



99TH GENERAL ASSEMBLY

State of Illinois

2015 and 2016

HB3136

by Rep. Jack D. Franks

SYNOPSIS AS INTRODUCED:

See Index

Amends the Illinois Vehicle Code and creates a new Chapter on autonomous vehicles. Defines the terms, "autonomous technology", "autonomous vehicle", "Secretary", "operator", and "manufacturer". Provides for the operation of autonomous vehicles on public roads for testing purposes. Provides that an autonomous vehicle shall not be driven for other than testing purposes unless the manufacturer submits an application meeting certain requirements, and that application is approved by the Secretary of State. Requires the Secretary to adopt regulations setting forth requirements for the submission of evidence of insurance, surety bond, or self-insurance, and the submission and approval of an application to operate an autonomous vehicle. Provides that the Secretary shall approve an application if the applicant has submitted all information and completed testing necessary to satisfy the Secretary that the autonomous vehicles are safe to operate on public roads and the applicant has complied with all requirements specified in the regulations adopted by the Secretary. Allows the Secretary to establish additional requirements by the adoption of regulations that he or she deems necessary to ensure the safe operation of autonomous vehicles on public roads. Allows the Secretary to promulgate regulations to assess a fee upon a manufacturer that submits an application to operate autonomous vehicles on public roads in an amount necessary to recover all costs reasonably incurred by the Secretary.

LRB099 06124 RJF 26180 b

FISCAL NOTE ACT
MAY APPLY

A BILL FOR

1 AN ACT concerning transportation.

2 **Be it enacted by the People of the State of Illinois,**
3 **represented in the General Assembly:**

4 Section 5. The Illinois Vehicle Code is amended by adding
5 the headings of Chapter 12a and Article I and Sections 12a-100,
6 12A-101, 12a-102, 12a-103, 12a-104, and 12a-105 and the heading
7 of Article II and Sections 12a-201 and 12a-202 as follows:

8 (625 ILCS 5/Ch. 12a heading new)

9 CHAPTER 12a. AUTONOMOUS VEHICLES

10 (625 ILCS 5/ Ch. 12a Art. I heading new)

11 ARTICLE I. DEFINITIONS

12 (625 ILCS 5/12a-100 new)

13 Sec. 12a-100. Definition of words and phrases. For the
14 purposes of this Chapter, the following words and phrases shall
15 have the meanings ascribed to them.

16 (625 ILCS 5/12a-101 new)

17 Sec. 12a-101. Autonomous technology. "Autonomous
18 technology" means technology that has the capability to drive a
19 vehicle without the active physical control or monitoring by a
20 human operator.

1 (625 ILCS 5/12a-102 new)

2 Sec. 12a-102. Autonomous vehicle. "Autonomous vehicle"
3 means any vehicle equipped with autonomous technology that has
4 been integrated into that vehicle. An autonomous vehicle does
5 not include a vehicle that is equipped with one or more
6 collision avoidance systems, including, but not limited to,
7 electronic blind spot assistance, automated emergency braking
8 systems, park assist, adaptive cruise control, lane keep
9 assist, lane departure warning, traffic jam and queuing assist,
10 or other similar systems that enhance safety or provide driver
11 assistance, but are not capable, collectively or singularly, of
12 driving the vehicle without the active control or monitoring of
13 a human operator.

14 (625 ILCS 5/12a-103 new)

15 Sec. 12a-103. Secretary. "Secretary" means the Secretary
16 of State.

17 (625 ILCS 5/12a-104 new)

18 Sec. 12a-104. Operator. An "operator" of an autonomous
19 vehicle is the person who is seated in the driver's seat, or if
20 there is no person in the driver's seat, causes the autonomous
21 technology to engage.

22 (625 ILCS 5/12a-105 new)

1 Sec. 12a-105. Manufacturer. A "manufacturer" of autonomous
2 technology is the person that originally manufactures a vehicle
3 and equips autonomous technology on the originally completed
4 vehicle or, in the case of a vehicle not originally equipped
5 with autonomous technology by the vehicle manufacturer, the
6 person that modifies the vehicle by installing autonomous
7 technology to convert it to an autonomous vehicle after the
8 vehicle was originally manufactured.

9 (625 ILCS 5/Ch. 12a Art. II heading new)

10 ARTICLE II. OPERATION OF AUTONOMOUS VEHICLES

11 (625 ILCS 5/12a-201 new)

12 Sec. 12a-201. Road testing autonomous vehicles.

13 (a) An autonomous vehicle may be operated on public roads
14 for testing purposes by a driver who possesses the proper class
15 of license for the type of vehicle being operated if all of the
16 following requirements are met:

17 (1) The autonomous vehicle is being operated on roads
18 in this State solely by employees, contractors, or other
19 persons designated by the manufacturer of the autonomous
20 technology.

21 (2) The driver shall be seated in the driver's seat,
22 monitoring the safe operation of the autonomous vehicle,
23 and capable of taking over immediate manual control of the
24 autonomous vehicle in the event of an autonomous technology

1 failure or other emergency.

2 (3) Prior to the start of testing in this State, the
3 manufacturer performing the testing shall obtain an
4 instrument of insurance, surety bond, or proof of
5 self-insurance in the amount of \$5,000,000, and shall
6 provide evidence of the insurance, surety bond, or
7 self-insurance to the Secretary in the form and manner
8 required by the Secretary pursuant to the regulations
9 adopted under subsection (a) of Section 12a-202.

10 (b) Except as provided in subsection (a), an autonomous
11 vehicle shall not be operated on public roads until the
12 manufacturer submits an application to the Secretary, and that
13 application is approved by the Secretary under the regulations
14 adopted in subsection (a) of Section 12a-202. The application
15 shall contain, at a minimum, all of the following
16 certifications:

17 (1) A certification by the manufacturer that the
18 autonomous technology satisfies all of the following
19 requirements:

20 (A) The autonomous vehicle has a mechanism to
21 engage and disengage the autonomous technology that is
22 easily accessible to the operator;

23 (B) The autonomous vehicle has a visual indicator
24 inside the cabin to indicate when the autonomous
25 technology is engaged;

26 (C) The autonomous vehicle has a system to safely

1 alert the operator if an autonomous technology failure
2 is detected while the autonomous technology is
3 engaged, and when an alert is given, the system shall
4 do either of the following:

5 (i) require the operator to take control of the
6 autonomous vehicle; or

7 (ii) if the operator does not or is unable to
8 take control of the autonomous vehicle, the
9 autonomous vehicle shall be capable of coming to a
10 complete stop;

11 (D) The autonomous vehicle shall allow the
12 operator to take control in multiple manners,
13 including, without limitation; through the use of the
14 brake, the accelerator pedal, or the steering wheel,
15 and it shall alert the operator that the autonomous
16 technology has been disengaged.

17 (E) The autonomous vehicle's autonomous technology
18 meets Federal Motor Vehicle Safety Standards for the
19 vehicle's model year and all other applicable safety
20 standards and performance requirements set forth in
21 State and federal law and the regulations promulgated
22 pursuant to those laws.

23 (F) The autonomous technology does not make
24 inoperative any Federal Motor Vehicle Safety Standards
25 for the vehicle's model year and all other applicable
26 safety standards and performance requirements set

1 forth in State and federal law and the regulations
2 promulgated pursuant to those laws.

3 (G) The autonomous vehicle has a separate
4 mechanism, in addition to, and separate from, any other
5 mechanism required by law, to capture and store the
6 autonomous technology sensor data for at least 30
7 seconds before a collision occurs between the
8 autonomous vehicle and another vehicle, object, or
9 natural person while the vehicle is operating in
10 autonomous mode. The autonomous technology sensor data
11 shall be captured and stored in a read-only format by
12 the mechanism so that the data is retained until
13 extracted from the mechanism by an external device
14 capable of downloading and storing the data. The data
15 shall be preserved for three years after the date of
16 the collision. The manufacturer of the autonomous
17 technology installed on the vehicle shall provide a
18 written disclosure to the purchaser of an autonomous
19 vehicle that describes what information is collected
20 by the autonomous technology equipped on the vehicle.

21 (2) A certification that the manufacturer has tested
22 the autonomous technology on public roads and has complied
23 with the testing standards, if any, established by the
24 Secretary under subsection (a) of Section 12a-202; and

25 (3) A certification that the manufacturer will
26 maintain a surety bond, or proof of self-insurance as

1 specified in regulations adopted by the Secretary under
2 subsection (a) of Section 12a-202, in an amount of
3 \$5,000,000.

4 (625 ILCS 5/12a-202 new)

5 Sec. 12a-202. Insurance, applications, and adoption of
6 regulations for autonomous vehicle operation.

7 (a) As soon as practicable, the Secretary shall adopt
8 regulations setting forth requirements for the submission of
9 evidence of insurance, surety bond, or self-insurance required
10 by subsection (a) of Section 12a-201, and the submission and
11 approval of an application to operate an autonomous vehicle
12 under subsection (b) of Section 12a-201.

13 (b) The regulations adopted by the Secretary shall include
14 any testing, equipment, and performance standards, in addition
15 to those established for purposes of subsection (a) of Section
16 12a-201, that the Secretary concludes are necessary to ensure
17 the safe operation of autonomous vehicles on public roads, with
18 or without the presence of a driver inside the vehicle. In
19 developing these regulations, the Secretary may consult with
20 the Illinois State Police or any other entity identified by the
21 Secretary that has expertise in automotive technology,
22 automotive safety, and autonomous system design.

23 (c) The Secretary may establish additional requirements by
24 the adoption of regulations, which it determines, in
25 consultation with the Illinois State Police, are necessary to

1 ensure the safe operation of autonomous vehicles on public
2 roads, including, but not limited to:

3 (1) regulations regarding the aggregate number of
4 deployments of autonomous vehicles on public roads;

5 (2) special rules for the registration of autonomous
6 vehicles;

7 (3) new license requirements for operators of
8 autonomous vehicles; and

9 (4) rules for revocation, suspension, or denial of any
10 license or any approval issued under this Chapter.

11 (d) The Secretary shall approve an application submitted by
12 a manufacturer under subsection (b) of Section 12a-201 if it
13 finds that the applicant has submitted all information and
14 completed testing necessary to satisfy the Secretary that the
15 autonomous vehicles are safe to operate on public roads and the
16 applicant has complied with all requirements specified in the
17 regulations adopted by the Secretary under subsections (a),
18 (b), and (c).

19 (e) If an application seeks approval for autonomous
20 vehicles capable of operating without the presence of a driver
21 inside the vehicle, the Secretary may impose additional
22 requirements and shall hold public hearings on the adoption of
23 any regulation it deems necessary to ensure the safe operation
24 of those vehicles. The Secretary may require the presence of a
25 driver in the driver's seat of the vehicle if it is determined
26 that such a requirement is necessary to ensure the safe

1 operation of those vehicles on public roads. The Secretary
2 shall notify the General Assembly of the receipt of an
3 application from a manufacturer seeking approval to operate an
4 autonomous vehicle capable of operating without the presence of
5 a driver inside the vehicle, and shall also notify the General
6 Assembly upon approval of the application. Approval of the
7 application shall be effective no sooner than 180 days after
8 the date the application is submitted.

9 (f) The Secretary may promulgate regulations to assess a
10 fee upon a manufacturer that submits an application to operate
11 autonomous vehicles on public roads in an amount necessary to
12 recover all costs reasonably incurred by the Secretary.

13 (g) Nothing in this Section shall limit or expand the
14 existing authority to operate autonomous vehicles on public
15 roads, until 120 days after the Secretary adopts the
16 regulations required by subsection (a). After adoption of any
17 regulations for autonomous vehicle operation, federal
18 regulations promulgated by the National Highway Traffic Safety
19 Administration shall supersede the provisions of this Section
20 when found to be in conflict.

1 INDEX

2 Statutes amended in order of appearance

3 625 ILCS 5/Ch. 12a heading

4 new

5 625 ILCS 5/ Ch. 12a Art. I

6 heading new

7 625 ILCS 5/12a-100 new

8 625 ILCS 5/12a-101 new

9 625 ILCS 5/12a-102 new

10 625 ILCS 5/12a-103 new

11 625 ILCS 5/12a-104 new

12 625 ILCS 5/12a-105 new

13 625 ILCS 5/Ch. 12a Art. II

14 heading new

15 625 ILCS 5/12a-201 new

16 625 ILCS 5/12a-202 new