

116TH CONGRESS
2D SESSION

S. 3175

To amend SAFETEA–LU to improve the Intelligent Transportation System Program Advisory Committee, to require information and resources for the development of local smart communities, to help establish a 21st century transportation workforce, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JANUARY 9, 2020

Ms. CORTEZ MASTO introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To amend SAFETEA–LU to improve the Intelligent Transportation System Program Advisory Committee, to require information and resources for the development of local smart communities, to help establish a 21st century transportation workforce, 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 “Smart Transportation
5 Advancement and Transition Act” or the “STAT Act”.

1 **SEC. 2. INTELLIGENT TRANSPORTATION SYSTEM PRO-**
 2 **GRAM ADVISORY COMMITTEE.**

3 Section 5305 of SAFETEA-LU (23 U.S.C. 512 note;
 4 Public Law 109–59) is amended by striking subsection (h)
 5 and inserting the following:

6 “(h) ADVISORY COMMITTEE.—

7 “(1) IN GENERAL.—The Secretary shall estab-
 8 lish an advisory committee (referred to in this sub-
 9 section as the ‘Committee’) to advise the Secretary
 10 in carrying out this subtitle.

11 “(2) MEMBERSHIP.—

12 “(A) IN GENERAL.—The Committee
 13 shall—

14 “(i) be composed of not more than 25
 15 members;

16 “(ii) be balanced between metropoli-
 17 tan and rural interests; and

18 “(iii) include, at a minimum—

19 “(I) a representative of a State
 20 department of transportation;

21 “(II) a representative of a local
 22 department of transportation (other
 23 than a metropolitan planning organi-
 24 zation);

25 “(III) a representative of a State,
 26 local, or regional transit agency;

1 “(IV) a representative of a met-
2 ropolitan planning organization;

3 “(V) a representative of a na-
4 tional transit association;

5 “(VI) a representative of a na-
6 tional, State, or local transportation
7 agency or association;

8 “(VII) a private sector user of in-
9 telligent transportation system tech-
10 nologies, including emerging vehicle
11 technologies;

12 “(VIII) a private sector developer
13 of intelligent transportation system
14 technologies, including emerging vehi-
15 cle technologies;

16 “(IX) an academic researcher—

17 “(aa) with expertise in com-
18 puter science or another informa-
19 tion science field related to intel-
20 ligent transportation systems;
21 and

22 “(bb) who is not an expert
23 on transportation issues;

1 “(X) an academic researcher in
2 civil engineering or a civil engineering
3 practitioner;

4 “(XI) an academic researcher
5 who is a social scientist with expertise
6 in transportation issues;

7 “(XII) an academic researcher
8 with expertise in labor issues, includ-
9 ing—

10 “(aa) disruptions due to
11 technology; and

12 “(bb) opportunities and bar-
13 riers related to transportation
14 and the incorporation of emerg-
15 ing technology;

16 “(XIII) a representative of a
17 nonprofit group representing the intel-
18 ligent transportation system industry;

19 “(XIV) a representative of a pub-
20 lic interest group concerned with safe-
21 ty, including bicycle and pedestrian
22 interests;

23 “(XV) a representative of a labor
24 organization;

1 “(XVI) a representative of a mo-
 2 bility-providing entity, including for
 3 seniors and people with disabilities;

4 “(XVII) an expert in traffic man-
 5 agement;

6 “(XVIII) a representative of a
 7 public interest group concerned with
 8 the impact of the transportation sys-
 9 tem on land use and residential pat-
 10 terns, including housing availability;
 11 and

12 “(XIX) members with expertise
 13 in planning, safety, and operations.

14 “(B) TERM.—

15 “(i) IN GENERAL.—Except as pro-
 16 vided in clause (ii), the term of a member
 17 of the Committee shall be 3 years.

18 “(ii) STAGGERED TERMS.—Of the
 19 members first appointed to the Com-
 20 mittee—

21 “(I) $\frac{1}{3}$ shall be appointed for a
 22 term of 1 year;

23 “(II) $\frac{1}{3}$ shall be appointed for a
 24 term of 2 years; and

1 “(III) $\frac{1}{3}$ shall be appointed for a
2 term of 3 years.

3 “(iii) RENEWAL.—On expiration of
4 the term of a member of the Committee,
5 the member—

6 “(I) may be reappointed; and

7 “(II) if the member is not re-
8 appointed under subclause (I), may
9 serve until a new member is ap-
10 pointed.

11 “(3) DUTIES.—The Committee shall, at a min-
12 imum—

13 “(A) provide input into the development of
14 the intelligent transportation system aspects of
15 the 5-year strategic plan under section 6503 of
16 title 49, United States Code;

17 “(B) annually review areas of intelligent
18 transportation systems programs and research
19 being considered for funding by the Depart-
20 ment, to determine—

21 “(i) whether those areas of research
22 are likely to advance the state of the prac-
23 tice or state of the art in intelligent trans-
24 portation systems;

1 “(ii) whether intelligent transportation
2 system technologies are likely to be de-
3 ployed by users, and if not, to determine
4 the barriers to deployment;

5 “(iii) the appropriate roles for govern-
6 ment and the private sector in investing in
7 the research and technologies being consid-
8 ered;

9 “(iv) how Federal resources are being
10 utilized to advance intelligent transpor-
11 tation systems; and

12 “(v) how the Department is engaging
13 and supporting local communities in the
14 adoption and integration of intelligent
15 transportation systems;

16 “(C) help develop and revise the resource
17 guide described in section 4(b) of the Smart
18 Transportation Advancement and Transition
19 Act; and

20 “(D) respond to requests for assistance,
21 advice, or consultation from States and local
22 communities as a result of the resource guide
23 described in section 4(b) of the Smart Trans-
24 portation Advancement and Transition Act.

25 “(4) MEETINGS.—The Committee—

1 “(A) shall convene not less frequently than
2 twice each year; and

3 “(B) may convene with the use of remote
4 video conference technology.

5 “(5) REPORT.—Not later than February 1 of
6 each year beginning after the date of enactment of
7 the Smart Transportation Advancement and Transi-
8 tion Act, the Secretary shall submit to the Commit-
9 tees on Appropriations, Commerce, Science, and
10 Transportation, and Environment and Public Works
11 of the Senate and the Committees on Appropriations
12 and Transportation and Infrastructure of the House
13 of Representatives a report that includes—

14 “(A) the recommendations made by the
15 Committee during the preceding calendar year;

16 “(B) an explanation of how the Secretary
17 has implemented those recommendations; and

18 “(C) for any recommendation not imple-
19 mented, an explanation of the reasons for not
20 implementing the recommendation.

21 “(6) APPLICABILITY OF FEDERAL ADVISORY
22 COMMITTEE ACT.—The Committee shall be subject
23 to the Federal Advisory Committee Act (5 U.S.C.
24 App.).”.

1 **SEC. 3. REPORT ON LOCAL ENGAGEMENT.**

2 Not later than 150 days after the date of enactment
 3 of this Act, and annually thereafter, the Secretary of
 4 Transportation, in coordination with the advisory com-
 5 mittee established under section 5305(h) of SAFETEA-
 6 LU (23 U.S.C. 512 note; Public Law 109–59), shall sub-
 7 mit to the Committees on Appropriations, Commerce,
 8 Science, and Transportation, and Environment and Public
 9 Works of the Senate and the Committees on Appropria-
 10 tions and Transportation and Infrastructure of the House
 11 of Representatives a report on efforts by the Department
 12 of Transportation to engage with local communities, met-
 13 ropolitan planning organizations, regional transportation
 14 commissions, and multijurisdictional groups, including in
 15 rural areas, on advancing data and intelligent transpor-
 16 tation systems technologies and other smart cities solu-
 17 tions.

18 **SEC. 4. SMART COMMUNITY RESOURCE GUIDE.**

19 (a) DEFINITIONS.—In this section:

20 (1) ADVISORY COMMITTEE.—The term “advi-
 21 sory committee” means the advisory committee es-
 22 tablished under section 5305(h) of SAFETEA-LU
 23 (23 U.S.C. 512 note; Public Law 109–59).

24 (2) SECRETARY.—The term “Secretary” means
 25 the Secretary of Transportation.

1 (3) SMART COMMUNITY.—The term “smart
2 community” means a community that uses innova-
3 tive technologies, data, analytics, and other means to
4 improve the community and address local challenges.

5 (4) SMART COMMUNITY RESOURCE GUIDE.—
6 The term “smart community resource guide” means
7 the resource guide created, published, and main-
8 tained under subsection (b).

9 (b) RESOURCE GUIDE.—The Secretary, in consulta-
10 tion with the advisory committee, shall create, publish,
11 and maintain a resource guide that is designed to assist
12 States and local communities in developing and imple-
13 menting intelligent transportation technology or smart
14 community transportation programs.

15 (c) INCLUSIONS.—The smart community resource
16 guide may include—

17 (1) a compilation of existing related Federal
18 and non-Federal programs that are available to
19 States and local communities in developing and im-
20 plementing smart community transportation pro-
21 grams, including technical assistance, education,
22 training, research and development, analysis, and
23 funding;

24 (2) available examples of States and local com-
25 munities engaging private sector entities to carry out

1 smart community transportation solutions, including
2 public-private partnership models that could be used
3 to leverage private sector funding to solve local chal-
4 lenges;

5 (3) available examples of proven methods for
6 States and local communities to facilitate the inte-
7 gration of smart community transportation tech-
8 nologies with, or within, new and existing infrastruc-
9 ture and systems;

10 (4) best practices and lessons learned from
11 smart community transportation demonstration
12 projects, including information on return on invest-
13 ment and performance, to help other States and
14 local communities to decide how to begin the inte-
15 gration of smart community transportation tech-
16 nologies; and

17 (5) other topics—

18 (A) as requested by industry entities,
19 States, or local governments; or

20 (B) as determined to be necessary by the
21 Secretary and the advisory committee.

22 (d) USE OF EXISTING GUIDES.—In creating, pub-
23 lishing, and maintaining the smart community resource
24 guide, the advisory committee shall consider existing Fed-
25 eral, State, and local community information, guides, and

1 other resources that relate to smart community transpor-
2 tation goals, activities, and best practices—

3 (1) to prevent duplication of efforts by the Fed-
4 eral Government;

5 (2) to improve local accessibility to Federal pro-
6 grams; and

7 (3) to leverage existing, complementary efforts.

8 (e) OUTREACH.—The Secretary, or, at the deter-
9 mination of the Secretary, the advisory committee, shall
10 conduct outreach to States, counties, local communities,
11 and other relevant entities—

12 (1) to provide interested stakeholders with the
13 smart community resource guide, including through
14 publication of the guide on the internet;

15 (2) to promote the consideration of smart com-
16 munity transportation technologies;

17 (3) to encourage States and local governments
18 to contribute smart community transportation pro-
19 gram and activity information to the smart commu-
20 nity resource guide;

21 (4) to identify—

22 (A) barriers to the adoption of smart com-
23 munity transportation technologies; and

1 (B) any research, development, and other
 2 assistance that is needed that could be included
 3 in the smart community resource guide; and
 4 (5) for other purposes, as identified by the Sec-
 5 retary or the advisory committee.

6 (f) REVISION.—The Secretary and the advisory com-
 7 mittee shall issue a revised smart community resource
 8 guide not less frequently than once every 3 years.

9 **SEC. 5. 21ST CENTURY TRANSPORTATION WORKFORCE.**

10 (a) DEFINITIONS.—In this section:

11 (1) APPRENTICESHIP READINESS PROGRAM.—
 12 The term “apprenticeship readiness program”
 13 means a curriculum or program designed to prepare
 14 young people and transitioning adults to enter and
 15 succeed in a registered apprenticeship program.

16 (2) CENTER OF EXCELLENCE.—The term
 17 “Center of Excellence” means a consortium of public
 18 institutions of higher education designated as a Cen-
 19 ter of Excellence in Advanced Transportation Work-
 20 force Training under subsection (e)(1).

21 (3) INSTITUTION OF HIGHER EDUCATION.—The
 22 term “institution of higher education” has the
 23 meaning given the term in section 101 of the Higher
 24 Education Act of 1965 (20 U.S.C. 1001).

1 (4) INTELLIGENT TRANSPORTATION TECH-
 2 NOLOGY.—The term “intelligent transportation tech-
 3 nology” means an operational system of various
 4 technologies that, when combined and managed, im-
 5 prove the operating capabilities of the overall trans-
 6 portation system.

7 (5) REGISTERED APPRENTICESHIP PROGRAM.—
 8 The term “registered apprenticeship program”
 9 means a program registered under the Act of Au-
 10 gust 16, 1937 (commonly known as the “National
 11 Apprenticeship Act”; 50 Stat. 664, chapter 663; 29
 12 U.S.C. 50 et seq.).

13 (6) SECRETARIES.—The term “Secretaries”
 14 means—

15 (A) the Secretary; and

16 (B) the Secretaries of Education, Energy,
 17 and Labor.

18 (7) SECRETARY.—The term “Secretary” means
 19 the Secretary of Transportation.

20 (b) WORKFORCE DEVELOPMENT SCANNING TOUR.—

21 Not later than 180 days after the date of enactment of
 22 this Act, the Secretaries, in coordination with the Intel-
 23 ligent Transportation Systems Joint Program Office of
 24 the Department of Transportation, shall conduct a na-
 25 tional and international scanning tour of surface transpor-

1 tation agencies, including State and local departments of
 2 transportation, public transit agencies, rail agencies, and
 3 other similar entities, to identify critical future invest-
 4 ments in workforce development, particularly investments
 5 related to enhancing technology skills of the personnel that
 6 operate and maintain surface transportation systems, in-
 7 frastructure, and vehicles.

8 (c) COLLABORATION WITH REGIONAL SURFACE
 9 TRANSPORTATION WORKFORCE DEVELOPMENT CEN-
 10 TERS.—For each Center of Excellence and each eligible
 11 entity that receives a grant under subsection (f), using ex-
 12 isting information and information learned during the
 13 scanning tour under subsection (b), the Secretaries shall
 14 identify—

15 (1) any potential collaborative initiatives that
 16 the Center of Excellence or eligible entity, as appli-
 17 cable, may carry out jointly with an applicable Re-
 18 gional Surface Transportation Workforce Develop-
 19 ment Center of the Federal Highway Administra-
 20 tion; and

21 (2) any cooperative opportunities to enhance
 22 curriculum development, training resources, and reg-
 23 istered apprenticeship programs for existing and new
 24 surface transportation personnel.

1 (d) NATIONAL SUMMIT ON TRANSPORTATION WORK-
2 FORCE DEVELOPMENT.—The Secretaries shall jointly host
3 a National Summit on Transportation Workforce Develop-
4 ment—

5 (1) to engage public and private stakeholders;
6 and

7 (2) to develop training initiatives based on pre-
8 vious findings by the Intelligent Transportation Sys-
9 tems Joint Program Office of the Department of
10 Transportation and the scanning tour under sub-
11 section (b).

12 (e) CENTERS OF EXCELLENCE IN ADVANCED TRANS-
13 PORTATION WORKFORCE TRAINING.—

14 (1) DESIGNATION.—Not later than 240 days
15 after the date on which the scanning tour under sub-
16 section (b) is completed, the Secretaries shall des-
17 ignate not less than 10 consortia of public institu-
18 tions of higher education as a “Center of Excellence
19 in Advanced Transportation Workforce Training”.

20 (2) FUNCTIONS.—Each Center of Excellence
21 shall seek to expand the capacity of that Center of
22 Excellence to train students for career opportunities
23 in industry and government service related to the
24 use of intelligent transportation technologies and
25 systems, including by—

1 (A) admitting more students;

2 (B) training faculty;

3 (C) expanding facilities;

4 (D) creating programs that provide stu-
5 dents with pathways to achieve vendor-neutral
6 industry-recognized credentials;

7 (E) establishing new career pathways from
8 secondary school to associate degree and bacca-
9 laureate degree programs;

10 (F) awarding credit for prior learning ex-
11 perience, including military service;

12 (G) providing the essential aspects of a
13 pre-apprenticeship or apprenticeship readiness
14 program; and

15 (H) providing information and guidance to
16 assist students in furthering the workforce de-
17 velopment of those students through existing
18 registered apprenticeship programs.

19 (3) EDUCATION AND TRAINING REQUIRE-
20 MENTS.—Each Center of Excellence shall address
21 education and training requirements associated with
22 various types of intelligent transportation tech-
23 nologies, components, infrastructure, and equipment,
24 including with respect to—

25 (A) installation;

- 1 (B) maintenance;
- 2 (C) manufacturing;
- 3 (D) operations, including data analysis and
- 4 review;
- 5 (E) cybersecurity;
- 6 (F) the use of intelligent transportation
- 7 technologies and systems in—
- 8 (i) various industry applications; and
- 9 (ii) programs and services of the Fed-
- 10 eral Government and State and local gov-
- 11 ernments;
- 12 (G) Federal policies relating to intelligent
- 13 transportation technologies and systems;
- 14 (H) dual credit programs that deliver
- 15 training opportunities to secondary school stu-
- 16 dents regarding intelligent transportation tech-
- 17 nologies and systems; and
- 18 (I) any training regarding—
- 19 (i) intelligent transportation sensors
- 20 or other technology; and
- 21 (ii) the processing, analyzing, and vis-
- 22 ualizing of data collected by intelligent
- 23 transportation technologies and systems.
- 24 (4) PRIORITY CONSIDERATION.—In designating
- 25 a Center of Excellence under this subsection, the

1 Secretaries shall give priority consideration to a con-
 2 sortium of public institutions of higher education
 3 that—

4 (A) develops partnerships with existing
 5 registered apprenticeship programs;

6 (B) demonstrates high safety, job place-
 7 ment, and quality standards in accordance with
 8 part 29 of title 29, Code of Federal Regulations
 9 (or successor regulations); and

10 (C) serve underrepresented populations.

11 (f) SMART TRANSPORTATION WORKFORCE DEVEL-
 12 OPMENT PROGRAM.—

13 (1) IN GENERAL.—The Secretary, in consulta-
 14 tion and coordination with the Secretary of Edu-
 15 cation, the Secretary of Energy, and the Secretary
 16 of Labor, shall carry out a program to award grants
 17 to eligible entities for eligible projects that support—

18 (A) the education and recruitment of tech-
 19 nical workers for the intelligent transportation
 20 technologies and systems industry; and

21 (B) the development of a workforce skilled
 22 in various types of intelligent transportation
 23 technologies, components, infrastructure, and
 24 equipment.

25 (2) ELIGIBLE ENTITIES.—

1 (A) IN GENERAL.—The Secretary may
2 award a grant under this subsection to—

- 3 (i) a unit of local government;
4 (ii) a Tribal government;
5 (iii) a transit agency or authority;
6 (iv) a public toll authority;
7 (v) a metropolitan planning organiza-
8 tion;

9 (vi) any other subdivision of a State
10 or local government;

11 (vii) an institution of higher edu-
12 cation, including a university transpor-
13 tation center under section 5505 of title
14 49, United States Code;

15 (viii) an entity operating a registered
16 apprenticeship program;

17 (ix) a multijurisdictional group;

18 (x) a regional transportation partner-
19 ship; or

20 (xi) a consortium of any of the enti-
21 ties described in clauses (i) through (x).

22 (B) APPLICATIONS.—To be eligible to re-
23 ceive a grant under this subsection, an eligible
24 entity described in subparagraph (A) shall sub-
25 mit to the Secretary an application at such

1 time, in such manner, and containing such in-
2 formation as the committee established under
3 paragraph (5) may require.

4 (3) ELIGIBLE PROJECTS.—The Secretary may
5 award a grant under this subsection for a project—

6 (A) to establish new educational programs
7 that teach the technical skills used in intelligent
8 transportation technologies and systems;

9 (B) to establish scholarships, apprentice-
10 ship readiness programs, or registered appren-
11 ticeship programs for individuals pursuing em-
12 ployment in the intelligent transportation tech-
13 nology and systems industry;

14 (C) to support or expand participation in
15 apprenticeship readiness programs or registered
16 apprenticeship programs for individuals pur-
17 suing employment in the intelligent transpor-
18 tation technology and systems industry;

19 (D) to support outreach about careers in
20 the intelligent transportation technologies and
21 systems industry to—

22 (i) primary, secondary, and post-sec-
23 ondary school students; or

24 (ii) communities that are underrep-
25 resented in those industries;

1 (E) to support educational opportunities
2 related to intelligent transportation technologies
3 and systems in economically disadvantaged geo-
4 graphic areas;

5 (F) to support transition to careers in in-
6 telligent transportation technologies and sys-
7 tems; or

8 (G) that, as determined by a unanimous
9 vote of the committee established under para-
10 graph (5), otherwise enhances—

11 (i) technical education in intelligent
12 transportation technologies and systems; or

13 (ii) the workforce of intelligent trans-
14 portation technologies and systems indus-
15 tries.

16 (4) PRIORITY CONSIDERATION.—In awarding
17 grants under this subsection, the Secretary shall give
18 priority consideration to an eligible entity that—

19 (A) is part of a consortium designated as
20 a Center of Excellence;

21 (B) incorporates existing registered ap-
22 prenticeship programs;

23 (C) demonstrates high safety, job place-
24 ment, and quality standards in accordance with

1 part 29 of title 29, Code of Federal Regulations
 2 (or successor regulations); and

3 (D) serves underrepresented populations.

4 (5) GRANT APPLICATION REVIEW COM-
 5 MITTEE.—

6 (A) IN GENERAL.—The Secretary, in con-
 7 sultation and coordination with the Secretary of
 8 Education, the Secretary of Energy, and the
 9 Secretary of Labor, shall establish a committee
 10 to review applications for, and select recipients
 11 of, grants under this subsection.

12 (B) MEMBERSHIP.—The committee estab-
 13 lished under subparagraph (A) shall be com-
 14 posed of individuals who were involved in the
 15 consideration, selection, and designation of the
 16 Centers of Excellence.

17 (C) USE OF ADVISORY COMMITTEE EXPER-
 18 TISE.—The committee established under sub-
 19 paragraph (A) shall use the expertise of the ad-
 20 visory committee established under section
 21 5305(h) of SAFETEA-LU (23 U.S.C. 512
 22 note; Public Law 109–59), as applicable.

23 (6) MAXIMUM AMOUNT OF GRANT.—Each grant
 24 awarded under this subsection shall be in an amount
 25 that is not more than \$1,000,000.

1 (7) AUTHORIZATION OF APPROPRIATIONS.—

2 There is authorized to be appropriated to the Secre-
3 taries to award grants under this subsection
4 \$10,000,000 for each of fiscal years 2021 through
5 2025.

6 (g) GAO REPORT ON WORKFORCE OPPORTUNITIES
7 AND BARRIERS.—

8 (1) IN GENERAL.—The Comptroller General of
9 the United States shall conduct a study that identi-
10 fies issues relating to workforce development in in-
11 telligent and zero-emissions transportation tech-
12 nology, including—

13 (A) any shortages of skilled employees in
14 those fields;

15 (B) issues relating to the transition of
16 workers from traditional vehicle manufacturing,
17 operation, and maintenance to the intelligent
18 and zero-emissions transportation workforce;

19 (C) issues relating to the transition of
20 workers from traditional surface transportation
21 installation, construction, manufacturing, oper-
22 ation, and maintenance to incorporation into
23 the intelligent transportation workforce; and

24 (D) examples of successful models of work-
25 force development in those fields.

1 (2) REPORT.—Not later than 1 year after the
2 date of enactment of this Act, the Comptroller Gen-
3 eral of the United States shall submit a report on
4 the results of the study under paragraph (1) to—

5 (A) the Committee on Commerce, Science,
6 and Transportation of the Senate;

7 (B) the Committee on Energy and Natural
8 Resources of the Senate;

9 (C) the Committee on Health, Education,
10 Labor, and Pensions of the Senate;

11 (D) the Committee on Appropriations of
12 the Senate;

13 (E) the Committee on Transportation and
14 Infrastructure of the House of Representatives;

15 (F) the Committee on Energy and Com-
16 merce of the House of Representatives;

17 (G) the Committee on Education and
18 Labor of the House of Representatives; and

19 (H) the Committee on Appropriations of
20 the House of Representatives.

○