

SENATE BILL 405

R7

5lr2705
CF HB 439

By: **Senator Salling**

Introduced and read first time: January 20, 2025

Assigned to: Judicial Proceedings

A BILL ENTITLED

1 AN ACT concerning

2 **Vehicle Laws – Fully Autonomous Vehicles – Human Safety Operators and**
3 **Reporting Requirements**

4 FOR the purpose of requiring a human safety operator to be present in certain fully
5 autonomous vehicles operating on highways in the State; requiring a manufacturer
6 of a fully autonomous vehicle to submit to the Motor Vehicle Administration an
7 incident report on any vehicle collision, certain citations for traffic violations, any
8 disengagement event, or any assault or harassment of a passenger or human safety
9 operator that occurs in the State and involves a fully autonomous vehicle under
10 certain circumstances; requiring a manufacturer of certain fully autonomous
11 vehicles to submit to the Administration reports on certain collisions involving the
12 fully autonomous vehicles and an annual report on certain disengagements of certain
13 fully autonomous vehicles occurring in the State; requiring the Administration to
14 submit findings and recommendations to the General Assembly regarding the
15 operation of certain fully autonomous vehicles in the State; and generally relating to
16 fully autonomous vehicles.

17 BY adding to
18 Article – Transportation
19 Section 18.3–101 through 18.3–106 to be under the new title “Title 18.3. Autonomous
20 Vehicles”
21 Annotated Code of Maryland
22 (2020 Replacement Volume and 2024 Supplement)

23 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,
24 That the Laws of Maryland read as follows:

25 **Article – Transportation**

26 **TITLE 18.3. AUTONOMOUS VEHICLES.**

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 18.3–101.

2 (A) IN THIS TITLE THE FOLLOWING WORDS HAVE THE MEANINGS
3 INDICATED.

4 (B) “AUTOMATED DRIVING SYSTEM” MEANS THE HARDWARE AND
5 SOFTWARE THAT ARE COLLECTIVELY CAPABLE OF PERFORMING THE ENTIRE
6 DYNAMIC DRIVING TASK ON A CONTINUOUS BASIS, REGARDLESS OF OPERATIONAL
7 DESIGN DOMAIN LIMITATIONS.

8 (C) “DISENGAGEMENT” MEANS DEACTIVATION OF THE AUTONOMOUS MODE
9 OR AUTONOMOUS TECHNOLOGY OF A FULLY AUTONOMOUS VEHICLE WHEN:

10 (1) A FAILURE OF THE AUTONOMOUS TECHNOLOGY IS DETECTED;

11 (2) THE SAFE OPERATION OF THE FULLY AUTONOMOUS VEHICLE
12 REQUIRES THAT THE HUMAN SAFETY OPERATOR DISENGAGE THE AUTONOMOUS
13 MODE AND TAKE IMMEDIATE CONTROL OF THE VEHICLE; OR

14 (3) FOR A DRIVERLESS FULLY AUTONOMOUS VEHICLE, THE SAFETY
15 OF THE VEHICLE, THE OCCUPANTS OF THE VEHICLE, OR THE PUBLIC REQUIRES
16 THAT THE AUTONOMOUS TECHNOLOGY BE DEACTIVATED.

17 (D) “DYNAMIC DRIVING TASK” MEANS ALL OF THE REAL–TIME
18 OPERATIONAL AND TACTICAL FUNCTIONS REQUIRED TO OPERATE A VEHICLE.

19 (E) “FULLY AUTONOMOUS VEHICLE” MEANS A MOTOR VEHICLE EQUIPPED
20 WITH AN AUTOMATED DRIVING SYSTEM THAT HAS THE CAPABILITY TO PERFORM
21 ALL ASPECTS OF THE DYNAMIC DRIVING TASK WITHOUT A DRIVER WITHIN AN
22 OPERATIONAL DESIGN DOMAIN.

23 (F) “HUMAN SAFETY OPERATOR” MEANS AN INDIVIDUAL:

24 (1) OPERATING A FULLY AUTONOMOUS VEHICLE WHO IS TRAINED IN
25 OPERATING AND SHUTTING OFF THE VEHICLE; AND

26 (2) WHO MEETS ALL FEDERAL AND STATE REQUIREMENTS FOR THE
27 TYPE OF VEHICLE BEING OPERATED.

28 (G) “OPERATIONAL DESIGN DOMAIN” MEANS A DESCRIPTION OF THE
29 OPERATING DOMAINS AND SYSTEMS UNDER WHICH AN AUTOMATED DRIVING
30 SYSTEM IS DESIGNED TO EFFECTIVELY OPERATE, INCLUDING:

- (1) GEOGRAPHIC LIMITATIONS;
- (2) ROADWAY TYPES;
- (3) SPEED RANGE; AND
- (4) ENVIRONMENTAL CONDITIONS.

18.3–102.

(A) BEGINNING DECEMBER 1, 2025, A MANUFACTURER OF A FULLY AUTONOMOUS VEHICLE SHALL SUBMIT AN INCIDENT REPORT TO THE ADMINISTRATION ON ANY VEHICLE COLLISION, TRAFFIC CITATION FOR A VIOLATION THAT HAS NOT BEEN ADJUDICATED NOT GUILTY OR NOT LIABLE, DISENGAGEMENT, OR ASSAULT OR HARASSMENT OF A PASSENGER OR HUMAN SAFETY OPERATOR THAT INVOLVED THE VEHICLE WHEN OPERATING IN FULLY AUTONOMOUS MODE IN THE STATE.

(B) AN INCIDENT REPORT SUBMITTED UNDER SUBSECTION (A) OF THIS SECTION RELATED TO A VEHICLE COLLISION SHALL INCLUDE:

- (1) A DETAILED NARRATIVE OF THE COLLISION, INCLUDING ANY RELEVANT PRE-COLLISION AND POST COLLISION INFORMATION;
- (2) THE CAUSE OF THE COLLISION;
- (3) ANY PASSENGER INTERACTIONS;
- (4) THE ROAD AND TRAFFIC CONDITIONS AT THE TIME OF THE COLLISION;
- (5) ANY INTERACTIONS WITH ROAD USERS OR OBSTACLES ON THE ROAD;
- (6) VEHICLE PERFORMANCE DATA;
- (7) INJURY AND PROPERTY DAMAGE DETAILS;
- (8) THE STATUS OF THE AUTONOMOUS VEHICLE'S TECHNOLOGY AT THE TIME OF THE COLLISION; AND

1 **(9) ANY ADDITIONAL INFORMATION REPORTED TO THE NATIONAL**
2 **HIGHWAY TRAFFIC SAFETY ADMINISTRATION.**

3 **(C) AN INCIDENT REPORT SUBMITTED UNDER SUBSECTION (A) OF THIS**
4 **SECTION RELATED TO A TRAFFIC CITATION FOR A VIOLATION THAT HAS NOT BEEN**
5 **ADJUDICATED NOT GUILTY OR NOT LIABLE SHALL INCLUDE:**

6 **(1) THE SPECIFIC TRAFFIC LAW THAT WAS VIOLATED, INCLUDING**
7 **ANY OFFICIAL RECORD OF AN ISSUED TRAFFIC CITATION;**

8 **(2) THE CIRCUMSTANCES THAT LED TO THE CITATION;**

9 **(3) ANY ACTIONS TAKEN BY THE AUTONOMOUS VEHICLE OR OTHER**
10 **INVOLVED PARTIES IN RESPONSE TO THE CIRCUMSTANCES THAT LED TO THE**
11 **CITATION; AND**

12 **(4) ANY JUSTIFICATION OFFERED FOR THE VIOLATION THAT LED TO**
13 **THE CITATION.**

14 **(D) (1) AN INCIDENT REPORT SUBMITTED UNDER SUBSECTION (A) OF**
15 **THIS SECTION RELATED TO A DISENGAGEMENT SHALL INCLUDE:**

16 **(I) THE LOCATION AT WHICH THE DISENGAGEMENT**
17 **OCCURRED;**

18 **(II) WHETHER THE VEHICLE WAS IN OPERATION WITH A DRIVER**
19 **AT THE TIME OF THE DISENGAGEMENT;**

20 **(III) A DESCRIPTION OF THE FACTS AND CIRCUMSTANCES OF**
21 **THE DISENGAGEMENT, INCLUDING WEATHER CONDITIONS, ROAD SURFACE**
22 **CONDITIONS, TRAFFIC CONDITIONS, CONSTRUCTION, EMERGENCIES, OR**
23 **COLLISIONS; AND**

24 **(IV) THE INDIVIDUAL OR ENTITY THAT INITIATED THE**
25 **VEHICLE'S DISENGAGEMENT, INCLUDING THE VEHICLE'S AUTONOMOUS**
26 **TECHNOLOGY, A HUMAN SAFETY OPERATOR, A REMOTE OPERATOR, OR A**
27 **PASSENGER.**

28 **(2) AN INCIDENT REPORT SUBMITTED UNDER PARAGRAPH (1) OF**
29 **THIS SUBSECTION SHALL BE WRITTEN IN PLAIN LANGUAGE WITH ENOUGH DETAIL**
30 **THAT A NONTECHNICAL PERSON CAN UNDERSTAND THE CIRCUMSTANCES THAT**
31 **CAUSED THE DISENGAGEMENT.**

(E) (1) AN INCIDENT REPORT SUBMITTED UNDER SUBSECTION (A) OF THIS SECTION RELATED TO ASSAULT OR HARASSMENT, INCLUDING SEXUAL HARASSMENT, SHALL INCLUDE A DETAILED DESCRIPTION OF THE INCIDENT, INCLUDING THE NATURE OF THE ASSAULT OR HARASSMENT, THE APPROXIMATE AGES AND GENDER IDENTITIES OF THE PARTIES TO THE INCIDENT, HOW THE MANUFACTURER ADDRESSED THE INCIDENT, AND ANY CHANGES TO POLICY OR PROTOCOL THAT THE MANUFACTURER INTENDS TO MAKE IN RESPONSE TO THE INCIDENT.

(2) AN INCIDENT REPORT SUBMITTED UNDER PARAGRAPH (1) OF THIS SUBSECTION SHALL BE MADE WITHOUT COMPROMISING THE PRIVACY AND IDENTITY OF THE INDIVIDUALS INVOLVED.

(F) THE ADMINISTRATION SHALL:

(1) ADOPT REGULATIONS ESTABLISHING:

(I) A TIMELINE FOR THE SUBMISSION OF INCIDENT REPORTS UNDER THIS SECTION THAT IS CONSISTENT WITH REPORTING DEADLINES ESTABLISHED BY THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION; AND

(II) FINES FOR THE FAILURE TO SUBMIT A REPORT AS REQUIRED UNDER THIS SECTION AND THE SUBMISSION OF A FALSE REPORT, INCLUDING INCREASED FINES FOR SUBSEQUENT VIOLATIONS;

(2) CREATE AND PUBLISH AN AUTONOMOUS VEHICLE INCIDENT REPORT FORM FOR THE REPORTING OF INCIDENTS UNDER SUBSECTIONS (B) THROUGH (E) OF THIS SECTION;

(3) CREATE AND PUBLISH A FORM TO COLLECT DATA FOR AGGREGATE ANALYSIS OF AUTONOMOUS VEHICLE SAFETY; AND

(4) PUBLISH ANONYMIZED VERSIONS OF ALL REPORTS SUBMITTED UNDER SUBSECTIONS (B) THROUGH (E) OF THIS SECTION ON THE DEPARTMENT'S WEBSITE WITHIN 30 DAYS OF RECEIPT.

18.3-103.

A FULLY AUTONOMOUS VEHICLE WITH A GROSS VEHICLE WEIGHT OF 10,001 POUNDS OR MORE MAY NOT BE OPERATED ON HIGHWAYS FOR TESTING OR TRANSPORTING GOODS OR PASSENGERS UNLESS A HUMAN SAFETY OPERATOR IS FULLY PRESENT IN THE FULLY AUTONOMOUS VEHICLE AT THE TIME OF OPERATION.

1 **18.3–104.**

2 **A MANUFACTURER WHOSE FULLY AUTONOMOUS VEHICLE WITH A GROSS**
3 **VEHICLE WEIGHT OF 10,001 POUNDS OR MORE IS INVOLVED IN A COLLISION**
4 **ORIGINATING FROM THE OPERATION OF THE FULLY AUTONOMOUS VEHICLE ON A**
5 **HIGHWAY THAT RESULTED IN PROPERTY DAMAGE, BODILY INJURY, OR DEATH**
6 **SHALL REPORT THE COLLISION TO THE ADMINISTRATION WITHIN 10 DAYS AFTER**
7 **THE COLLISION ON A FORM SPECIFIED BY THE ADMINISTRATION.**

8 **18.3–105.**

9 **(A) BEGINNING ON DECEMBER 1, 2025, AND EACH DECEMBER 1**
10 **THEREAFTER, A MANUFACTURER OF A FULLY AUTONOMOUS VEHICLE WITH A GROSS**
11 **VEHICLE WEIGHT OF 10,001 POUNDS OR MORE SHALL SUBMIT AN ANNUAL REPORT**
12 **TO THE ADMINISTRATION ON DISENGAGEMENT EVENTS OCCURRING TO THESE**
13 **VEHICLES WHEN IN FULLY AUTONOMOUS MODE IN THE STATE IN THE PRECEDING**
14 **YEAR.**

15 **(B) THE REPORT REQUIRED UNDER SUBSECTION (A) OF THIS SECTION**
16 **SHALL SUMMARIZE THE CIRCUMSTANCES OR CONDITIONS AT THE TIME OF THE**
17 **DISENGAGEMENT, INCLUDING:**

18 **(1) THE LOCATION OF THE DISENGAGEMENT;**

19 **(2) WHETHER THE VEHICLE WAS OPERATING WITH OR WITHOUT A**
20 **HUMAN SAFETY OPERATOR AT THE TIME OF THE DISENGAGEMENT;**

21 **(3) A DESCRIPTION OF THE CAUSE OF THE DISENGAGEMENT,**
22 **INCLUDING:**

23 **(I) WEATHER CONDITIONS;**

24 **(II) ROAD SURFACE CONDITIONS;**

25 **(III) TRAFFIC CONDITIONS;**

26 **(IV) EMERGENCY CONDITIONS; AND**

27 **(V) WHETHER THERE WAS A COLLISION; AND**

28 **(4) WHETHER THE DISENGAGEMENT WAS INITIATED BY:**

(I) THE AUTONOMOUS TECHNOLOGY;

(II) THE HUMAN SAFETY OPERATOR;

(III) A REMOTE OPERATOR; OR

(IV) A PASSENGER.

18.3-106.

ON OR BEFORE DECEMBER 1, 2030, THE ADMINISTRATION SHALL REPORT TO THE GENERAL ASSEMBLY, IN ACCORDANCE WITH § 2-1257 OF THE STATE GOVERNMENT ARTICLE, ON THE IMPACT OF AUTONOMOUS VEHICLES WITH A GROSS VEHICLE WEIGHT OF 10,001 POUNDS OR MORE, INCLUDING:

(1) A SUMMARY OF DISENGAGEMENTS AND CRASHES;

(2) IN CONSULTATION WITH THE STATE HIGHWAY ADMINISTRATION AND THE DEPARTMENT OF STATE POLICE, INFORMATION ON TRAFFIC CONGESTION IMPACTS, DRIVER AND PASSENGER SAFETY RISKS, AND IMPACTS ON OTHER MOTORISTS, BICYCLISTS, AND PEDESTRIANS;

(3) IN CONSULTATION WITH THE DIVISION OF LABOR AND INDUSTRY, ANY JOB-RELATED IMPACTS, INCLUDING WORKER DISPLACEMENT AND SHORTCOMINGS IN RETRAINING OPPORTUNITIES;

(4) IN CONSULTATION WITH THE STATE HIGHWAY ADMINISTRATION, INFRASTRUCTURE IMPACTS, DEFICIENCIES, AND NEEDS;

(5) AN OVERVIEW OF THE PERFORMANCE OF THE TECHNOLOGY, PUBLIC SAFETY IMPACTS, AND OTHER RELEVANT FACTORS IN CONSIDERING DEPLOYMENT OF AUTONOMOUS DRIVING TECHNOLOGY; AND

(6) A RECOMMENDATION ON WHETHER THE GENERAL ASSEMBLY SHOULD REMOVE, MODIFY, OR MAINTAIN THE REQUIREMENT FOR AN AUTONOMOUS VEHICLE WITH A GROSS VEHICLE WEIGHT OF 10,001 POUNDS OR MORE TO OPERATE WITH A HUMAN SAFETY OPERATOR PHYSICALLY PRESENT IN THE VEHICLE.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect October 1, 2025.