

119TH CONGRESS
1ST SESSION

S. 3572

To amend title 23, United States Code, to allow recipients of certain grants to improve highway safety efforts through the integration of predictive data analytics, telematics, and other advanced technologies, and for other purposes.

IN THE SENATE OF THE UNITED STATES

DECEMBER 18, 2025

Mr. BOOZMAN (for himself, Mr. PADILLA, and Mrs. HYDE-SMITH) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To amend title 23, United States Code, to allow recipients of certain grants to improve highway safety efforts through the integration of predictive data analytics, telematics, and other advanced 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 “Roadway Safety Mod-
5 ernization Act of 2025”.

1 **SEC. 2. INCLUSION OF HIGHWAY SAFETY TECHNOLOGY IN**
2 **CERTAIN HIGHWAY AND FREIGHT SAFETY**
3 **PROGRAMS.**

4 (a) AMENDMENTS TO HIGHWAY SAFETY PRO-
5 GRAMS.—

6 (1) HIGHWAY SAFETY IMPROVEMENT PRO-
7 GRAM.—Section 148 of title 23, United States Code,
8 is amended—

9 (A) in subsection (a)—

10 (i) in paragraph (4)(B) by adding at
11 the end the following new clause:

12 “(xxx) The development, acquisition,
13 or deployment of safety data and systems,
14 including predictive analytics, telematics,
15 and other validated methodology tools for
16 purposes of highway safety.”;

17 (ii) in paragraph (10)(B) by striking
18 “includes,” and all that follows through
19 the period at the end and inserting “in-
20 cludes—

21 “(i) in the case of a railway-highway
22 grade crossing, the characteristics of high-
23 way and train traffic, licensing, and vehicle
24 data; and

25 “(ii) to the extent practicable, data
26 collected via predictive analytics,

telematics, or other validated methodology tools for use in risk modeling and highway safety planning.”; and

(iii) in paragraph (13)—

(I) by redesignating subparagraphs (H) through (J) as subparagraphs (I) through (K), respectively; and

(II) by inserting after subparagraph (G) the following:

“(H) incorporates predictive analytics, telematics, or other validated methodology tools for use in risk modeling and highway safety planning;”; and

(B) in subsection (c)—

(i) in paragraph (1)(B) by striking “; and” and inserting “, including by using of safety data to proactively identify and address roadway safety risks and such safety problems; and”;

(ii) in paragraph (2)(A)—

(I) in clause (v) by striking “and” at the end;

(II) in clause (vi) by striking the semicolon and inserting “; and”; and

1 (III) by adding at the end the
2 following new clause:

3 “(vii) using crash data and predictive
4 analytics, telematics, or other validated
5 methodology tools;”; and

6 (iii) in paragraph (2)(B)—

7 (I) in clause (iv) by striking
8 “and” at the end; and

9 (II) by adding at the end the fol-
10 lowing new clauses:

11 “(vi) evaluate how effective a safety
12 project is at reducing crashes, injuries, or
13 fatalities; and

14 “(vii) assess the comparative benefits,
15 if any, of safety strategies and interven-
16 tions to determine which such strategies
17 and interventions yield the greatest im-
18 provement to safety, taking into account
19 characteristics of various locations and risk
20 factors;”.

21 (2) NATIONAL HIGHWAY FREIGHT PROGRAM.—
22 Section 167 of title 23, United States Code, is
23 amended—

24 (A) in subsection (h)—

1 (i) in paragraph (5)(C) by adding at
 2 the end the following new clause:

3 “(xxiv) Development, acquisition, or
 4 deployment of safety data tools, including
 5 predictive analytics, telematics, and other
 6 validated methodology tools to improve
 7 freight safety and support performance-
 8 based planning, including performance-
 9 based planning under sections 134 and
 10 135.”; and

11 (ii) in paragraph (6)(B)(i) by insert-
 12 ing before the semicolon “, including the
 13 use of predictive analytics, telematics, and
 14 other validated methodology tools”;

15 (B) in subsection (j), by amending to read
 16 as follows:

17 “(j) INTELLIGENT FREIGHT TRANSPORTATION SYS-
 18 TEM OPERATING STANDARDS.—Not later than 1 year
 19 after the date of enactment of the Roadway Safety Mod-
 20 ernization Act of 2025, the Administrator shall—

21 “(1) determine whether there is a need for es-
 22 tablishing operating standards for intelligent freight
 23 transportation systems; and

1 “(2) if the Administrator determines there is
 2 such a need, submit to Congress a report on such
 3 need.”; and

4 (C) by adding at the end the following new
 5 subsection:

6 “(I) DEFINITIONS.—In this section:

7 “(1) INTELLIGENT FREIGHT TRANSPORTATION
 8 SYSTEM.—The term ‘intelligent freight transpor-
 9 tation system’ means—

10 “(A) innovative or intelligent technological
 11 transportation systems, infrastructure, or facili-
 12 ties, including elevated freight transportation
 13 facilities—

14 “(i) in proximity to, or within, an ex-
 15 isting right of way on a Federal-aid high-
 16 way; or

17 “(ii) that connect land ports of entry
 18 to existing Federal-aid highways; or

19 “(B) communications or information proc-
 20 essing systems that improve the efficiency, se-
 21 curity, or safety of freight movements on the
 22 Federal-aid highway system, including to im-
 23 prove the conveyance of freight on dedicated in-
 24 telligent freight lanes.

1 “(2) SAFETY DATA.—The term ‘safety data’
2 has the meaning given such term in section
3 148(a).”.

4 (3) NATIONAL PRIORITY SAFETY PROGRAMS.—
5 Section 405(c) of title 23, United States Code, is
6 amended—

7 (A) in paragraph (1)—

8 (i) in subparagraph (E) by striking
9 the period at the end and inserting “;
10 and”; and

11 (ii) by adding at the end the fol-
12 lowing:

13 “(F) encourage the integration of pre-
14 dictive analytics, telematics, and other validated
15 methodology tools into safety data systems of
16 the State.”; and

17 (B) in paragraph (4)—

18 (i) in subparagraph (H)(ii) by striking
19 “and” at the end;

20 (ii) in subparagraph (I) by striking
21 the period at the end and inserting “;
22 and”; and

23 (iii) by adding at the end the fol-
24 lowing:

1 “(J) deploying or using predictive ana-
2 lytics, telematics, and other validated method-
3 ology tools to identify high-risk roadway seg-
4 ments, evaluate crash causation factors, and
5 support the development of performance-based
6 planning, including performance-based planning
7 under sections 134 and 135.”.

8 (b) GUIDANCE.—Not later than 1 year after the date
9 of enactment of this Act, the Secretary of Transportation
10 shall develop and issue guidance regarding best practices
11 for—

12 (1) anonymizing data collected for highway
13 safety purposes, securing such data, and protecting
14 personally identifiable information;

15 (2) promoting transparency and accountability
16 in using predictive analytics, telematics, and other
17 validated methodology tools; and

18 (3) ensuring that safety data and related tech-
19 nologies are grounded in validated methodologies
20 (such as actuarial validation, behavioral risk anal-
21 ysis, and other proven risk indicators) to ensure, to
22 the extent practicable, the reliability and effective-
23 ness of such data and technologies.

24 (c) COORDINATION; CONSULTATION.—The Secretary
25 shall—

1 (1) within the Department of Transportation,
2 ensure the coordination of activities carried out with
3 respect to, or programs that fund the use of, pre-
4 dictive safety tools, including any such activities or
5 programs of the Federal Highway Administration,
6 National Highway Traffic Safety Administration,
7 Federal Motor Carrier Safety Administration, Fed-
8 eral Railroad Administration, Office of the Assistant
9 Secretary for Research and Technology, and the In-
10 telligent Transportation Systems Joint Program Of-
11 fice; and

12 (2) consult with the Secretary of Energy, Sec-
13 retary of Commerce, and the heads of any other
14 agency determined appropriate by the Secretary of
15 Transportation to promote the effective use of pre-
16 dictive analytics, telematics, and other validated
17 methodology tools in, and ensure interoperability of
18 such tools across, Federal programs.

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