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)