

117TH CONGRESS  
1ST SESSION

# H. R. 3628

To amend subchapter II of chapter 301 of title 49, United States Code, to require crash avoidance technologies, and for other purposes.

---

## IN THE HOUSE OF REPRESENTATIVES

MAY 28, 2021

Ms. SCHAKOWSKY introduced the following bill; which was referred to the Committee on Energy and Commerce

---

## A BILL

To amend subchapter II of chapter 301 of title 49, United States Code, to require crash avoidance technologies, 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,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “21st Century Smart  
5 Cars Act”.

6 **SEC. 2. 21ST CENTURY SMART CARS.**

7 (a) CRASH AVOIDANCE RULEMAKING.—

8 (1) IN GENERAL.—Subchapter II of chapter  
9 301 of title 49, United States Code, is amended by  
10 adding at the end the following:

1 **“§ 30130. Crash avoidance rulemaking**

2 “(a) IN GENERAL.—Not later than 2 years after the  
3 date of enactment of this section, the Secretary shall issue  
4 final rules prescribing motor vehicle safety standards  
5 that—

6 “(1) establish minimum performance require-  
7 ments for the crash avoidance systems described in  
8 subsection (b); and

9 “(2) require all new passenger motor vehicles  
10 manufactured for sale in the United States, intro-  
11 duced or delivered for introduction in interstate com-  
12 merce, or imported into the United States to be  
13 equipped with the crash avoidance systems described  
14 in subsection (b).

15 “(b) CRASH AVOIDANCE SYSTEMS.—The Secretary  
16 shall issue motor vehicle safety standards for each of the  
17 following crash avoidance systems—

18 “(1) forward collision warning and automatic  
19 emergency braking that detects potential collisions  
20 with vehicles, objects, pedestrians, bicyclists, and  
21 other vulnerable road users while the vehicle is trav-  
22 eling forward, provides a warning to the driver, and  
23 automatically applies the brakes to avoid or mitigate  
24 the severity of a collision;

25 “(2) rear automatic emergency braking that de-  
26 tects a potential collision with vehicles, objects, pe-

1       destrians, bicyclists, and other vulnerable road users  
2       while a vehicle is travelling in reverse and automati-  
3       cally applies the brakes to avoid or mitigate the se-  
4       verity of a collision;

5               “(3) rear cross traffic warning that detects ve-  
6       hicles, objects, pedestrians, bicyclists, and other vul-  
7       nerable road users approaching from the side and  
8       rear of a vehicle as it travels in reverse and alerts  
9       the driver;

10              “(4) lane departure warning that monitors a ve-  
11       hicle’s position in its lane and alerts the driver as  
12       the vehicle approaches or crosses lane markers; and

13              “(5) blind spot warning that detects a vehicle,  
14       pedestrian, bicyclist, and other vulnerable road user  
15       to the side or rear of a vehicle and alerts the driver  
16       to their presence, including when a driver attempts  
17       to change the course of travel toward another vehicle  
18       or road user in the blind zone of the vehicle.

19              “(c) CONSIDERATIONS.—In prescribing the motor ve-  
20       hicle safety standards required in subsection (a), the Sec-  
21       retary shall require that the crash avoidance systems—

22              “(1) perform effectively at speeds for which a  
23       passenger motor vehicle is designed to operate, in-  
24       cluding on city streets and highways; and

1           “(2) include self-diagnostic capability and warn-  
2           ing when inoperable.

3           “(d) COMPLIANCE DATE.—The compliance date of  
4 the standards prescribed under subsection (a) shall not ex-  
5 ceed more than 2 years from the date final rules are  
6 issued.

7           “(e) RULEMAKING ON POINT OF SALE INFORMA-  
8 TION.—Not later than 18 months after the date of enact-  
9 ment of this section, the Secretary shall issue a final rule  
10 to require clear and concise information about the capa-  
11 bilities and limitations of advanced crash avoidance sys-  
12 tems described in subsection (b) to be provided to a con-  
13 sumer at the point of sale and in the vehicle owner’s man-  
14 ual, including a publicly accessible electronic owner’s man-  
15 ual.

16           “(f) HEADLAMPS.—

17           “(1) Not later than 2 years after the date of  
18 enactment of this section, the Secretary shall issue  
19 a final rule amending section 571.108 of title 49,  
20 Code of Federal Regulations to—

21                   “(A) improve illumination of the roadway;

22                   “(B) prevent glare;

23                   “(C) establish minimum performance  
24 standards for—

1 “(i) semi-automatic headlamp beam  
2 switching;

3 “(ii) curve adaptive headlamps; and

4 “(iii) adaptive driving beam headlamp  
5 technology.

6 “(2) The compliance date of the revised stand-  
7 ard prescribed under paragraph (1) shall not exceed  
8 more than 2 years from the effective date.

9 “(3) Not later than 1 year after the date of en-  
10 actment of this section, the Secretary shall finalize  
11 the Rulemaking (83 Fed. Reg. 51766) to permit the  
12 certification of adaptive driving beam headlighting  
13 systems.

14 “(g) DEFINITIONS.—In this section:

15 “(1) CRASH AVOIDANCE.—The term ‘crash  
16 avoidance’ has the meaning given to that term in  
17 section 32301.

18 “(2) PASSENGER MOTOR VEHICLE.—The term  
19 ‘passenger motor vehicle’ has the meaning given to  
20 that term in section 32101.”.

21 (2) CONFORMING AMENDMENT.—The table of  
22 sections for subchapter II of chapter 301 of title 49,  
23 United States Code, is further amended by adding  
24 after the item relating to section 30129 (as added  
25 by section 32002(a)(2)) the following:

“30130. Crash avoidance rulemaking.”.

1 (b) RESEARCH OF ADVANCED CRASH SYSTEMS.—

2 (1) IN GENERAL.—Subchapter II of chapter  
3 301 of title 49, United States Code, as amended by  
4 section(a)(1), is further amended by adding at the  
5 end the following:

6 **“§ 30131. Advanced crash systems research and con-**  
7 **sumer education**

8 “(a) ADVANCED CRASH SYSTEMS RESEARCH.—

9 “(1) Not later than 2 years after the date of  
10 enactment of this section, the Secretary shall com-  
11 plete research into the following:

12 “(A) Direct driver monitoring systems that  
13 will minimize driver disengagement, driver dis-  
14 traction, prevent automation complacency, and  
15 foreseeable misuse of vehicle automation.

16 “(B) Lane keeping assistance that assists  
17 with steering to keep a vehicle within its driving  
18 lane.

19 “(C) Automatic collision notification sys-  
20 tems that—

21 “(i) notify emergency responders that  
22 a crash has occurred and provide the geo-  
23 graphical location of the vehicle and crash  
24 data in a manner that allows for assess-

1           ment of potential injuries and emergency  
2           response; and

3           “(ii) transfer to the Secretary  
4           anonymized automatic crash data for the  
5           purposes of safety research and statistical  
6           analysis.

7           “(D) Intelligent Speed Assist that—

8           “(i) determines the applicable speed  
9           limit where the vehicle is operating; and

10           “(ii) alerts the driver to the current  
11           speed limit and discourages exceeding that  
12           limit.

13           “(2) REQUIREMENTS.—In conducting the re-  
14           search required under subsection (a), the Secretary  
15           shall—

16           “(A) develop one or more tests to evaluate  
17           the performance of the systems;

18           “(B) determine criteria that would be rea-  
19           sonable and practicable at evaluating the per-  
20           formance of the systems; and

21           “(C) determine fail, pass, or advanced pass  
22           criteria to assure the systems are performing  
23           their intended function.

24           “(3) REPORT.—The Secretary shall submit a  
25           report detailing findings from the research required

1 under subsection (a) to the House Energy and Com-  
2 merce Committee and the Senate Commerce,  
3 Science, and Transportation Committee not later  
4 than 3 years after the date of enactment of this Act.

5 “(4) RULEMAKING.—Not later than 4 years  
6 after the date of enactment of this section, the Sec-  
7 retary shall issue final rules to establish motor vehi-  
8 cle safety standards for the advanced crash systems  
9 described in this subsection and to require all new  
10 passenger motor vehicles manufactured for sale in  
11 the United States, introduced or delivered for intro-  
12 duction in interstate commerce, or imported into the  
13 United States produced after the compliance date of  
14 such standards to be equipped with advanced crash  
15 avoidance systems described in this subsection.

16 “(5) LEAD TIME.—The compliance date of the  
17 standards prescribed under this section shall not ex-  
18 ceed more than 2 model years from the date a motor  
19 vehicle safety standard is finalized.

20 “(6) CRASH DATA.—If the Secretary makes a  
21 determination that establishing a motor vehicle safe-  
22 ty standard described in paragraph (1)(C)(ii) does  
23 not meet the requirements and considerations set  
24 forth in subsections (a) and (b) of section 30111 of  
25 title 49, United States Code, the Secretary—



1           “(A) shall submit a report describing the  
2 reasons for reaching such a determination to  
3 the Committee on Energy and Commerce of the  
4 House of Representatives and the Committee  
5 on Commerce, Science, and Transportation in  
6 the Senate; and

7           “(B) may not issue such a standard.

8           “(b) DEFINITIONS.—In this section:

9           “(1) CRASH AVOIDANCE.—The term ‘crash  
10 avoidance’ has the meaning given to that term in  
11 section 32301.

12           “(2) PASSENGER MOTOR VEHICLE.—The term  
13 ‘passenger motor vehicle’ has the meaning given to  
14 that term in section 32101.”.

15           “(2) CONFORMING AMENDMENT.—The table of  
16 section for subchapter II of chapter 301 of title 49,  
17 United States Code, is further amended by adding  
18 after the item relating to section 30129, as added by  
19 section 2(b), the following:

“30131. Advanced crash systems research and consumer education.”.

○