

**(B) Small businesses**

The Secretary shall ensure that such collaboration with Federal agencies prioritizes the needs and challenges of small businesses.

**(e) Evaluation****(1) In general**

Not later than 3 years after December 16, 2014, the Secretary shall enter into a contract with an independent entity, such as the National Academy of Sciences, to conduct an evaluation of the program established under subsection (a).

**(2) Requirements**

The evaluation shall include—

- (A) whether the program is achieving its goals;
- (B) any recommendations for how the program may be improved; and
- (C) a recommendation as to whether the program should be continued or terminated.

**(f) Definitions**

In this section:

**(1) Regional innovation cluster**

The term “regional innovation cluster” means a geographically bounded network of similar, synergistic, or complementary entities that—

- (A) are engaged in or with a particular industry sector and its related sectors;
- (B) have active channels for business transactions and communication;
- (C) share specialized infrastructure, labor markets, and services; and
- (D) leverage the region’s unique competitive strengths to stimulate innovation and create jobs.

**(2) State**

The term “State” means one of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or any other territory or possession of the United States.

**(g) Funding****(1) General rule**

Except as provided in paragraph (2), no funds are authorized to be appropriated by the Revitalize American Manufacturing and Innovation Act of 2014 for carrying out this section.

**(2) Authority**

To the extent provided for in advance by appropriations Acts, the Secretary may use not to exceed \$10,000,000 for each of the fiscal years 2015 through 2019 to carry out this section from amounts appropriated for economic development assistance programs.

(Pub. L. 96-480, §27, as added Pub. L. 111-358, title VI, §603, Jan. 4, 2011, 124 Stat. 4030; amended Pub. L. 113-235, div. B, title VII, §705, Dec. 16, 2014, 128 Stat. 2230.)

## REFERENCES IN TEXT

The Revitalize American Manufacturing and Innovation Act of 2014, referred to in subsec. (g)(1), is title VII of div. B. of Pub. L. 113-235, Dec. 16, 2014, 128 Stat. 2220.

For complete classification of this Act to the Code, see Short Title note under section 271 of this title and Tables.

## AMENDMENTS

2014—Pub. L. 113-235 amended section generally. Prior to amendment, text related to regional innovation program and consisted of subsecs. (a) to (i), including provisions relating to establishment of program, cluster grants, science and research park development grants, loan guarantees for science park infrastructure, regional innovation research and information program, interagency coordination, evaluation of program, definitions, and authorization of appropriations.

**§ 3723. STEM apprenticeship programs****(a) In general**

The Secretary of Commerce may carry out a grant program to identify the need for skilled science, technology, engineering, and mathematics (referred to in this section as “STEM”) workers and to expand STEM apprenticeship programs.

**(b) Eligible recipient defined**

In this section, the term “eligible recipient” means—

- (1) a State;
- (2) an Indian tribe;
- (3) a city or other political subdivision of a State;
- (4) an entity that—
  - (A) is a nonprofit organization, an institution of higher education, a public-private partnership, a science or research park, a Federal laboratory, or an economic development organization or similar entity; and
  - (B) has an application that is supported by a State, a political subdivision of a State, or a native organization; or
- (5) a consortium of any of the entities described in paragraphs (1) through (5).

**(c) Needs assessment grants**

The Secretary of Commerce may provide a grant to an eligible recipient to conduct a needs assessment to identify—

- (1) the unmet need of a region’s employer base for skilled STEM workers;
- (2) the potential of STEM apprenticeships to address the unmet need described in paragraph (1); and
- (3) any barriers to addressing the unmet need described in paragraph (1).

**(d) Apprenticeship expansion grants**

The Secretary of Commerce may provide a grant to an eligible recipient that has conducted a needs assessment as described in subsection (c)(1) to develop infrastructure to expand STEM apprenticeship programs.

(Pub. L. 96-480, §28, as added Pub. L. 114-329, title III, §312(e), Jan. 6, 2017, 130 Stat. 3014.)

## DEVELOPING STEM APPRENTICESHIPS

Pub. L. 114-329, title III, §312(a)-(d), Jan. 6, 2017, 130 Stat. 3013, 3014, provided that:

“(a) FINDINGS.—Congress makes the following findings:

- “(1) The lack of data on the return on investment for United States employers using registered apprenticeships makes it difficult—

“(A) to communicate the value of these programs to businesses; and

“(B) to expand registered apprenticeships.

“(2) The lack of data on the value and impact of employer-provided worker training, which is likely substantial, hinders the ability of the Federal Government to formulate policy related to workforce training.

“(3) The Secretary of Commerce has initiated—

“(A) the first study on the return on investment for United States employers using registered apprenticeships through case studies of firms in various sectors, occupations, and geographic locations to provide the business community with data on employer benefits and costs; and

“(B) discussions with officials at relevant Federal agencies about the need to collect comprehensive data on—

“(i) employer-provided worker training; and

“(ii) existing tools that could be used to collect such data.

“(b) DEVELOPMENT OF APPRENTICESHIP INFORMATION.—The Secretary of Commerce shall continue to research the value to businesses of utilizing apprenticeship programs, including—

“(1) evidence of return on investment of apprenticeships, including estimates for the average time it takes a business to recover the costs associated with training apprentices; and

“(2) data from the United States Census Bureau and other statistical surveys on employer-provided training, including apprenticeships and other on-the-job training and industry-recognized certification programs.

“(c) DISSEMINATION OF APPRENTICESHIP INFORMATION.—The Secretary of Commerce shall disseminate findings from research on apprenticeships to businesses and other relevant stakeholders, including—

“(1) institutions of higher education;

“(2) State and local chambers of commerce; and

“(3) workforce training organizations.

“(d) NEW APPRENTICESHIP PROGRAM STUDY.—The Secretary of Commerce may collaborate with the Secretary of Labor to study approaches for reducing the cost of creating new apprenticeship programs and hosting apprentices for businesses, particularly small businesses, including—

“(1) training sharing agreements;

“(2) group training models; and

“(3) pooling resources and best practices.”

[For definitions of “STEM” and “institution of higher education” as used in section 312(a)–(d) of Pub. L. 114–329, set out above, see section 2 of Pub. L. 114–329, set out as a note under section 1862s of Title 42, The Public Health and Welfare.]

## § 3724. Crowdsourcing and citizen science

### (a) Short title

This section may be cited as the “Crowdsourcing and Citizen Science Act”.

### (b) Sense of Congress

It is the sense of Congress that—

(1) the authority granted to Federal agencies under the America COMPETES Reauthorization Act of 2010 (Public Law 111–358; 124 Stat. 3982) to pursue the use of incentive prizes and challenges has yielded numerous benefits;

(2) crowdsourcing and citizen science projects have a number of additional unique benefits, including accelerating scientific research, increasing cost effectiveness to maximize the return on taxpayer dollars, addressing societal needs, providing hands-on learning in STEM, and connecting members of the public directly to Federal science agency missions and to each other; and

(3) granting Federal science agencies the direct, explicit authority to use crowdsourcing

and citizen science will encourage its appropriate use to advance Federal science agency missions and stimulate and facilitate broader public participation in the innovation process, yielding numerous benefits to the Federal Government and citizens who participate in such projects.

### (c) Definitions

In this section:

#### (1) Citizen science

The term “citizen science” means a form of open collaboration in which individuals or organizations participate voluntarily in the scientific process in various ways, including—

(A) enabling the formulation of research questions;

(B) creating and refining project design;

(C) conducting scientific experiments;

(D) collecting and analyzing data;

(E) interpreting the results of data;

(F) developing technologies and applications;

(G) making discoveries; and

(H) solving problems.

#### (2) Crowdsourcing

The term “crowdsourcing” means a method to obtain needed services, ideas, or content by soliciting voluntary contributions from a group of individuals or organizations, especially from an online community.

#### (3) Participant

The term “participant” means any individual or other entity that has volunteered in a crowdsourcing or citizen science project under this section.

### (d) Crowdsourcing and citizen science

#### (1) In general

The head of each Federal science agency, or the heads of multiple Federal science agencies working cooperatively, may utilize crowdsourcing and citizen science to conduct projects designed to advance the mission of the respective Federal science agency or the joint mission of Federal science agencies, as applicable.

#### (2) Voluntary services

Notwithstanding section 1342 of title 31, the head of a Federal science agency may accept, subject to regulations issued by the Director of the Office of Personnel Management, in coordination with the Director of the Office of Science and Technology Policy, services from participants under this section if such services—

(A) are performed voluntarily as a part of a crowdsourcing or citizen science project authorized under paragraph (1);

(B) are not financially compensated for their time; and

(C) will not be used to displace any employee of the Federal Government.

#### (3) Outreach

The head of each Federal science agency engaged in a crowdsourcing or citizen science project under this section shall make public and promote such project to encourage broad participation.