

SENATE FILE NO. SF0007

Autonomous vehicles.

Sponsored by: Joint Transportation, Highways & Military
Affairs Interim Committee

A BILL

for

1 AN ACT relating to motor vehicles; providing for the
2 regulation, registration and licensing of vehicles equipped
3 with an automated driving system; providing for liability
4 for the operation of vehicles equipped with automated
5 driving systems; providing definitions; authorizing a fee;
6 creating an account; requiring rulemaking; and providing
7 for effective dates.

8

9 *Be It Enacted by the Legislature of the State of Wyoming:*

10

11 **Section 1.** W.S. 31-21-101 through 31-21-111 are
12 created to read:

13

14

CHAPTER 21

15

AUTONOMOUS MOTOR VEHICLES

1

2

ARTICLE 1

3

AUTOMATED DRIVING SYSTEM REGULATION

4

5

31-21-101. Definitions.

6

7

(a) As used in this chapter:

8

9

(i) "Automated driving system data recorder" or "ADS data recorder" means a mechanism, in addition to and separate from, any other mechanism required by law, installed in an ADS to record technical information about the status and operation of the vehicle's ADS for thirty (30) seconds before a collision and at least five (5) seconds after a collision or until the vehicle comes to a complete stop, whichever is later;

17

18

(ii) "Automated driving system" or "ADS" means the hardware and software that are collectively capable of performing the entire dynamic driving task on a sustained basis, regardless of whether the system is limited to a specific operational design domain. An ADS is used specifically to describe a level 3, 4 or 5 system as the

23

1 standards of driving automation are defined in the SAE
2 J3016 standard. A vehicle equipped with an ADS is not a
3 vehicle that is equipped with systems that enhance safety
4 or provide the human driver assistance, but where the
5 collision avoidance systems are not capable, collectively
6 or singularly, of driving the vehicle without the active
7 control or monitoring of a human driver;

8

9 (iii) "Department" means the department of
10 transportation;

11

12 (iv) "Dispatching entity" means an entity that
13 dispatches an ADS equipped vehicle in driverless operation;

14

15 (v) "Dynamic driving task" or "DDT" means all of
16 the real-time operational and tactical functions required
17 to operate a vehicle in on-road traffic, excluding
18 strategic functions such as trip scheduling and selection
19 of destinations and waypoints, and including at least all
20 of the following:

21

22 (A) Lateral vehicle motion control via
23 steering;

1

2 (B) Longitudinal motion control via
3 acceleration and deceleration;

4

5 (C) Monitoring the driving environment via
6 object and event detection, recognition, classification and
7 response preparation;

8

9 (D) Object and event response execution;

10

11 (E) Maneuver planning;

12

13 (F) Enhancing conspicuity via lighting,
14 signaling and gesturing.

15

16 (vi) "Dynamic driving task fallback" or "DDT
17 fallback" means the response after a DDT performance
18 relevant system failure or after an operational design
19 domain exit:

20

21 (A) By the fallback ready user to perform
22 the DDT or to achieve a minimal risk condition; or

23

1 (B) By an ADS to achieve minimal risk
2 condition.

3

4 (vii) "Fallback ready user" means the user of a
5 vehicle equipped with an engaged level 3 ADS who is able to
6 operate the vehicle and is receptive to ADS issued requests
7 to intervene and to evident DDT performance relevant system
8 failures in the vehicle compelling the user to perform the
9 DDT fallback;

10

11 (viii) "Highway" means as defined in W.S.
12 31-1-101(a)(viii);

13

14 (ix) "Human driver" means a natural person in
15 the vehicle with a valid class of license for the type of
16 motor vehicle being operated who controls all or part of
17 the dynamic driving task;

18

19 (x) "Minimal risk condition" means a condition
20 to which a fallback ready user, a dispatch entity or an ADS
21 may bring a vehicle after performing the DDT fallback to
22 reduce the risk of a crash when a given trip cannot or
23 should not be completed;

1

2 (xi) "On demand autonomous vehicle network"
3 means a network used to dispatch or otherwise enable the
4 provision of transportation services with vehicles equipped
5 with an ADS for purposes of transporting persons or goods,
6 including for hire transportation and transportation for
7 compensation;

8

9 (xii) "Operational design domain" or "ODD"
10 means the operating conditions under which a given driving
11 automation system or feature thereof is specifically
12 designed to function, including environmental,
13 geographical, and time-of-day restrictions or the requisite
14 presence or absence of certain traffic or roadway
15 characteristics;

16

17 (xiii) "Operate" means collectively, the
18 activities performed by a human driver (with or without
19 support from one (1) or more level 1 or 2 driving
20 automation features) or by an ADS to perform the entire DDT
21 for a vehicle during a trip;

22

1 (xiv) "Request to intervene" means notification
2 by an ADS to a fallback ready user indicating that the user
3 should promptly perform the DDT fallback, which may entail
4 resuming manual operation of the vehicle or achieving a
5 minimal risk condition if the vehicle is not drivable;

6

7 (xv) "SAE J3016" means the Taxonomy and
8 Definitions for Terms Related to Driving Automation Systems
9 for On-Road Motor Vehicles published by SAE International
10 in June 2018 and any amendments thereto and any successor
11 standard publication.

12

13 **31-21-102. Operation of a vehicle equipped with an**
14 **ADS without a human driver; safety at railroad crossings.**

15

16 (a) A person may operate a vehicle equipped with an
17 ADS on the highways of this state without a human driver
18 provided that an operational automated driving system is
19 engaged and the vehicle meets all of the following
20 conditions:

21

22 (i) If a failure of the ADS occurs that renders
23 the system unable to perform the entire dynamic driving

1 task relevant to its intended operational design domain,
2 the vehicle equipped with an ADS will achieve a minimal
3 risk condition;

4

5 (ii) The vehicle equipped with an ADS is capable
6 of and subject to operating in compliance with all
7 applicable traffic and motor vehicle laws and regulations
8 of this state, unless an exemption has been granted by
9 department rules;

10

11 (iii) The vehicle is in compliance with all
12 applicable federal motor vehicle safety standards for the
13 vehicle's model year or has a United States department of
14 transportation or other relevant agency approved exemption
15 from specific compliance;

16

17 (iv) The vehicle is in compliance with all
18 applicable safety standards and performance requirements
19 required by state and federal law including applicable
20 equipment safety standards under W.S. 31-5-901 through
21 31-5-970 unless a waiver has been granted by the relevant
22 regulating agency;

23

1 (v) While in driverless operation, the vehicle
2 is capable of operating in compliance with the applicable
3 traffic and motor vehicle safety laws and rules of this
4 state that govern the performance of the dynamic driving
5 task, including safely negotiating railroad crossings,
6 unless an exemption has been granted by the department.
7 When considering an exemption that affects vehicle
8 operations at railroad crossings, no exemption shall be
9 granted without an onsite diagnostic at a railroad crossing
10 involving the department and all railroad companies that
11 operate at the crossing, resulting in a joint concurrence
12 among the railroad companies and the department.

13

14 (b) It is the responsibility of the person who
15 originally manufactures a vehicle and equips the vehicle
16 with an ADS or, in the case of a vehicle not originally
17 equipped with an ADS, the person who modifies the vehicle
18 by installing an ADS to convert it after the vehicle is
19 originally manufactured, to certify that a vehicle equipped
20 with an ADS meets the conditions in subsection (a) of this
21 section.

22

23 **31-21-103. Licensing.**

1

2 (a) When an automated driving system installed on a
3 motor vehicle is engaged:

4

5 (i) The automated driving system is considered
6 the driver for the purpose of assessing compliance with
7 applicable traffic or motor vehicle laws; and

8

9 (ii) The automated driving system is considered
10 to be licensed to operate the vehicle if the dispatching
11 entity has a valid class of license for the type of motor
12 vehicle being operated if the vehicle is equipped with
13 level 3 or 4 automation as the standards of driving
14 automation are defined in the SAE J3016 standard. If a
15 vehicle is equipped with a level 5 automation as defined in
16 the SAE J3016 standard, the automated driving system is
17 considered to be licensed to operate independently and does
18 not require the dispatching entity to have a valid class of
19 license.

20

21 **31-21-104. Insurance.**

22

1 Before operating a vehicle equipped with an ADS on highways
2 in this state without a human driver, the vehicle owner
3 shall submit proof of financial responsibility to the
4 county treasurer in the county where the vehicle is
5 registered that the vehicle is covered by insurance, proof
6 of self-insurance or a bond that satisfies the requirements
7 of W.S. 31-2-225(e) and uninsured motorist coverage as
8 required by W.S. 31-10-101.

9

10 **31-21-105. Duties after crashes involving vehicles**
11 **equipped with an ADS; liability for crashes and traffic**
12 **violations.**

13

14 (a) In the event of a crash involving a vehicle
15 equipped with an ADS:

16

17 (i) The vehicle equipped with an ADS shall
18 remain on the scene of the crash when required by W.S.
19 31-5-1101 and 31-5-1102, but only where the vehicle
20 achieves a minimal risk condition as required by W.S.
21 31-21-102(a)(i);

22

1 (ii) The vehicle owner or person acting on
2 behalf of the owner shall report the crash consistent with
3 W.S. 31-5-1104, 31-5-1105 and 31-5-1107 and shall provide
4 the information required in W.S. 31-5-1103, or if the
5 vehicle has the capability of promptly alerting law
6 enforcement or emergency services, the vehicle shall alert
7 law enforcement or emergency services to the crash.

8

9 (b) The dispatching entity, manufacturer, vehicle
10 owner, or any combination thereof, of a vehicle equipped
11 with an ADS that is involved in a crash or a violation of a
12 traffic law shall be liable if any or a combination of
13 those persons or entities are at fault for any crash or
14 violation of a traffic law, each according to the same
15 applicable local and state laws that determine liability
16 for a crash or violation of a traffic law involving a
17 vehicle with a human driver.

18

19 (c) The information from a vehicle equipped with an
20 ADS shall be accessible to law enforcement in relation to a
21 crash, traffic violation or any other circumstance wherein
22 law enforcement would obtain the information from a human

1 driver operating a vehicle who is subject to W.S. 31-5-1101
2 through 31-5-1108 and 31-5-1201 through 31-5-1214.

3

4 **31-21-106. On-demand autonomous vehicle network;**
5 **commercial vehicles equipped with an ADS.**

6

7 (a) An on-demand autonomous vehicle network shall be
8 permitted to operate pursuant to applicable state laws.

9

10 (b) Commercial vehicles equipped with an ADS shall be
11 permitted to operate pursuant to state laws governing the
12 operation of commercial vehicles, except that any statutory
13 provision that reasonably applies only to a human driver
14 would not apply to the operation of vehicles with the
15 automated driving system engaged.

16

17 **31-21-107. Registration and title of vehicles**
18 **equipped with an ADS.**

19

20 (a) A vehicle equipped with an ADS shall be properly
21 registered in accordance with W.S. 31-2-201 and 31-18-201,
22 if applicable. If a vehicle equipped with an ADS is

1 registered in this state, the vehicle shall be identified
2 on the registration as a vehicle equipped with an ADS.

3

4 (b) A vehicle equipped with an ADS shall be properly
5 titled in accordance with W.S. 31-2-101. If a vehicle
6 equipped with an ADS is titled in this state, the vehicle
7 shall be identified on the title as a vehicle equipped with
8 an ADS.

9

10 (c) In the case of a vehicle not originally equipped
11 with an automated driving system but later modified by
12 installing an automated driving system to convert it to a
13 vehicle equipped with an ADS after the vehicle is
14 originally manufactured, the vehicle's annual registration
15 due immediately following the modification shall identify
16 the vehicle as a vehicle equipped with an ADS and the
17 vehicle's title shall be amended to identify the vehicle as
18 a vehicle equipped with an ADS. After the modification and
19 on or before the date that the annual registration is due,
20 the owner of record shall notify the county clerk and
21 county treasurer in the county in which the vehicle is:

22

1 (i) Registered that the vehicle is now a vehicle
2 equipped with an ADS and the registration shall reflect the
3 modification; and

4

5 (ii) Titled that the vehicle is now a vehicle
6 equipped with an ADS and the title shall be amended to
7 reflect the modification.

8

9 **31-21-108. Controlling authority; rights and**
10 **obligations of manufacturers.**

11

12 (a) Unless otherwise provided in this chapter,
13 vehicles equipped with an ADS are governed exclusively by
14 this chapter, applicable federal laws and department rules
15 and are subject to state and federal laws governing traffic
16 on highways and equipment. The department is the sole and
17 exclusive state agency that may implement the provisions of
18 this chapter. The department may impose any additional
19 requirements necessary to ensure the safe operation of
20 vehicles equipped with an ADS. The department shall provide
21 for the administration and enforcement of this chapter by
22 its divisions.

23

1 (b) Except as provided in subsection (a) of this
2 section, no state agency, political subdivision, county,
3 municipality or local entity may prohibit the operation of
4 vehicles equipped with an ADS or on-demand autonomous
5 vehicle networks.

6
7 (c) Nothing in this chapter shall expand or restrict
8 the respective rights or obligations of, or limitations
9 upon, motor vehicle manufacturers and licensed motor
10 vehicle dealers as set forth in W.S. 31-16-101 through
11 31-16-127. To the extent that this chapter conflicts with
12 title 31, chapter 16 of the Wyoming statutes then chapter
13 16 of this title shall control.

14
15 **31-21-109. Operation by a human driver of a vehicle**
16 **equipped with an ADS.**

17
18 (a) A human driver may operate a vehicle equipped
19 with an automated driving system capable of performing the
20 entire dynamic driving task if all of the following
21 conditions are true:

22

1 (i) The human driver holds the appropriate class
2 of license for the type of motor vehicle being operated;

3

4 (ii) The human driver will respond appropriately
5 to a request to intervene and then operate the vehicle as
6 if the automated driving system is not capable of
7 performing the entire dynamic driving task or the vehicle
8 exits its operational design domain;

9

10 (iii) The automated driving system is capable of
11 being operated in compliance with all applicable traffic
12 and motor vehicle laws and regulations of this state,
13 unless an exemption has been granted by department rules.

14

15 (b) A vehicle equipped with an automated driving
16 system and driven pursuant to subsection (a) of this
17 section shall allow the human driver to take control, and
18 the vehicle shall alert the human driver that the automated
19 driving system has been disengaged.

20

21 (c) Nothing in this chapter prohibits or restricts a
22 human driver from operating a vehicle equipped with an ADS

1 that allows for the human driver to control all or part of
2 the dynamic driving task.

3

4 **31-21-110. Temporary ADS operating permits.**

5

6 (a) The department may develop a process by which
7 entities involved in the demonstration or testing in the
8 state of vehicles equipped with an ADS shall notify the
9 department. The information required as part of the
10 notification process may be established by the department.

11

12 (b) Before demonstrating or testing any vehicle
13 equipped with an automated driving system, the manufacturer
14 shall file with the department proof that the manufacturer
15 maintains liability insurance in the amount of not less
16 than five million dollars (\$5,000,000.00) that insures
17 against losses for which the manufacturer is responsible
18 and that are caused by the vehicle equipped with an
19 automated driving system.

20

21 **31-21-111. Rulemaking; fee; autonomous vehicle**
22 **account.**

23

1 (a) Consistent with this chapter and other applicable
2 state and federal laws, the department shall promulgate
3 rules and shall provide any forms necessary to implement
4 this chapter.

5

6 (b) If federal rules regulating vehicles equipped
7 with an ADS conflict with this chapter or any rules
8 promulgated pursuant to this chapter, the federal
9 regulations shall be given precedence over the provisions
10 of this chapter or any rules promulgated pursuant thereto.

11

12 (c) The department may assess an additional fee upon
13 an owner of a vehicle equipped with an ADS in an amount
14 necessary to recover all costs reasonably incurred by the
15 department attributable to regulation and administration to
16 accommodate the vehicle. Once established, the department
17 may annually increase the fee authorized under this section
18 to recover costs reasonably incurred for regulation and
19 administration but not to exceed the percentage increase as
20 shown by the Wyoming cost-of-living index as determined by
21 the division of economic analysis of the department of
22 administration and information unless authorized by the
23 legislature.

1

2 (d) The funds the department receives from the fee
3 authorized in subsection (c) of this section shall be
4 deposited into an account, hereby created as the autonomous
5 vehicle account. Funds in the autonomous vehicle account
6 are continuously appropriated to the department and shall
7 only be used for costs attributable to regulation and
8 administration of vehicles equipped with an ADS. Any funds
9 within the account, including any additional funds
10 appropriated by the legislature, shall not lapse or revert
11 until directed by the legislature. Earnings on funds in the
12 account shall accrue to the account.

13

14 **Section 2.** W.S. 31-5-102(a)(x) is amended to read:

15

16 **31-5-102. Definitions.**

17

18 (a) Except as otherwise provided, as used in this
19 act:

20

21 (x) "Driver" means every person who drives or is
22 in actual physical control of a vehicle. The automated
23 driving system as regulated in W.S. 31-21-101 through

1 31-21-111 is considered the driver for the purpose of
2 assessing compliance with applicable traffic or motor
3 vehicle laws;

4

5 **Section 3.** Not later than January 1, 2022, the
6 department shall promulgate rules to administer this act.

7

8 **Section 4.**

9

10 (a) Except as provided in subsection (b) of this
11 section, this act is effective immediately upon completion
12 of all acts necessary for a bill to become law as provided
13 by Article 4, Section 8 of the Wyoming Constitution.

14

15 (b) Section 1 of this act is effective January 1,
16 2022.

17

18 (END)