

HOUSE BILL 1256

R5

5lr2803
CF SB 949

By: **Delegates Ziegler, Feldmark, Hornberger, Lehman, Roberts, Schmidt, Wims,
Wivell, Wu, and Young**

Introduced and read first time: February 7, 2025

Assigned to: Environment and Transportation

A BILL ENTITLED

1 AN ACT concerning

2 **Vehicle Laws – Fully Autonomous Vehicles**

3 FOR the purpose of establishing certain standards and requirements for the operation of
4 fully autonomous vehicles on highways in the State; and generally relating to fully
5 autonomous vehicles.

6 BY adding to

7 Article – Transportation

8 Section 21–1501 through 21–1505 to be under the new subtitle “Subtitle 15. Fully
9 Autonomous Vehicles”

10 Annotated Code of Maryland

11 (2020 Replacement Volume and 2024 Supplement)

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

14 **Article – Transportation**

15 **SUBTITLE 15. FULLY AUTONOMOUS VEHICLES.**

16 **21–1501.**

17 **(A) IN THIS SUBTITLE THE FOLLOWING WORDS HAVE THE MEANINGS**
18 **INDICATED.**

19 **(B) “AUTOMATED DRIVING SYSTEM” MEANS THE HARDWARE AND**
20 **SOFTWARE THAT ARE COLLECTIVELY CAPABLE OF PERFORMING THE ENTIRE**
21 **DYNAMIC DRIVING TASK ON A SUSTAINED BASIS, REGARDLESS OF WHETHER IT IS**
22 **LIMITED TO A SPECIFIC OPERATIONAL DESIGN DOMAIN.**

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



1 (C) "DYNAMIC DRIVING TASK" MEANS ALL OF THE REAL-TIME
2 OPERATIONAL FUNCTIONS REQUIRED TO OPERATE A MOTOR VEHICLE ON A
3 HIGHWAY, INCLUDING:

4 (1) LATERAL VEHICLE MOTION CONTROL THROUGH STEERING;

5 (2) LONGITUDINAL MOTION CONTROL THROUGH ACCELERATION
6 AND DECELERATION;

7 (3) MONITORING THE DRIVING ENVIRONMENT THROUGH OBJECT
8 AND EVENT DETECTION, RECOGNITION, CLASSIFICATION, AND RESPONSE
9 PREPARATION;

10 (4) OBJECT AND EVENT RESPONSE EXECUTION;

11 (5) MANEUVER PLANNING; AND

12 (6) SIGNALING WITH LIGHTS OR GESTURES.

13 (D) (1) "FULLY AUTONOMOUS VEHICLE" MEANS A MOTOR VEHICLE
14 EQUIPPED WITH AN AUTOMATED DRIVING SYSTEM DESIGNED TO FUNCTION
15 WITHOUT A HUMAN DRIVER.

16 (2) "FULLY AUTONOMOUS VEHICLE" INCLUDES A LEVEL 4 OR 5
17 SYSTEM AS DEFINED BY "TAXONOMY AND DEFINITIONS FOR TERMS RELATED TO
18 DRIVING AUTOMATION SYSTEMS FOR ON-ROAD MOTOR VEHICLES" PUBLISHED BY
19 THE SOCIETY OF AUTOMOTIVE ENGINEERS INTERNATIONAL.

20 (E) "MINIMAL RISK CONDITION" MEANS A LOW-RISK CONDITION A FULLY
21 AUTONOMOUS VEHICLE ACHIEVES, BY WAY OF THE HUMAN DRIVER OR THE
22 AUTOMATED DRIVING SYSTEM, WHEN THE VEHICLE CANNOT SAFELY CONTINUE THE
23 TRIP.

24 (F) "OPERATIONAL DESIGN DOMAIN" MEANS OPERATING CONDITIONS
25 UNDER WHICH A GIVEN AUTOMATED DRIVING SYSTEM IS SPECIFICALLY DESIGNED
26 TO FUNCTION, INCLUDING ENVIRONMENTAL CONDITIONS, ROADWAY
27 CHARACTERISTICS, OR TIME-OF-DAY RESTRICTIONS.

28 21-1502.

29 (A) A PERSON MAY OPERATE A FULLY AUTONOMOUS VEHICLE ON A
30 HIGHWAY IN THE STATE WITHOUT A HUMAN DRIVER AND WITH THE AUTOMATED

1 DRIVING SYSTEM ENGAGED IF THE VEHICLE MEETS THE FOLLOWING CONDITIONS:

2 (1) IF A FAILURE OF THE AUTOMATED DRIVING SYSTEM OCCURS
3 THAT RENDERS THE SYSTEM UNABLE TO PERFORM THE ENTIRE DYNAMIC DRIVING
4 TASK RELEVANT TO ITS INTENDED OPERATIONAL DESIGN DOMAIN, THE FULLY
5 AUTONOMOUS VEHICLE WILL ACHIEVE A MINIMAL RISK CONDITION;

6 (2) THE FULLY AUTONOMOUS VEHICLE IS CAPABLE OF OPERATING IN
7 ACCORDANCE WITH THE MARYLAND VEHICLE LAW, UNLESS AN EXEMPTION HAS
8 BEEN GRANTED BY THE ADMINISTRATION; AND

9 (3) THE FULLY AUTONOMOUS VEHICLE BEARS THE REQUIRED
10 MANUFACTURER'S CERTIFICATION LABEL INDICATING THAT THE VEHICLE IS IN
11 COMPLIANCE WITH ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY
12 STANDARDS, INCLUDING REFERENCE TO ANY EXEMPTION GRANTED BY THE
13 NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION.

14 (B) (1) BEFORE OPERATING A FULLY AUTONOMOUS VEHICLE ON A
15 HIGHWAY IN THE STATE WITHOUT A HUMAN DRIVER AND WITH THE AUTOMATED
16 DRIVING SYSTEM ENGAGED, A PERSON SHALL SUBMIT A LAW ENFORCEMENT
17 INTERACTION PLAN TO THE ADMINISTRATION.

18 (2) A LAW ENFORCEMENT INTERACTION PLAN SHALL CONTAIN
19 INFORMATION ON:

20 (I) HOW TO COMMUNICATE WITH A FLEET SUPPORT
21 SPECIALIST WHO IS AVAILABLE DURING THE TIMES THE FULLY AUTONOMOUS
22 VEHICLE IS IN OPERATION;

23 (II) HOW TO SAFELY REMOVE THE FULLY AUTONOMOUS
24 VEHICLE FROM THE HIGHWAY AND STEPS TO PROPERLY TOW THE VEHICLE;

25 (III) HOW TO RECOGNIZE WHETHER THE FULLY AUTONOMOUS
26 VEHICLE IS OPERATING AUTONOMOUSLY; AND

27 (IV) ANY OTHER INFORMATION THAT THE MANUFACTURER,
28 OWNER, OR ADMINISTRATION CONSIDERS NECESSARY, INCLUDING INFORMATION
29 REGARDING HAZARDOUS CONDITIONS OR PUBLIC SAFETY RISKS ASSOCIATED WITH
30 THE OPERATION OF A FULLY AUTONOMOUS VEHICLE.

31 (C) BEFORE OPERATING A FULLY AUTONOMOUS VEHICLE ON A HIGHWAY IN
32 THE STATE WITHOUT A HUMAN DRIVER AND WITH THE AUTOMATED DRIVING
33 SYSTEM ENGAGED, THE OWNER OF THE VEHICLE SHALL SUBMIT PROOF OF

1 REQUIRED SECURITY TO THE ADMINISTRATION ON THE FORM THE
2 ADMINISTRATION PROVIDES.

3 (D) WHEN A FULLY AUTONOMOUS VEHICLE IS OPERATING WITH THE
4 AUTOMATED DRIVING SYSTEM ENGAGED, THE AUTOMATED DRIVING SYSTEM IS
5 CONSIDERED TO:

6 (1) BE THE VEHICLE OPERATOR FOR DETERMINING COMPLIANCE
7 WITH THE MARYLAND VEHICLE LAW;

8 (2) SATISFY ELECTRONICALLY ALL PHYSICAL ACTS REQUIRED BY A
9 VEHICLE DRIVER; AND

10 (3) BE LICENSED TO OPERATE THE VEHICLE.

11 (E) (1) A HUMAN DRIVER MAY OPERATE A FULLY AUTONOMOUS VEHICLE
12 IF THE AUTOMATED DRIVING SYSTEM IS NOT ENGAGED.

13 (2) A PERSON SHALL OPERATE A FULLY AUTONOMOUS VEHICLE IF
14 THE AUTOMATED DRIVING SYSTEM MAKES A REQUEST FOR THE PERSON TO
15 INTERVENE WHEN THE AUTOMATED DRIVING SYSTEM IS NOT CAPABLE OF
16 PERFORMING THE ENTIRE DYNAMIC DRIVING TASK WITHIN THE OPERATIONAL
17 DESIGN DOMAIN.

18 (F) (1) IN THE EVENT OF A VEHICLE CRASH INVOLVING A FULLY
19 AUTONOMOUS VEHICLE, THE FULLY AUTONOMOUS VEHICLE AND THE OPERATOR OR
20 PASSENGER IN THE FULLY AUTONOMOUS VEHICLE SHALL COMPLY WITH THE
21 REQUIREMENTS UNDER TITLE 20 OF THIS ARTICLE.

22 (2) ALL NOTICE AND REPORTING REQUIREMENTS UNDER TITLE 20
23 OF THIS ARTICLE SHALL BE SATISFIED WITHIN 15 DAYS AFTER A VEHICLE CRASH
24 INVOLVING A FULLY AUTONOMOUS VEHICLE, UNLESS AN EXTENSION IS GRANTED
25 UNDER TITLE 20 OF THIS ARTICLE.

26 21-1503.

27 (A) SUBJECT TO SUBSECTION (B) OF THIS SECTION, A TRANSPORTATION
28 NETWORK COMPANY, FOR-HIRE VEHICLE COMPANY, OR OTHER GROUND
29 PASSENGER TRANSPORTATION COMPANY MAY USE FULLY AUTONOMOUS VEHICLES.

30 (B) ANY PROVISION OF THE MARYLAND VEHICLE LAW THAT BY ITS NATURE
31 APPLIES ONLY TO A HUMAN DRIVER DOES NOT APPLY TO THE OPERATOR OF A FULLY
32 AUTONOMOUS VEHICLE WITH THE AUTOMATED DRIVING SYSTEM ENGAGED BEING

1 USED BY A TRANSPORTATION NETWORK COMPANY, FOR-HIRE VEHICLE COMPANY,
2 OR OTHER GROUND PASSENGER TRANSPORTATION COMPANY.

3 **21-1504.**

4 THE MOTOR VEHICLE TITLE AND REGISTRATION FOR A FULLY AUTONOMOUS
5 VEHICLE SHALL IDENTIFY THE VEHICLE AS A “FULLY AUTONOMOUS VEHICLE”.

6 **21-1505.**

7 A STATE AGENCY OR LOCAL POLITICAL SUBDIVISION MAY NOT PROHIBIT THE
8 OPERATION OF FULLY AUTONOMOUS VEHICLES ON HIGHWAYS UNDER THEIR
9 JURISDICTION.

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