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115TH CONGRESS
1ST SESSION

H. R. 4151

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

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 26, 2017

Mrs. COMSTOCK (for herself and Ms. ESTY of Connecticut) introduced the following bill; which was referred to the Committee on Transportation and Infrastructure, and in addition to the Committee on Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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A BILL

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

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the ''Smart Technology for Resilient, Efficient, Economic and Reliable Transportation in Cities and Communities Act'' or the ''STREET Act''.

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

Sec. 1. Short title; table of contents.
Sec. 2. Purpose.
Sec. 3. Definitions.
Sec. 4. Smart city and community transportation resource guide.
Sec. 5. Smart Cities Challenge Grant Extension Program.
Sec. 6. GAO study.
Sec. 7. Standards and interoperability framework.

SEC. 2. PURPOSE.

The purpose of this Act is to promote smart technologies and systems to reduce transportation costs, traffic congestion, air pollution, energy use, and carbon emissions for communities of all sizes by—

(1) creating a smart city and community transportation resource guide in order to increase equity;

(2) promoting the quality and performance of smart city or community transportation technologies while protecting—

(A) the security of data and systems; and

(B) privacy; and

(3) providing assistance to local governments interested in implementing smart city or community transportation technologies.

SEC. 3. DEFINITIONS.

In this Act:

(1) DATA.—The term ''data'' includes information and images.

(2) MEDIUM-SIZED CITY.—The term ''medium-sized city'' means a beneficiary city with a population between 200,000 and 850,000, according to the Census Bureau's most recent annual estimates of resident population.

(3) RURAL AREA.—The term ''rural area'' means a beneficiary jurisdiction with a population between 10,000 and 75,000 people, not located within an urbanized area or cluster, according to the Census Bureau's most recent annual estimates of resident population.

(4) SECRETARIES.—The term ''Secretaries'' means the Secretary, acting in coordination with—

(A) the Secretary of Energy;

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

(C) the Director of the National Science Foundation.

(5) SECRETARY.—The term ''Secretary'' means the Secretary of Transportation.

(6) SMALL CITY.—The term ''small city'' means a beneficiary city with a population between 75,000 and 200,000, according to the Census Bureau's most recent annual estimates of resident population.

(7) SMART CITY OR COMMUNITY.—

(A) IN GENERAL.—The term ''smart city or community'' means a community in which innovative, advanced, secure, and reliable information and communication technologies and related mechanisms are applied—

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

(ii) to reduce resource consumption by increasing the efficiency and cost effectiveness of civic operations and services;

(iii) to promote economic growth; and

(iv) to create a community that is safer and more secure, sustainable, resilient, livable, and workable.

(B) INCLUSIONS.—The term ''smart city or community'' includes a local jurisdiction that—

(i) gathers and incorporates data from systems, devices, and sensors embedded in civic systems and infrastructure to improve the effectiveness and efficiency of civic operations and services;

(ii) aggregates and analyzes gathered data;

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

(iv) makes corresponding improvements to civic systems and services based on gathered data; and

(v) integrates measures—

(I) to enhance the resilience of civic systems against cybersecurity threats and physical and social vulnerabilities and breaches;

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

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

(8) SMART TRANSPORTATION TECHNOLOGIES AND SYSTEMS.—The term ''smart transportation technologies and systems'' means technology and systems that provide innovative services in multiple modes of transport and traffic management to enable users to be safer, better coordinated and connected, and better informed. Such systems may also provide data to cities to assist in making effective transportation policy.

(9) STATE.—The term ''State'' means—

(A) a State;

(B) the District of Columbia;

(C) the Commonwealth of Puerto Rico; and

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

(10) URBAN AREA.—The term ''urban area'' means a census-designated urban area with a population of 50,000 residents or more.

SEC. 4. SMART CITY AND COMMUNITY TRANSPORTATION RESOURCE GUIDE.

(a) PUBLICATION.—

(1) IN GENERAL.—The Secretaries, in coordination with the heads of any other applicable Federal agencies, shall create, publish, and maintain a resource guide designed to assist States, communities, and cities in developing and implementing smart city or community programs.

(2) INFORMATION INCLUDED.—The Secretaries, in coordination with representatives of States, cities, communities, and industry entities, shall determine what information shall be included in the guide described in paragraph (1).

(b) REQUIREMENTS.—The guide published under subsection (a)—

(1) shall be maintained electronically on a website;

(2) shall be provided as an electronic reference guide available to the public free of charge; and

(3) may include—

(A) available examples of local governments engaging private sector entities in order to implement smart city or community solutions, including public-private partnership models, that could be used to leverage private sector funding and reduce transportation costs;

(B) best practices and lessons learned from technology demonstrations, including return on investment and performance information to help cities decide how to initiate integration of smart technologies;

(C) voluntary, industry-led, international consensus standards and best practices, in collaboration with the National Institute of Standards and Technology, for safeguarding cybersecurity and appropriate data management and data privacy; and

(D) such other topics as are determined to be necessary by the Secretaries.

(c) EXISTING GUIDES.—In creating, publishing, and maintaining the guide under subsection (a), the Secretaries shall consider Federal guides published before, on, or after the date of enactment of this Act relating to smart city or community goals, activities, and best practices—

(1) to prevent duplication of efforts by the Federal Government; and

(2) to leverage existing complementary efforts.

SEC. 5. SMART CITIES CHALLENGE GRANT EXTENSION PROGRAM.

(a) IN GENERAL.—Not later than 12 months after the date of enactment of this Act, the Secretary of Transportation shall develop and implement an additional round to the Smart Cities Challenge under which the Secretary shall provide grants on a competitive basis to small- and medium-sized communities to implement smart transportation proposals.

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

(1) a State or local government;

(2) a tribal government;

(3) a transit agency or authority;

(4) a public toll authority;

(5) a metropolitan planning organization;

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

(7) a multijurisdictional group applying through a single lead applicant.

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

(d) PRIORITY.—In selecting eligible entities to receive grants under this section, the Secretary shall prioritize applicants that—

(1) identify transportation challenges and describe how smart transportation technologies and systems can address such challenges;

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

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

(4) comply with any other requirements that the Secretary may identify.

(e) NON-FEDERAL SHARE.—The non-Federal share of the cost of a project for which a grant is awarded under this section shall be a minimum of 25 percent of the total cost.

(f) AMOUNT OF GRANTS.—The amount of a grant awarded under this section shall be a minimum of $20,000,000 and a maximum of $40,000,000. The total amount of funds awarded under this section shall not exceed $100,000,000 for one calendar year.

(g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $100,000,000 for each of fiscal years 2018 through 2022. Additionally, the Secretary may reallocate unobligated funds to carry out this section.

SEC. 6. GAO STUDY.

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

(1) financial and procurement mechanisms currently available to public and private entities to fund smart city or community activities and associated demonstration projects, including ''pay for performance'' financing that could deliver measurable and verifiable market and non-market values to smart cities or communities;

(2) new, innovative financial and procurement mechanisms under development or used experimentally that may be available, in the near term, to public and private entities to fund smart city or community activities and associated demonstration projects;

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

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

SEC. 7. STANDARDS AND INTEROPERABILITY FRAMEWORK.

(a) PARTICIPATION.—To strengthen the public-private partnership approach to smart city- or community-related standards development and interoperability, the Director of the National Institute of Standards and Technology shall strongly encourage and support participation by Federal Government experts in private sector-led standards-related activities that convene smart city or community stakeholders, including representatives of applicable Federal agencies.

(b) ACTIVITIES.—To promote innovation and economic competitiveness and to achieve interoperability of smart city or community devices and systems, while strengthening the United States approach to private sec-

tor-led standardization activities and the participation of Federal representatives under subsection (a), the Director, in consultation with private and public sector stakeholders, shall—

(1) survey and review domestic and international smart city or community performance standards, existing architectures, applications, and deployments, and interoperability standards;

(2) make consensus-based recommendations—

(A) to identify gaps in the smart city or community performance standards and interoperability standards under paragraph (1);

(B) to harmonize existing standards and deployment efforts and enable greater interoperability across smart city or community technologies;

(C) to coordinate domestic and international performance standards and interoperability standards to promote uniform performance standards and interoperability standards worldwide, including with respect to the need for testing and demonstration; and

(D) for guidelines to enable interoperability in the collection, storage, ownership, and sharing of data;

(3) based on the recommendations under paragraph (2), develop a consensus-based framework that includes protocols and model standards for information management, including existing guidelines, best practices, and industry consensus standards;

(4) ensure that cybersecurity and privacy are core elements of the recommended standards and interoperability standards; and

(5) lead international coordination efforts to develop industry-led, technology-neutral, voluntary, consensus-based global smart city or community performance standards and interoperability standards.

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