

AMENDED IN SENATE APRIL 16, 2012

AMENDED IN SENATE APRIL 9, 2012

SENATE BILL

No. 1298

Introduced by Senator Padilla

February 23, 2012

An act to add Division 16.6 (commencing with Section 38750) to the Vehicle Code, relating to vehicles.

LEGISLATIVE COUNSEL'S DIGEST

SB 1298, as amended, Padilla. Vehicles: autonomous vehicles: safety and performance requirements.

Existing law requires the Department of the California Highway Patrol to adopt rules and regulations that are designed to promote the safe operation of specific vehicles, including, among other things, schoolbuses and commercial motor vehicles.

This bill would authorize the operation of an autonomous vehicle, as defined, on public roads by a licensed driver if either of 2 conditions applies, including, among other things, that the manufacturer of the autonomous technology certifies that the autonomous vehicle has a mechanism to engage and disengage the autonomous technology that is easily accessible to the operator and that the autonomous technology meets all applicable safety standards and performance requirements set forth in state and federal law and the regulations promulgated pursuant to those provisions.

The bill would require ~~that federal regulations promulgated by the National Highway Traffic Safety Administration (NHTSA) would supersede these provisions when found to be in conflict. The bill would~~ *that, until such time that an autonomous vehicle meets the requirements established by the National Highway Traffic Safety Administration*

(NHTSA) for the operation of autonomous vehicles without the presence of a licensed driver, an autonomous vehicle may not be operated on public roads unless a licensed driver is seated in the driver’s seat of the vehicle. The bill would also authorize the Department of the California Highway Patrol, in consultation with the Department of Motor Vehicles, to recommend to the Legislature additional requirements for the safe operation of autonomous vehicles on California’s public roads, including, among other things, specific recommendations for the operation of an autonomous vehicle without the presence of a licensed driver.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. Division 16.6 (commencing with Section 38750)
2 is added to the Vehicle Code, to read:

3

4 DIVISION 16.6. AUTONOMOUS VEHICLES

5

6 38750. The Legislature finds and declares all of the following:

7 (a) Development is actively under way of new technology that,
8 through the use of computers, sensors, and other systems, permits
9 a motor vehicle to operate without the active control and continuous
10 monitoring of a human operator. Motor vehicles with this
11 technology, referred to as “autonomous vehicles,” offer significant
12 potential safety, mobility, and commercial benefits for individuals
13 and businesses in the state and elsewhere.

14 (b) Autonomous vehicles have been operated safely on public
15 roads in the state in recent years by ~~companies~~ *entities* developing
16 and testing this technology.

17 (c) The State of California, which presently does not prohibit
18 or specifically regulate the operation of autonomous vehicles,
19 desires to encourage the current and future development, testing,
20 and operation of autonomous vehicles on the public roads of the
21 state. The state seeks to avoid interrupting these activities while
22 at the same time creating appropriate rules intended to ensure that
23 the testing and operation of autonomous vehicles in the state are
24 conducted in a safe manner.

1 (d) Toward that end, the Legislature finds it appropriate to
2 authorize the establishment of specific safety requirements for the
3 testing and operation of autonomous vehicles, and to require that
4 future testing and operation of autonomous vehicles in the state
5 comply with those requirements.

6 38751. (a) For purposes of this division, the following
7 definitions apply:

8 (1) “Autonomous technology” means technology that has the
9 capability to drive the vehicle on which it is installed without the
10 active control or continuous monitoring by a human operator.

11 (2) (A) “Autonomous vehicle” means any vehicle equipped
12 with autonomous technology.

13 (B) An autonomous vehicle does not include a vehicle that is
14 equipped with one or more collision avoidance systems, including,
15 but not limited to, electronic blind spot assistance, automated
16 emergency braking systems, park assist, adaptive cruise control,
17 lane keep assist, lane departure warning, traffic jam and queuing
18 assist, or other similar systems that enhance safety or provide driver
19 assistance, but are not capable, collectively or singularly, of driving
20 the vehicle without the active control or monitoring of a human
21 operator.

22 (3) A “manufacturer” of autonomous technology is the person
23 as defined in Section 470 that originally manufactures a vehicle
24 and equips autonomous technology on the originally completed
25 vehicle or, in the case of a vehicle not originally equipped with
26 autonomous technology by the vehicle manufacturer, the person
27 that modifies the vehicle by installing autonomous technology to
28 convert it to an autonomous vehicle after the vehicle was originally
29 manufactured.

30 (b) An autonomous vehicle may be operated on public roads
31 by a licensed driver if either of the following applies:

32 (1) The autonomous vehicle is being operated on roads in this
33 state solely by employees, contractors, or other persons designated
34 by the manufacturer of the autonomous technology for testing
35 purposes. For testing purposes, a human operator shall be present
36 in the autonomous vehicle such that he or she has the ability to
37 monitor the vehicle’s performance and intervene, if necessary,
38 unless the vehicle is being tested or demonstrated on a closed
39 course. Prior to the start of testing in this state, the entity
40 performing the testing must obtain an instrument of insurance,

1 surety bond, or proof of self-insurance in the amount of five million
2 dollars (\$5,000,000). ~~An autonomous vehicle may be tested on the~~
3 ~~public roads of the state with the autonomous technology engaged~~
4 ~~only if the entity performing the tests has completed at least 10,000~~
5 ~~miles of prior road testing with the autonomous technology~~
6 ~~engaged on a vehicle.~~

7 (2) The manufacturer of the autonomous technology certifies
8 all of the following:

9 (A) The autonomous vehicle has a mechanism to engage and
10 disengage the autonomous technology that is easily accessible to
11 the operator.

12 (B) The autonomous vehicle has a visual indicator inside the
13 cabin to indicate when the autonomous technology is engaged.

14 (C) The autonomous vehicle has a system to safely alert the
15 operator if an autonomous technology failure is detected while the
16 autonomous technology is engaged, and when an alert is given,
17 the system shall do either of the following:

18 (i) Require the operator to take control of the autonomous
19 vehicle.

20 (ii) If the operator is unable to take control of the autonomous
21 vehicle, ~~or the operator is not physically present inside the vehicle,~~
22 be equipped with technology capable of moving the autonomous
23 vehicle safely out of traffic and to a complete stop.

24 (D) If limitations of the autonomous technology installed on
25 the autonomous vehicle make it necessary for the operator to be
26 physically present inside the autonomous vehicle when the
27 autonomous technology is engaged, the autonomous vehicle shall
28 allow the operator to take control in multiple manners, including,
29 without limitation, through the use of the brake, the accelerator
30 pedal, or the steering wheel, and it shall alert the operator that the
31 autonomous technology has been disengaged.

32 (E) The autonomous technology meets all applicable safety
33 standards and performance requirements set forth in state and
34 federal law and the regulations promulgated pursuant to those
35 laws.

36 (F) The autonomous technology does not adversely affect any
37 safety features of the autonomous vehicle that are mandated by
38 federal regulations.

39 ~~(e) For purposes of this section, a person is the operator of an~~
40 ~~autonomous vehicle when the person causes the autonomous~~

1 ~~technology to engage, regardless of whether the person is~~
2 ~~physically present in the vehicle while it is engaged.~~

3 ~~(d) Federal regulations promulgated by the National Highway~~
4 ~~Traffic Safety Administration shall supersede this section when~~
5 ~~found to be in conflict with this section.~~

6 *(c) Until such time that an autonomous vehicle meets the*
7 *requirements established by the National Highway Traffic Safety*
8 *Administration (NHTSA) for the operation of autonomous vehicles*
9 *without the presence of a licensed driver, the autonomous vehicle*
10 *may not be operated on public roads unless a licensed driver is*
11 *seated in the driver's seat of the vehicle.*

12 ~~(e)~~

13 *(d) The Department of the California Highway Patrol may, in*
14 *consultation with the Department of Motor Vehicles, recommend*
15 *to the Legislature additional requirements for the safe operation*
16 *of autonomous vehicles on California's public roads, including,*
17 *but not limited to, specific recommendations for the operation of*
18 *an autonomous vehicle without the presence of a licensed driver.*