

117TH CONGRESS  
1ST SESSION

# H. R. 5156

To promote the use of smart technologies and systems in communities, and  
for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 3, 2021

Ms. CLARKE of New York introduced the following bill; which was referred  
to the Committee on Transportation and Infrastructure

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## A BILL

To promote the use of smart technologies and systems in  
communities, 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; TABLE OF CONTENTS.**

4       (a) SHORT TITLE.—This Act may be cited as the  
5       “Smart Technologies for Accessible and Resilient Trans-  
6       portation Act” or the “START Act”.

7       (b) TABLE OF CONTENTS.—The table of contents for  
8       this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Purpose.
- Sec. 3. Definitions.
- Sec. 4. Smart community resource center.
- Sec. 5. Smart Cities Challenge grant extension program.

Sec. 6. GAO study.

Sec. 7. Reports to Secretary of Transportation and Congress.

1 **SEC. 2. PURPOSE.**

2       The purpose of this Act is to promote the adoption  
3 of smart technologies and systems to reduce transpor-  
4 tation costs, traffic congestion, air pollution, energy use,  
5 and carbon emissions, and enhance transportation access,  
6 equity, efficiency, resilience, safety, security, and sustain-  
7 ability for communities of all sizes by—

8           (1) providing assistance to local governments  
9 interested in implementing smart city or community  
10 transportation technologies;

11          (2) creating a smart community resource cen-  
12 ter; and

13          (3) promoting the quality and performance of  
14 smart city technologies while protecting—

15           (A) the physical and cyber security of data  
16 and smart city technology systems; and

17           (B) privacy.

18 **SEC. 3. DEFINITIONS.**

19       In this Act:

20           (1) **APPROPRIATE COMMITTEES OF CON-**  
21 **GRESS.**—The term “appropriate committees of Con-  
22 gress” means—

23           (A) the Committee on Commerce, Science,  
24 and Transportation of the Senate; and

1 (B) the Committee on Transportation and  
2 Infrastructure and the Committee on Energy  
3 and Commerce of the House of Representatives.

4 (2) DATA.—The term “data” includes informa-  
5 tion and images.

6 (3) INTELLIGENT TRANSPORTATION SYSTEM.—  
7 The term “intelligent transportation system” means  
8 a system that—

9 (A) integrates advanced communications  
10 technologies into transportation infrastructure  
11 and vehicles; and

12 (B) encompasses wireless and traditional  
13 communications-based information and elec-  
14 tronic technologies.

15 (4) LARGE-SIZED CITY.—The term “large-sized  
16 city” means a beneficiary city with a population of  
17 850,000 or greater, according to the most recent an-  
18 nual estimates of resident population by the Bureau  
19 of the Census.

20 (5) MEDIUM-SIZED CITY.—The term “medium-  
21 sized city” means a beneficiary city with a popu-  
22 lation between 200,000 and 850,000, according to  
23 the most recent annual estimates of resident popu-  
24 lation by the Bureau of the Census.

1           (6) RURAL AREA.—The term “rural area”  
2       means a beneficiary jurisdiction with a population  
3       between 10,000 and 75,000 people, not located with-  
4       in an urbanized area or cluster, according to the  
5       most recent annual estimates of resident population  
6       by the Bureau of the Census.

7           (7) SECRETARIES.—The term “Secretaries”  
8       means the Secretary, acting in coordination with—

9                       (A) the Secretary of Energy;

10                      (B) the Secretary of Housing and Urban  
11       Development; and

12                      (C) the Director of the National Science  
13       Foundation.

14           (8) SECRETARY.—The term “Secretary” means  
15       the Secretary of Transportation.

16           (9) SECURITY SOLUTIONS.—The term “security  
17       solutions” means video camera equipment, emer-  
18       gency light and panic alarms, information technology  
19       and information systems.

20           (10) SMALL CITY.—The term “small city”  
21       means a beneficiary city with a population between  
22       75,000 and 200,000, according to the most recent  
23       annual estimates of resident population by the Bu-  
24       reau of the Census.

25           (11) SMART CITY OR COMMUNITY.—

1 (A) IN GENERAL.—The term “smart city  
2 or community” means a community in which  
3 innovative, advanced, secure, and reliable infor-  
4 mation and communication technologies and re-  
5 lated mechanisms are applied—

6 (i) to improve the quality of life for  
7 residents;

8 (ii) to reduce resource consumption by  
9 increasing the efficiency and cost effective-  
10 ness of civic operations and services;

11 (iii) to promote economic growth; and

12 (iv) to create a community that is  
13 safer and more secure, sustainable, resil-  
14 ient, livable, and workable.

15 (B) INCLUSIONS.—The term “smart city  
16 or community” includes a local jurisdiction that  
17 installs smart city technology that—

18 (i) gathers and incorporates data from  
19 systems, devices, and sensors embedded in  
20 civic systems and infrastructure to improve  
21 the effectiveness and efficiency of civic op-  
22 erations and services;

23 (ii) aggregates and analyzes gathered  
24 data;

1 (iii) communicates the analysis and  
2 data in a variety of formats;

3 (iv) makes corresponding improve-  
4 ments to civic systems and services based  
5 on gathered data; and

6 (v) integrates measures—

7 (I) to ensure the resilience of  
8 civic systems against cybersecurity  
9 threats and physical and social  
10 vulnerabilities and breaches;

11 (II) to protect the private data of  
12 residents; and

13 (III) to measure the impact of  
14 smart city or community technologies  
15 on the effectiveness and efficiency  
16 civic operations and services.

17 (12) SMART CITY TECHNOLOGY.—The term  
18 “smart city technology” means technology and sys-  
19 tems that gather and incorporate data from systems,  
20 devices, and sensors embedded in civic systems, se-  
21 curity systems, transportation and traffic manage-  
22 ment systems, and infrastructure to improve the ef-  
23 fectiveness and efficiency of civic operations by—

24 (A) aggregating and analyzing collected  
25 data;

1 (B) communicating the analysis and data  
2 in a variety of forms;

3 (C) corresponding improvements to civic  
4 systems and services based on gathered data;

5 (D) providing innovative services in mul-  
6 tiple modes of transport and traffic manage-  
7 ment to enable users to be safer, better coordi-  
8 nated and connected, and better informed; and

9 (E) integrating measures—

10 (i) to protect private data of residents;

11 and

12 (ii) to measure the impact of smart  
13 city or community technologies on the ef-  
14 fectiveness and efficiency of civic oper-  
15 ations and services, including digital inclu-  
16 sion and broadband adoption.

17 (13) STATE.—The term “State” means—

18 (A) a State;

19 (B) the District of Columbia;

20 (C) the Commonwealth of Puerto Rico;

21 and

22 (D) any other territory or possession of the  
23 United States.

24 (14) URBAN AREA.—The term “urban area”  
25 means a area designated as an urbanized area by

1 the Bureau of the Census with a population of  
2 50,000 residents or more.

3 **SEC. 4. SMART COMMUNITY RESOURCE CENTER.**

4 (a) ESTABLISHMENT.—The Secretaries, in coordina-  
5 tion with the heads of any other applicable Federal agen-  
6 cies, shall create, publish, and make available to the public  
7 online a resource center, to be known as the “Smart Com-  
8 munity Resource Center”, that includes a compilation of  
9 resources or links to resources for States and local com-  
10 munities to use in developing and implementing—

11 (1) intelligent transportation system programs;

12 or

13 (2) smart city or community transportation  
14 programs.

15 (b) INCLUSIONS.—Information provided by the re-  
16 source center shall include—

17 (1) available examples of Federal guides, pro-  
18 grams, and resources for intelligent transportation  
19 systems or smart city or community transportation  
20 programs, including technical assistance, education,  
21 training, funding, and examples of intelligent trans-  
22 portation systems or smart city or community trans-  
23 portation programs implemented by States and local  
24 communities, available from—

25 (A) the Department of Transportation;



1 (B) other Federal agencies; and

2 (C) non-Federal sources;

3 (2) reports or databases with the results of in-  
4 telligent transportation system or smart city or com-  
5 munity transportation programs;

6 (3) examples of local governments engaging pri-  
7 vate sector entities in order to implement smart city  
8 or community solutions including private-public  
9 partnership models, that could be used to leverage  
10 private sector funding, reduce transportation costs,  
11 and enhance security resiliency;

12 (4) any best practices developed or lessons  
13 learned from intelligent transportation system or  
14 smart city or community transportation programs;  
15 and

16 (5) such other resources as the Secretary deter-  
17 mines to be appropriate.

18 (c) DEADLINE.—The Secretary shall establish the re-  
19 source center by the date that is 1 year after the date  
20 of enactment of this Act.

21 (d) UPDATES.—The Secretary shall ensure that the  
22 resource center is updated on a regular basis.

23 (e) EXISTING GUIDES.—In creating, publishing, and  
24 maintaining the guide under subsection (a), the Secre-  
25 taries shall consider Federal guides published before, on,

1 or after the date of enactment of this Act relating to smart  
2 city or community goals, activities, and best practices—

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

5 (2) to leverage complementary efforts in effect  
6 at the time such guide is created.

7 **SEC. 5. SMART CITIES CHALLENGE GRANT EXTENSION**  
8 **PROGRAM.**

9 (a) IN GENERAL.—Not later than 12 months after  
10 the date of enactment of this Act, the Secretary of Trans-  
11 portation shall develop and implement an annual competi-  
12 tion for the Smart Cities Challenge under which the Sec-  
13 retary shall provide grants on a competitive basis to com-  
14 munities of all sizes to implement smart transportation  
15 proposals and demonstrate how advanced technologies can  
16 be integrated into city planning and utilized to mitigate  
17 transportation challenges related to safety, mobility, and  
18 climate change.

19 (b) ELIGIBILITY.—To be eligible to receive a grant  
20 under this section, an entity shall be—

- 21 (1) a State or local government;
- 22 (2) a tribal government;
- 23 (3) a transit agency or authority;
- 24 (4) a public toll authority;
- 25 (5) a metropolitan planning organization;

1           (6) any other subdivision of a State or local  
2       government;

3           (7) a nonprofit organization;

4           (8) a multijurisdictional group applying through  
5       a single lead applicant; or

6           (9) a consortia of academic institutions apply-  
7       ing through a single lead applicant.

8       (c) APPLICATIONS.—An eligible entity seeking a  
9       grant under this section shall submit to the Secretary an  
10      application at the time, in such manner, and containing  
11      such information as the Secretary may require. An eligible  
12      entity may only submit 1 application.

13      (d) PRIORITY.—In selecting eligible entities to receive  
14      grants under this section, the Secretary shall prioritize ap-  
15      plicants that—

16           (1) identify transportation challenges and de-  
17      scribe how smart city technologies and systems can  
18      address such challenges;

19           (2) determine what technologies have the most  
20      potential to address the challenges identified;

21           (3) identify what data may be collected and  
22      analyzed using these technologies and how such data  
23      would be used to continue to address identified  
24      transportation challenges;

1           (4) incorporate relevant security solutions based  
2       on the scope and necessity for such smart city  
3       project;

4           (5) represent diverse geographic areas of the  
5       United States;

6           (6) represent communities of all sizes;

7           (7) address communities that have significant  
8       underserved and disadvantaged populations; and

9           (8) comply with any other requirements that  
10      the Secretary may identify.

11       (e) NON-FEDERAL SHARE.—The non-Federal share  
12      of the cost of a project for which a grant is awarded under  
13      this section shall be a minimum of 20 percent of the total  
14      cost.

15       (f) AMOUNT OF GRANTS.—Not later than 1 year  
16      after the date of enactment of this paragraph, and for  
17      every fiscal year through fiscal year 2025, the Secretary  
18      shall award grants to not less than 6 eligible entities. The  
19      amount of a grant awarded under this section shall be a  
20      minimum of \$5,000,000 and a maximum of \$40,000,000.  
21      The total amount of funds awarded under this section  
22      shall not exceed \$250,000,000 for one calendar year.

23       (g) PLANNING GRANTS.—The Secretary may award  
24      planning grants ranging from \$50,000 to \$400,000 to as-  
25      sist eligible entities in conducting research into the bene-

1 fits, challenges, and feasibility of smart city technologies  
2 for communities within their jurisdiction.

3 (h) AUTHORIZATION OF APPROPRIATIONS.—There is  
4 authorized to be appropriated to carry out this section  
5 \$250,000,000 for each of fiscal years 2022 through 2025.  
6 Additionally, the Secretary may reallocate unobligated  
7 funds to carry out this section.

8 (i) COORDINATION.—The Secretary may coordinate  
9 with non-profit foundations and other Federal agencies  
10 funding relevant smart city efforts, including the National  
11 Science Foundation, National Institutions of Standards  
12 and Technology, Department of Defense, Department of  
13 Energy, and other entities that the Secretary deems ap-  
14 propriate.

15 **SEC. 6. GAO STUDY.**

16 Not later than 1 year after the date of enactment  
17 of this Act, the Comptroller General of the United States  
18 shall conduct a study to identify—

19 (1) financial and procurement mechanisms cur-  
20 rently available to public and private entities to fund  
21 smart city or community activities and associated  
22 demonstration projects, including “pay for perform-  
23 ance” financing that could deliver measurable and  
24 verifiable market and non-market values to smart  
25 cities or communities;

1           (2) new, innovative financial and procurement  
2 mechanisms under development or used experi-  
3 mentally that may be available, in the near term, to  
4 public and private entities to fund smart city or  
5 community activities and associated demonstration  
6 projects;

7           (3) barriers to creative financing solutions for  
8 those activities and projects, including procurement  
9 barriers faced by State and local governments; and

10          (4) ways to leverage private sector investments  
11 in smart cities and communities.

12 **SEC. 7. REPORTS TO SECRETARY OF TRANSPORTATION**  
13 **AND CONGRESS.**

14          (a) **QUARTERLY REPORT.**—Each recipient of a  
15 Smart Cities Challenge grant under section 5 shall submit  
16 a quarterly report to the Secretary regarding the develop-  
17 ment, implementation, and operation of the project.

18          (b) **REPORT TO CONGRESS.**—Not later than 2 years  
19 after the date of enactment of this Act, and each year  
20 thereafter through 2026, the Secretary shall submit to the  
21 appropriate committees of Congress a report that in-  
22 cludes—

23           (1) pertinent updates regarding the develop-  
24 ment, list of recipients, implementation, and oper-

1        ation of projects funded under Smart Cities Chal-  
2        lenge;

3            (2) the impact of such projects on the transpor-  
4        tation systems within the area served by the project  
5        and review of appropriate security protocols inte-  
6        grated into the project;

7            (3) the impact of such projects on frontline  
8        communities, including communities of color,  
9        women, veterans, and the elderly;

10          (4) the extent to which the goals of the grant  
11        program have been met; and

12          (5) any recommendations for revisions or im-  
13        provements to the Smart Cities Challenge to guide  
14        future deployment activities.

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