Article 18.

Regulation of Fully Autonomous Vehicles.

**§ 20-400. Definitions.**

The following definitions apply in this Article:

(1) Automated driving system. – The hardware and software that are collectively capable of performing the entire dynamic driving task on a sustained basis, regardless of whether it is operating within a limited or unlimited operational design domain.

(2) Dynamic driving task. – All of the real-time operational and tactical control functions required to operate a motor vehicle in motion or which has the engine running, such as:

a. Lateral vehicle motion control via steering.

b. Longitudinal motion control via acceleration and deceleration.

c. Monitoring the driving environment via object and event detection, recognition, classification, and response preparation.

d. Object and event response execution.

e. Maneuver planning.

f. Enhancing conspicuity via lighting, signaling, and gesturing.

(3) Fully autonomous vehicle. – A motor vehicle equipped with an automated driving system that will not at any time require an occupant to perform any portion of the dynamic driving task when the automated driving system is engaged. If equipment that allows an occupant to perform any portion of the dynamic driving task is installed, it must be stowed or made unusable in such a manner that an occupant cannot assume control of the vehicle when the automated driving system is engaged.

(4) Minimal risk condition. – An operating mode in which a fully autonomous vehicle with the automated driving system engaged achieves a reasonably safe state, bringing the vehicle to a complete stop, upon experiencing a failure of the automatic driving system that renders the vehicle unable to perform any portion of the dynamic driving task.

(5) Operator. – For the purposes of this Article, is a person as defined in G.S. 20-4.01. An operator does not include an occupant within a fully autonomous vehicle performing solely strategic driving functions.

(6) Operational design domain. – Specific conditions under which an automated driving system is limited to effectively operate, such as geographical limitations, roadway types, speed range, and environmental conditions.

(7) Strategic driving functions. – Control of navigational parameters such as trip scheduling or the selection of destinations and waypoints but does not include any portion of the dynamic driving task. (2017-166, s. 1.)

**§ 20-401. Regulation of fully autonomous vehicles.**

(a) Driver's License Not Required. – Notwithstanding the provisions of G.S. 20-7 and this Chapter, the operator of a fully autonomous vehicle with the automated driving system engaged is not required to be licensed to operate a motor vehicle.

(b) Vehicle Registration Card in Vehicle. – For a fully autonomous vehicle, the provisions of G.S. 20-49(4) and G.S. 20-57(c) are satisfied if the vehicle registration card is in the vehicle, physically or electronically, and readily available to be inspected by an officer or inspector.

(c) Parent or Legal Guardian Responsible for Certain Violations. – The parent or legal guardian of a minor is responsible for a violation of G.S. 20-135.2B, the prohibition on children in an open bed of a pickup, or G.S. 20-137.1, the child restraint law, if the violation occurs in a fully autonomous vehicle.

(d) Minimum Age for Unsupervised Minors in Fully Autonomous Vehicles. – It is unlawful for any parent or legal guardian of a person less than 12 years of age to knowingly permit that person to occupy a fully autonomous vehicle in motion or which has the engine running unless the person is under the supervision of a person 18 years of age or older.

(e) Registered Owner Responsible for Moving Violations. – The person in whose name the fully autonomous vehicle is registered is responsible for a violation of this Chapter that is considered a moving violation, if the violation involves a fully autonomous vehicle.

(f) Unattended Vehicle. – A vehicle shall not be considered unattended pursuant to G.S. 20-163 or any other provision of Chapter 20 of the General Statutes merely because it is a fully autonomous vehicle with the automated driving system engaged.

(g) Duty to Stop in the Event of a Crash. – If all of the following conditions are met when a fully autonomous vehicle is involved in a crash, then the provisions of subsections (a) through (c2) and subsection (e) of G.S. 20-166 and subsections (a) and (c) of G.S. 20-166.1 shall be considered satisfied, and no violation of those provisions shall be charged:

(1) The vehicle or the operator of the vehicle promptly contacts the appropriate law enforcement agency to report the crash.

(2) The vehicle or operator of the vehicle promptly calls for medical assistance, if appropriate.

(3) For a reportable crash, the vehicle remains at the scene of the crash until vehicle registration and insurance information is provided to the parties affected by the crash and a law enforcement officer authorizes the vehicle to be removed.

(4) For a nonreportable crash, the vehicle remains at the scene or in the immediate vicinity of the crash until vehicle registration and insurance information is provided to the parties affected by the crash.

(h) Operation. – A person may operate a fully autonomous vehicle if the vehicle meets all of the following requirements:

(1) Unless an exception or exemption has been granted under applicable State or federal law, the vehicle:
    a. Is capable of being operated in compliance with Articles 3, 3A, 7, 11, and 13 of this Chapter;
    b. Complies with applicable federal law and regulations; and
    c. Has been certified in accordance with federal regulations in 49 C.F.R. Part 567 as being in compliance with applicable federal motor vehicle safety standards and bears the required certification label or labels.

(2) The vehicle has the capability to meet the requirements of subsection (g) of this section.

(3) The vehicle can achieve a minimal risk condition.

(4) The vehicle is covered by a motor vehicle liability policy meeting the applicable requirements of G.S. 20-279.21.

(5) The vehicle is registered in accordance with Part 3 of Article 3 of this Chapter, and, if registered in this State, the vehicle shall be identified on the registration and registration card as a fully autonomous vehicle.

(i) Preemption. – No local government shall enact any local law or ordinance related to the regulation or operation of fully autonomous vehicles or vehicles equipped with an automated driving system, other than regulation specifically authorized in Chapter 153A and Chapter 160A of the General Statutes that is not specifically related to those types of motor vehicles. (2017-166, s. 1.)

**§ 20-402. Applicability to vehicles other than fully autonomous vehicles.**

(a) Definitions. – As used in this section, a "request to intervene" means notification by a vehicle to the human operator that the operator should promptly begin or resume performance of part or all of the dynamic driving task.

(b) Applicability. – Operation of a motor vehicle equipped with an automated driving system capable of performing the entire dynamic driving task with the expectation that a human operator will respond appropriately to a request to intervene is lawful under this Chapter and subject to the provisions of this Chapter. (2017-166, s. 1.)

**§ 20-403. Fully Autonomous Vehicle Committee.**

(a) Committee Established. – There is hereby created a Fully Autonomous Vehicle Committee within the Department of Transportation.

(b) Membership. – The following persons shall serve on the Committee:

(1) Secretary of Transportation, or the Secretary's designee.
(2) The Secretary of Commerce, or the Secretary's designee.
(3) The Commissioner of Insurance, or the Commissioner's designee.
(4) A representative of the Highway Patrol, designated by the Commander.
(5) A representative of the North Carolina Association of Chiefs of Police, designated by its Executive Director.
(6) A representative of the North Carolina Sheriffs' Association, designated by its President.
(7) A representative of the University of North Carolina Highway Safety Research Center, designated by the Director.
(8) At least two representatives from the autonomous vehicle industry, designated by the Secretary of Transportation.
(9) A representative of the Attorney General's Office, designated by the Attorney General, who is familiar with motor vehicle law.
(10) A representative of local law enforcement, designated by the Secretary of Transportation.
(11) A representative of the trucking industry, designated by the North Carolina Trucking Association.
(12) A planner from an urban area, designated by the North Carolina League of Municipalities.
(13) A planner from a rural area, designated by the North Carolina Association of County Commissioners.
(14) Two members of the North Carolina Senate, designated by the President Pro Tempore of the Senate.

(15) Two members of the North Carolina House of Representatives, designated by the Speaker of the House.

(c) Duties. – The Committee shall meet regularly, and at a minimum four times a year, to consider matters relevant to fully autonomous vehicle technology, review State motor vehicle law as they relate to the deployment of fully autonomous vehicles onto the State highway system and municipal streets, make recommendations concerning the testing of fully autonomous vehicles, identify and make recommendations for Department of Transportation traffic rules and ordinances, and make recommendations to the General Assembly on any needed changes to State law.

(d) Staff. – The Department of Transportation shall provide staff and meeting space, from reasonably available resources, to the Committee. (2017-166, s. 1.)