-102](#).

135 (25) "Passenger" means a user on board a vehicle who has no role in the operation of
136 that vehicle.

137 (26) "Person" means the same as that term is defined in Section [41-6a-102](#).

138 (27) "Remote driver" means a human driver who is not located in a position to
139 manually exercise in-vehicle braking, accelerating, steering, or transmission gear selection
140 input devices, but operates the vehicle.

141 (28) "Request to intervene" means the notification by an ADS to a fallback-ready user
142 indicating that the fallback-ready user should promptly begin or resume operation of the
143 vehicle.

144 (29) "Sustained operation of a motor vehicle" means the performance of part or all of
145 the dynamic driving task both between and across external events, including response to
146 external events and continued performance of part or all of the dynamic driving task in the
147 absence of external events.

148 (30) "System failure" means a malfunction in a driving automation system or other
149 vehicle system that prevents the ADS from reliably performing the portion of the dynamic

150 driving task on a sustained basis, including the complete dynamic driving task, that the ADS
151 would otherwise perform.

152 (31) "User" means a:

153 (a) human driver;

154 (b) passenger;

155 (c) fallback-ready user; or

156 (d) driverless operation dispatcher.

157 Section 2. Section **41-26-109** is enacted to read:

158 **41-26-109. Unaccompanied minors in an autonomous transport.**

159 (1) As used in this section:

160 (a) "Guardian" means a person who has qualified and been recognized by a court as a
161 guardian of a minor court appointment.

162 (b) "Parent" means a biological or adoptive parent.

163 (c) "Safety belt" means the same as that term is defined in Section [41-6a-1802](#).

164 (d) "Unaccompanied minor" means a person under the age of 18 that is not under the
165 supervision of an adult.

166 (2) (a) An on-demand autonomous vehicle network may not provide services to an
167 unaccompanied minor that is:

168 (i) under the age of eight; or

169 (ii) required to use a child restraint system under the standards described in 49 C.F.R.
170 Sec. 571.213.

171 (b) An on-demand autonomous vehicle network may not provide services to an
172 unaccompanied minor under the age of 16 if the services are not requested and initiated by the
173 minor's parent or guardian.

174 (3) (a) Before an on-demand autonomous vehicle network may provide services to an
175 unaccompanied minor under the age of 16, the entity operating the on-demand autonomous
176 vehicle network shall ensure that a parent or guardian has:

177 (i) completed a waiver or permission form; and

178 (ii) provided emergency contact information for each minor being transported.

179 (b) The waiver or permission form may be part of the on-demand autonomous vehicle
180 network's mobile application or other ride hailing technology.

181 (4) An entity operating an on-demand autonomous vehicle network shall ensure that
 182 any vehicle offered to provide services to an unaccompanied minor:

183 (a) is enclosed with a roof or top;

184 (b) is in clean and safe condition;

185 (c) maintains an interior temperature between 60 and 85 degrees Fahrenheit;

186 (d) is compliant with safety and equipment standards described in Chapter 6a, Part 16,

187 Vehicle Equipment ~~H~~→ , or has an exemption as described in Subsection 41-26-103(2) ←~~H~~ ;

187a and

188 (e) is equipped with an emergency communication system, including assistive
 189 technology, that can establish effective communication between the vehicle, passenger, and
 190 emergency services in the event of an incident.

191 (5) (a) An entity operating an on-demand autonomous vehicle network shall ensure that
 192 any vehicle offered to provide services to an unaccompanied minor has a video monitoring
 193 system to monitor activity in the vehicle, and, except as provided in Subsection (5)(b), retain
 194 the video data for 90 days after the date on which the on-demand autonomous vehicle network
 195 provides the service.

196 (b) If a formal investigation is initiated within the 90 days described in Subsection
 197 (5)(a), the entity operating the on-demand autonomous vehicle network shall retain the video
 198 data for as long as:

199 (i) reasonably necessary for evidentiary or investigative purposes; or

200 (ii) required by a warrant issued under the Utah Rules of Criminal Procedure or an
 201 equivalent federal warrant.

202 (6) (a) The parent or guardian of an unaccompanied minor shall ensure that the safety
 203 belt is properly fastened before an on-demand autonomous vehicle network may provide
 204 services to an unaccompanied minor.

205 (b) The parent or guardian of an unaccompanied minor shall, before an on-demand
 206 autonomous vehicle network may provide services to an unaccompanied minor:

207 (i) ensure that a parent, guardian, or another adult designated by a parent or guardian, is
 208 at the destination to receive the unaccompanied minor; or

209 (ii) affirmatively waive the requirement described in Subsection (6)(b)(i).