

- (i) the size, specialization, and competitiveness of regional innovation initiatives;
- (ii) the regional domestic product contribution, total jobs and earnings by key occupations, establishment size, nature of specialization, patents, Federal research and development spending, and other relevant information for regional innovation initiatives; and
- (iii) supply chain product and service flows within and between regional innovation initiatives.

**(2) Research grants**

The Secretary may award research grants on a competitive basis to support and further the goals of the program established under this section.

**(3) Dissemination of information**

Data and analysis compiled by the Secretary under the program established in this subsection shall be made available to other Federal agencies, State and local governments, and nonprofit and for-profit entities.

**(4) Regional innovation grant program**

The Secretary shall incorporate data and analysis relating to any grant awarded under subsection (c) into the program established under this subsection.

**(e) Interagency coordination**

**(1) In general**

To the maximum extent practicable, the Secretary shall ensure that the activities carried out under this section are coordinated with, and do not duplicate the efforts of, other programs at the Department of Commerce or at other Federal agencies.

**(2) Collaboration**

**(A) In general**

The Secretary shall explore and pursue collaboration with other Federal agencies, including through multi-agency funding opportunities, on regional innovation strategies.

**(B) Small businesses**

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

**(f) Evaluation**

**(1) In general**

Not later than 5 years after Congress first appropriates funds to carry out this section, the Secretary shall competitively award a contract with an independent entity to conduct an evaluation of programs established under this section.

**(2) Requirements**

The evaluation conducted under paragraph (1) shall include—

- (A) an assessment of whether the program is achieving its goals;
- (B) the program's efficacy in providing awards to geographically diverse entities;
- (C) any recommendations for how the program may be improved; and
- (D) a recommendation as to whether the program should be continued or terminated.

**(g) Reporting requirement**

Not later than 5 years after the first grant is awarded under subsection (c), and every 5 years thereafter until 5 years after the last grant recipient completes the regional innovation initiative for which such grant was awarded, the Secretary shall submit a summary report to Congress that describes the outcome of each regional innovation initiative that was completed during the previous 5 years.

**(h) Funding**

From amounts appropriated by Congress to the Secretary, the Secretary may use up to \$50,000,000 in each of the fiscal years 2020 through 2024 to carry out this section.

(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; Pub. L. 116-92, div. A, title XVII, §1742, Dec. 20, 2019, 133 Stat. 1837.)

AMENDMENTS

2019—Pub. L. 116-92 amended section generally. Prior to amendment, section related to regional innovation program, consisting of subsecs. (a) to (g).

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,