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1ST SESSION

S. 2496

To direct the Administrator of the National Highway Traffic Safety Administration and the Administrator of the Federal Highway Administration to implement certain recommendations of the National Transportation Safety Board relating to pedestrian safety, bicyclist safety, and speeding-related crashes involving passenger vehicles, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 28, 2021

Mr. SCHATZ (for himself and Mr. CASEY) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To direct the Administrator of the National Highway Traffic Safety Administration and the Administrator of the Federal Highway Administration to implement certain recommendations of the National Transportation Safety Board relating to pedestrian safety, bicyclist safety, and speeding-related crashes involving passenger vehicles, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Vulnerable Road Users
3 Safety Act”.

4 **SEC. 2. DEFINITION OF MICROMOBILITY VEHICLE.**

5 (a) IN GENERAL.—In this Act, the term “micro-
6 mobility vehicle” means a vehicle that—

7 (1) weighs not more than 150 pounds; and

8 (2) is designed primarily—

9 (A) for human transport; and

10 (B) to be used—

11 (i) on paved roadways; or

12 (ii) if the vehicle weighs 100 pounds

13 or less, on paths.

14 (b) EXCLUSION.—In this Act, the term “micro-
15 mobility vehicle” does not include a manned or unmanned
16 passenger vehicle.

17 **SEC. 3. PEDESTRIAN SAFETY.**

18 (a) PEDESTRIAN SAFETY MEASURES.—

19 (1) PURPOSE.—The purpose of this subsection
20 is to direct the Administrator of the National High-
21 way Traffic Safety Administration and the Adminis-
22 trator of the Federal Highway Administration to im-
23 plement certain recommendations in the Special In-
24 vestigation Report of the National Transportation
25 Safety Board on pedestrian safety, adopted on Sep-
26 tember 25, 2018.

1 (2) DEFINITION OF AUTOMATED PEDESTRIAN
 2 SAFETY SYSTEM.—In this subsection, the term
 3 “automated pedestrian safety system” means a vehi-
 4 cle-based pedestrian- and bicyclist-detection system
 5 that alerts drivers of potential vehicle-pedestrian or
 6 vehicle-cyclist crashes and applies automatic emer-
 7 gency braking to prevent such crashes.

8 (3) NHTSA.—The Secretary of Transpor-
 9 tation, acting through the Administrator of the Na-
 10 tional Highway Traffic Safety Administration,
 11 shall—

12 (A) not later than 2 years after the date
 13 of enactment of this Act—

14 (i) revise section 571.108 of title 49,
 15 Code of Federal Regulations (relating to
 16 Federal Motor Vehicle Safety Standard
 17 Number 108) (or successor regulations)—

18 (I) to include performance-based
 19 standards for vehicle headlamp sys-
 20 tems—

21 (aa) to ensure that
 22 headlamps are correctly aimed on
 23 the road; and

24 (bb) requiring those systems
 25 to be tested on-vehicle to account

1 for headlamp height and lighting
2 performance; and

3 (II) to allow the use of adaptive
4 headlamp systems;

5 (ii) issue a final rule to establish min-
6 imum performance standards for adaptive
7 driving beam headlamp systems; and

8 (iii) issue a final rule that—

9 (I) establishes standards for the
10 hood and bumper areas of motor vehi-
11 cles, including passenger cars, multi-
12 purpose passenger vehicles, trucks,
13 and buses with a gross vehicle weight
14 rating of 10,000 pounds or less, to re-
15 duce the number of injuries and fa-
16 talities suffered by pedestrians,
17 bicyclists, and users of micromobility
18 vehicles who are struck by those
19 motor vehicles; and

20 (II) considers the protection of
21 vulnerable pedestrian populations, in-
22 cluding individuals with disabilities,
23 children, and older adults; and

24 (B) not later than 1 year after the date of
25 enactment of this Act—

1 (i) develop performance test criteria
2 for use by manufacturers in evaluating the
3 extent to which automated pedestrian safe-
4 ty systems in light vehicles prevent or miti-
5 gate pedestrian injury;

6 (ii) issue a final decision notice that—

7 (I) incorporates automated pe-
8 destrian safety systems, including pe-
9 destrian automatic emergency braking
10 systems and other passive safety sys-
11 tems, into the New Car Assessment
12 Program of the National Highway
13 Traffic Safety Administration; and

14 (II) establishes—

15 (aa) a minimum perform-
16 ance standard for automated pe-
17 destrian safety systems in ac-
18 cordance with the changes to the
19 New Car Assessment Program
20 described in subclause (I); and

21 (bb) a compliance date with
22 respect to those changes;

23 (iii) establish a detailed crash data set
24 that covers all pedestrian, bicyclist, and
25 micromobility vehicle user events and rep-

resents the current and complete range of crash types, including nonfatal injury crashes, disaggregated by demographic characteristics, including race, age, disability, status, and sex of the victims—

(I) for analysis by States and units of local government; and

(II) to model and simulate pedestrian collision avoidance systems;

(iv) establish methods that States and metropolitan planning organizations (as defined in section 134 of title 23, United States Code) may use—

(I) to collect pedestrian, bicyclist, and micromobility vehicle user event data; and

(II) to define a common framework that allows that data to be combined; and

(v) coordinate with the Director of the Centers for Disease Control and Prevention to develop and implement a plan for States to combine highway crash data and injury health data to produce a national database of pedestrian injuries and fatali-

1 ties, disaggregated by demographic charac-
2 teristics, including race, age, disability sta-
3 tus, and sex of the victims.

4 (4) FEDERAL HIGHWAY ADMINISTRATION.—Not
5 later than 18 months after the date of enactment of
6 this Act, the Administrator of the Federal Highway
7 Administration shall develop standard definitions
8 and establish methods that States, metropolitan
9 planning organizations (as defined in section 134 of
10 title 23, United States Code), Federal land manage-
11 ment agencies, and Tribal governments that receive
12 funding under the tribal transportation program
13 under section 202 of title 23, United States Code,
14 shall use to annually collect and publish pedestrian
15 exposure data that includes—

16 (A) the percentage of pedestrian fatalities
17 that occurred, by State, on roadways in each
18 State that are owned and operated by the
19 State, a Federal land management agency, or a
20 Tribal government that receives funding under
21 the tribal transportation program under section
22 202 of title 23, United States Code, as com-
23 pared to locally-owned and operated roadways
24 in the State;

1 (B) the owner and operator of the roadway
 2 where each pedestrian fatality described in sub-
 3 paragraph (A) occurred;

4 (C) the design speed, target speed (where
 5 available), and operating speed of the roadway
 6 where each pedestrian fatality described in sub-
 7 paragraph (A) occurred;

8 (D) each of the performance measures—

9 (i) described in section 490.207 of
 10 title 23, Code of Federal Regulations (or
 11 successor regulations); and

12 (ii) not described in any of subpara-
 13 graphs (A) through (C);

14 (E)(i) the number of fatalities (as defined
 15 in section 490.205 of title 23, Code of Federal
 16 Regulations (or successor regulations)) in which
 17 the person suffering fatal injuries was using a
 18 bicycle or micromobility vehicle at the time of
 19 the motor vehicle crash; and

20 (ii) a description of the bicycle or micro-
 21 mobility vehicle; and

22 (F)(i) the number of serious injuries (as
 23 defined in section 490.205 of title 23, Code of
 24 Federal Regulations (or successor regulations))
 25 in which the person suffering a serious injury

1 was using a bicycle or micromobility vehicle at
 2 the time of the motor vehicle crash; and

3 (ii) a description of the bicycle or micro-
 4 mobility vehicle.

5 (5) SPECIAL RULES.—Section 148(g) of title
 6 23, United States Code, is amended by adding at
 7 the end the following:

8 “(3) PEDESTRIANS, BICYCLISTS, AND USERS OF
 9 MICROMOBILITY VEHICLES.—

10 “(A) DEFINITION OF MICROMOBILITY VE-
 11 HICLE.—In this paragraph, the term ‘micro-
 12 mobility vehicle’ has the meaning given the
 13 term in section 2 of the Vulnerable Road Users
 14 Safety Act.

15 “(B) RULE.—If the rate of fatalities or se-
 16 rious injuries for any of pedestrians, bicyclists,
 17 and users of micromobility vehicles in a State
 18 increases during the most recent 2-year period
 19 for which data are available, that State shall be
 20 required—

21 “(i) to include in the subsequent State
 22 strategic highway safety plan of the State
 23 strategies to decrease those rates; and

1 “(ii) to prioritize the implementation
2 of any recommendations of the National
3 Transportation Safety Board.

4 “(C) APPLICATION.—Nothing in this para-
5 graph requires the Administrator of the Federal
6 Highway Administration to revise the definition
7 of the term ‘non-motorized serious injuries’ in
8 section 490.205 of title 23, Code of Federal
9 Regulations (or successor regulations).”.

10 (b) SPEEDING-RELATED CRASHES INVOLVING PAS-
11 Senger VEHICLES.—

12 (1) PURPOSE.—The purpose of this subsection
13 is to direct the Administrator of the Federal High-
14 way Administration to implement, for roadways that
15 are legally allowed to be used by or are likely to be
16 used by pedestrians, cyclists, and other vulnerable
17 road users, certain recommendations in the report of
18 the National Transportation Safety Board on reduc-
19 ing speeding-related crashes involving passenger ve-
20 hicles, adopted on July 25, 2017.

21 (2) FEDERAL HIGHWAY ADMINISTRATION.—Not
22 later than 18 months after the date of enactment of
23 this Act, the Administrator of the Federal Highway
24 Administration shall revise the speed limits section
25 of the Manual on Uniform Traffic Control Devices—

1 (A) to require the factors currently listed
2 as optional for all engineering studies;

3 (B) to require that an expert system such
4 as USLIMITS2 be used as a validation tool;

5 (C) to remove the guidance that speed lim-
6 its in speed zones should be within 5 mph of
7 the 85th percentile speed; and

8 (D) at a minimum, to incorporate relevant
9 aspects of the safe system approach for urban
10 roads to strengthen protection for vulnerable
11 road users.

12 **SEC. 4. BICYCLIST SAFETY.**

13 (a) PURPOSE.—The purpose of this section is to en-
14 hance the safety of bicyclists and other vulnerable road
15 users by requiring the Administrator of the National
16 Highway Traffic Safety Administration, the Administrator
17 of the Federal Highway Administration, and the Intel-
18 ligent Transportation Systems Joint Program Office of
19 the Department of Transportation to implement certain
20 recommendations of the National Transportation Safety
21 Board identified in the Safety Research Report entitled
22 “Bicyclist Safety on US Roadways: Crash Risks and
23 Countermeasures”, adopted on November 5, 2019.

24 (b) NATIONAL HIGHWAY TRAFFIC SAFETY ADMINIS-
25 TRATION.—Not later than 2 years after the date of enact-

1 ment of this Act, the Secretary of Transportation, acting
2 through the Administrator of the National Highway Traf-
3 fic Safety Administration (referred to in this subsection
4 as the “Secretary”), shall—

5 (1)(A) develop minimum performance standards
6 for connected vehicle technology for all light vehicles
7 and vehicles with a gross vehicle weight rating of not
8 more than 26,000 pounds;

9 (B) on development of the standards described
10 in subparagraph (A), require connected vehicle tech-
11 nology to be installed on all newly manufactured
12 highway vehicles beginning with the first model year
13 that begins not less than 2 years after the effective
14 date of the final rule establishing the minimum per-
15 formance standards; and

16 (C) complete all rulemaking relating to con-
17 nected vehicle technology that is in progress as of
18 the date of enactment of this Act;

19 (2) require that newly manufactured truck trac-
20 tors with a gross vehicle weight rating of more than
21 26,000 pounds be equipped with a blind spot warn-
22 ing system to improve the ability of the driver of a
23 tractor-trailer to detect—

24 (A) passenger vehicles; and

1 (B) vulnerable road users, including pedes-
2 trians, bicyclists, users of micromobility vehi-
3 cles, and motorcycleists;

4 (3) incorporate into the New Car Assessment
5 Program of the National Highway Traffic Safety
6 Administration tests to evaluate the ability of a new
7 car to avoid crashes with bicyclists, users of micro-
8 mobility vehicles, and pedestrians;

9 (4) expand the 5-star rating system of the New
10 Car Assessment Program of the National Highway
11 Traffic Safety Administration to include a scale that
12 rates the performance of forward collision avoidance
13 systems;

14 (5) issue a final decision notice incorporating
15 pedestrian, bicyclist, and micromobility vehicle user
16 safety systems, including pedestrian, bicyclist, and
17 micromobility vehicle user automatic emergency
18 braking systems and other passive safety systems,
19 into the New Car Assessment Program of the Na-
20 tional Highway Traffic Safety Administration; and

21 (6) complete the development of performance
22 standards for visibility enhancement systems—

23 (A) to ensure that those systems improve
24 driver visibility in blind spots; and

1 (B) to improve the ability of the driver of
2 a single unit truck with a gross vehicle weight
3 rating of more than 10,000 pounds to detect
4 vulnerable road users, including pedestrians,
5 bicyclists, users of micromobility vehicles, and
6 motorcyclists, in the proximity of the truck.

7 (c) FEDERAL HIGHWAY ADMINISTRATION.—Not
8 later than 18 months after the date of enactment of this
9 Act, the Administrator of the Federal Highway Adminis-
10 tration shall—

11 (1)(A) complete the development of methods to
12 combine automated and traditional count with inno-
13 vative bicycle-counting approaches that capture bicy-
14 cling activity data generated by bicyclists and bike
15 share operations; and

16 (B) provide information about those methods to
17 State departments of transportation;

18 (2) update the list of proven safety counter-
19 measures published by the Federal Highway Admin-
20 istration to include separated bike lanes and multi-
21 use trails; and

22 (3) include separated bike lanes and multi-use
23 trails as innovations in the Every Day Counts initia-
24 tive under section 1444 of the FAST Act (23 U.S.C.
25 101 note; Public Law 114–94).

1 (d) SAFETY CONSIDERATIONS IN PLANNING AND DE-
 2 SIGN.—Section 217(g)(2) of title 23, United States Code,
 3 is amended, in the second sentence, by inserting “, sepa-
 4 rated bicycle lanes and multi-use trails, and intersection
 5 safety treatments” after “street crossings”.

6 (e) INTELLIGENT TRANSPORTATION SYSTEMS JOINT
 7 PROGRAM OFFICE.—

8 (1) IN GENERAL.—Not later than 180 days
 9 after the date of enactment of this Act, the Intel-
 10 ligent Transportation Systems Joint Program Office
 11 of the Department of Transportation, in collabora-
 12 tion with the Administrator of the National Highway
 13 Traffic Safety Administration and the Administrator
 14 of the Federal Highway Administration, shall ex-
 15 pand vehicle-to-pedestrian research efforts to ensure
 16 that bicyclists and other vulnerable road users will
 17 be incorporated into the safe deployment of con-
 18 nected vehicle systems.

19 (2) REPORT.—Not later than 30 months after
 20 the date of enactment of this Act, the Intelligent
 21 Transportation Systems Joint Program Office of the
 22 Department of Transportation, in collaboration with
 23 the Administrator of the National Highway Traffic
 24 Safety Administration and the Administrator of the
 25 Federal Highway Administration, shall submit to

- 1 Congress and make publicly available a report on the
- 2 findings of the research efforts described in para-
- 3 graph (1).

