

2017 Regular Session

HOUSE BILL NO. 511

BY REPRESENTATIVES PIERRE, STOKES, AND LEGER

Prefiled pursuant to Article III, Section 2(A)(4)(b)(i) of the Constitution of Louisiana.

MOTOR VEHICLES: Provides relative to the regulation and operation of autonomous vehicles

1 AN ACT

2 To enact Chapter 18 of Title 32 of the Louisiana Revised Statutes of 1950, to be comprised
3 of R.S. 32:1801 through 1808, relative to regulation of fully autonomous vehicles;
4 to provide for the operation of fully autonomous vehicles; to require insurance,
5 registration, and title for fully autonomous vehicles; to provide for the reporting of
6 accidents involving fully autonomous vehicles; to provide for the implementation of
7 additional rules and regulations for the operation of autonomous vehicles; to provide
8 for definitions; and to provide for related matters.

9 Be it enacted by the Legislature of Louisiana:

10 Section 1. Chapter 18 of Title 32 of the Louisiana Revised Statutes of 1950,
11 comprised of R.S. 32:1801 through 1808 is hereby enacted to read as follows:

12 CHAPTER 18. FULLY AUTONOMOUS VEHICLES

13 §1801. Definitions

14 When used in this Chapter, the following words and phrases shall have the
15 meanings ascribed to them in this Section, unless the context clearly indicates a
16 different meaning:

17 (1) "Automated driving system" means the hardware and software that are
18 collectively capable of performing the entire dynamic driving task on a sustained
19 basis, regardless of whether it is limited to a specific operational design domain.

1 (2) "Dynamic driving task" or "DDT" means all of the real-time operational
2 and tactical functions required to operate a vehicle in on-road traffic, excluding the
3 strategic functions such as trip scheduling and selection of destinations and
4 waypoints.

5 (3) "Fully autonomous vehicle" means a vehicle equipped with an automated
6 driving system designed to perform all aspects of the dynamic driving task within its
7 operational design domain, including achieving a minimal risk condition, without
8 any intervention or supervision by a human driver.

9 (4) "Human driver" means a natural person in the vehicle with immediate
10 access to controls for steering, braking, and acceleration.

11 (5) "Minimal risk condition" means a low-risk operating mode in which a
12 fully autonomous vehicle operating without a human driver achieves a reasonably
13 safe state, such as bringing the vehicle to a complete stop upon experiencing a failure
14 of the vehicle's automated driving system that renders the vehicle unable to perform
15 the entire dynamic driving task.

16 (6) "On-demand autonomous vehicle network" means a passenger
17 transportation network that uses a software application or other digital means to
18 connect passengers to fully autonomous vehicles for transportation, including
19 for-hire transportation and transportation for compensation.

20 (7) "Operational design domain" or "ODD" means a description of the
21 specific operating domains in which an automated driving system is designed to
22 properly operate, including but not limited to, roadway types, speed range,
23 environmental conditions such as weather and time of day, and other domain
24 constraints.

25 §1802. Operation of fully autonomous vehicles; no human driver

26 A fully autonomous vehicle is authorized to drive or operate on the public
27 roads of this state without a human driver provided that the vehicle meets all of the
28 following conditions:

1 (1) If a failure of the automated driving system occurs that renders the
2 system unable to perform the entire dynamic driving task relevant to its intended
3 operational design domain, the vehicle will achieve a minimal risk condition.

4 (2) The fully autonomous vehicle is capable of operating in compliance with
5 the applicable traffic and motor vehicle safety laws and regulations of this state,
6 unless an exception is granted by the Department of Transportation and
7 Development or the Department of Public Safety and Corrections, office of motor
8 vehicles.

9 (3) The vehicle bears the required manufacturer's certification label
10 indicating that at the time of its manufacture it was in compliance with all applicable
11 federal motor vehicle safety standards, unless an exception is granted under
12 applicable federal law.

13 §1803. Insurance

14 Before a fully autonomous vehicle may operate on public roads in the state
15 without a human driver, a person shall submit proof of financial responsibility
16 satisfactory to the Department of Public Safety and Corrections, office of motor
17 vehicles, that the fully autonomous vehicle is covered by insurance or proof of
18 self-insurance that satisfies the requirements of R.S. 32:861 and R.S. 32:900.

19 §1804. Reporting accidents

20 Any accident involving a fully autonomous vehicle without a human driver
21 on public roads in this state shall be reported in accordance with R.S. 32:871.

22 §1805. On-demand autonomous vehicle network

23 Notwithstanding any other provision of state or local law to the contrary, a
24 person may operate an on-demand autonomous vehicle network. Such a network
25 may provide transportation for multiple passengers who agree to share the ride in
26 whole or in part. An on-demand autonomous vehicle network may connect
27 passengers to fully autonomous vehicles either exclusively or as part of a digital
28 network that also connects passengers to human drivers who provide transportation
29 services in vehicles that are not fully autonomous.

1 §1806. Registration and title

2 A. A fully autonomous vehicle shall be properly registered in accordance
3 with R.S. 47:463. If a fully autonomous vehicle is registered in this state, the vehicle
4 shall be identified on the registration as a fully autonomous vehicle.

5 B. A fully autonomous vehicle shall be properly titled in accordance with
6 R.S. 32:701 et seq. If a fully autonomous vehicle is titled in this state, the vehicle
7 shall be identified on the title as a fully autonomous vehicle.

8 §1807. Controlling authority

9 A. Unless otherwise provided in this Chapter and notwithstanding any other
10 provision of law to the contrary, fully autonomous vehicles and automated driving
11 systems are governed exclusively by this Chapter. The provisions of this Chapter
12 shall be implemented by the Department of Transportation and Development and the
13 Department of Public Safety and Corrections, office of motor vehicles.

14 B. No state or local governmental subdivision may impose additional
15 requirements for the regulation or operation of fully autonomous vehicles, including
16 performance standards specific to the operation of fully autonomous vehicles,
17 automated driving systems, or an on-demand autonomous vehicle network, except
18 the Department of Transportation and Development or the Department of Public
19 Safety and Corrections, office of motor vehicles.

20 C. No state or local governmental subdivision may impose a tax on a fully
21 autonomous vehicle, automated driving system, or on-demand autonomous vehicle
22 network, where such tax relates specifically to the operation of fully autonomous
23 vehicles.

24 §1808. Rule of construction

25 A. When engaged, the automated driving system shall be considered the
26 driver or operator of a fully autonomous vehicle for purposes of conformance to
27 applicable traffic or motor vehicle laws of the state.

1 B. The provisions of R.S. 32:402 shall not apply to an automated driving
2 system when engaged on a fully autonomous vehicle, or to a person operating a fully
3 autonomous vehicle with the automated driving system engaged.

4 C. A human driver shall not be required to operate a fully autonomous
5 vehicle that is being operated by an automated driving system. The automated
6 driving system of a fully autonomous vehicle, when engaged, shall be deemed to
7 fulfill any physical acts required of a human driver.

DIGEST

The digest printed below was prepared by House Legislative Services. It constitutes no part of the legislative instrument. The keyword, one-liner, abstract, and digest do not constitute part of the law or proof or indicia of legislative intent. [R.S. 1:13(B) and 24:177(E)]

HB 511 Original

2017 Regular Session

Pierre

Abstract: Creates regulations and requirements for the operation of fully autonomous vehicles.

Proposed law defines "automated driving system" as the hardware and software that are collectively capable of performing the entire dynamic driving task on a sustained basis, regardless of whether it is limited to a specific operational design domain.

Proposed law defines "dynamic driving task" or "DDT" as all of the real-time operational and tactical functions required to operate a vehicle in on-road traffic, excluding the strategic functions such as trip scheduling and selection of destinations and waypoints.

Proposed law defines "fully autonomous vehicle" as a vehicle equipped with an automated driving system designed to perform all aspects of the dynamic driving task within its operational design domain, including achieving a minimal risk condition, without any intervention or supervision by a human driver.

Proposed law defines "human driver" as a natural person in the vehicle with immediate access to controls for steering, braking and acceleration.

Proposed law defines "minimal risk condition" as a low-risk operating mode in which a fully autonomous vehicle operating without a human driver achieves a reasonably safe state, such as bringing the vehicle to a complete stop upon experiencing a failure of the vehicle's automated driving system that renders the vehicle unable to perform the entire dynamic driving task.

Proposed law defines "on-demand autonomous vehicle network" as a passenger transportation network that uses a software application or other digital means to connect passengers to fully autonomous vehicles for transportation, including for-hire transportation and transportation for compensation.

Proposed law defines "operational design domain" or "ODD" as a description of the specific operating domains in which an automated driving system is designed to properly operate, including but not limited to roadway types, speed range, environmental conditions, such as weather and time of day, and other domain constraints.

Proposed law authorizes a fully autonomous vehicle to operate on the roads of this state without a human driver if the vehicle meets all of the following conditions:

- (1) If a failure of the automated system occurs that renders the system unable to perform the entire driving task relevant to its intended operational design domain, the vehicle will achieve a minimal risk condition.
- (2) The fully autonomous vehicle is capable of operating in compliance with the applicable traffic and motor vehicle safety laws and regulations of the state unless an exception is granted by the Dept. of Transportation and Development or the Dept. of Public Safety Services.
- (3) The vehicle bears the required manufacturer's certification label indicating that it was in compliance with all applicable federal motor vehicle safety standards at the time of its manufacture, unless an exception is granted under applicable federal law.

Proposed law requires a person to submit proof of financial responsibility satisfactory to the Dept. of Public Safety and Corrections, office of motor vehicles, that the fully autonomous vehicle is covered by insurance or proof of self-insurance that satisfies the requirements in present law.

Proposed law requires any accident involving a fully autonomous vehicle without a human driver on public roads of the state to be reported in accordance with present law.

Proposed law authorizes a person to operate an on-demand autonomous vehicle network, which may provide transportation for multiple passengers who agree to share the ride. Specifies that an on-demand autonomous vehicle network may connect passengers to fully autonomous vehicles either exclusively or as part of a digital network that also connects passengers to human drivers who provide transportation services in vehicles that are not fully autonomous.

Proposed law requires a fully autonomous vehicle to be properly registered and titled in accordance with present law and requires the vehicle to be identified as a fully autonomous vehicle on the registration and title.

Proposed law requires the provisions of proposed law govern fully autonomous vehicles and requires implementation by the Dept. of Transportation and Development or the Dept. of Public Safety and Corrections, office of motor vehicles.

Proposed law authorizes the Dept. of Transportation and Development or the Dept. of Public Safety and Corrections, office of motor vehicles, to make necessary additions to the requirements for the regulation and use of fully autonomous vehicles.

Proposed law prohibits the state or a local governmental subdivision from imposing a tax on a fully autonomous vehicle, automated driving system, or on-demand autonomous vehicle network where such tax relates specifically to the operation of fully autonomous vehicles.

Proposed law clarifies that the automated driving system is considered the driver or operator of an engaged fully autonomous vehicle for purposes of conformance to present law.

Proposed law clarifies that state licensing requirements do not apply to an automated driving system when engaged on a fully autonomous vehicle, or to a person operating a fully autonomous vehicle with the automated driving system engaged.

Proposed law provides that a human driver is not required to operate a fully autonomous vehicle that is being operated by an automated driving system and clarifies that the

automated driving system of a fully autonomous vehicle, when engaged, will fulfill any physical acts required of a human driver.

(Adds R.S. 32:1801 through 1808)