

Committee on Commerce, Science, and Transportation of the Senate, the Committee on Science, Space, and Technology of the House of Representatives, and the Committee on Oversight and Reform of the House of Representatives a report, including the results of the evaluation under subparagraph (A) and any recent statistics regarding the size, composition, and educational requirements of the Federal AI workforce.

**(C) Resources**

The Director, in coordination with the Director of the Office of Personnel Management, shall provide consolidated and user-friendly online resources for prospective scholarship recipients, including, to the extent practicable—

- (i) searchable, up-to-date, and accurate information about participating institutions of higher education and job opportunities related to the AI field; and
- (ii) a modernized description of AI careers.

**(17) Refresh**

Not less than once every 2 years, the Director, in coordination with the Director of the Office of Personnel Management, shall review and update the Federal AI Scholarship-for-Service Program to reflect advances in technology.

(Pub. L. 117-167, div. B, title III, §10313, Aug. 9, 2022, 136 Stat. 1522.)

**Editorial Notes**

REFERENCES IN TEXT

The Higher Education Act of 1965, referred to in subsec. (d)(13)(A), is Pub. L. 89-329, Nov. 8, 1965, 79 Stat. 1219. Part D of title IV of the Act is classified generally to part D (§1087a et seq.) of subchapter IV of chapter 28 of Title 20, Education. For complete classification of this Act to the Code, see section 1 of Pub. L. 89-329, set out as a Short Title note under section 1001 of Title 20 and Tables.

CODIFICATION

Section is comprised of section 10313 of div. B of Pub. L. 117-167. Subsecs. (a)(1)(A) and (b)(2) of section 10313 of div. B of Pub. L. 117-167 amended sections 1862o and 1869 of this title, respectively.

**Statutory Notes and Related Subsidiaries**

CHANGE OF NAME

Committee on Oversight and Reform of House of Representatives changed to Committee on Oversight and Accountability of House of Representatives by House Resolution No. 5, One Hundred Eighteenth Congress, Jan. 9, 2023.

**§ 18994. STEM workforce data**

**(a) Skilled technical workforce portfolio review**

**(1) In general**

Not later than 1 year after August 9, 2022, the Director shall conduct a full portfolio analysis of the Foundation's skilled technical workforce investments across all Directorates in the areas of education, research, infrastructure, data collection, and analysis.

**(2) Report**

Not later than 180 days after the date of the review under paragraph (1) is complete, the Di-

rector shall submit to Congress and make widely available to the public a summary report of the portfolio review.

**(b) Survey data**

**(1) Rotating topic modules**

To meet evolving needs for data on the state of the science and engineering workforce, the Director shall assess, through coordination with other Federal statistical agencies and drawing on input from relevant stakeholders, the feasibility and benefits of incorporating questions or topic modules to existing National Center for Science and Engineering Statistics surveys that would vary from cycle to cycle.

**(2) New data**

Not later than 1 year after August 9, 2022, the Director shall submit to Congress and the Board the results of an assessment, carried out in coordination with other Federal agencies and with input from relevant stakeholders, of the feasibility and benefits of incorporating new questions or topic modules to existing National Center for Science and Engineering Statistics surveys on—

- (A) the skilled technical workforce;
- (B) working conditions and work-life balance;
- (C) harassment and discrimination;
- (D) immigration and emigration; and
- (E) any other topics at the discretion of the Director.

**(3) Longitudinal design**

The Director shall continue and accelerate efforts to enhance the usefulness of National Center for Science and Engineering Statistics survey data for longitudinal research and analysis.

**(4) Government Accountability Office review**

Not later than 1 year after August 9, 2022, the Comptroller General of the United States shall submit a report to Congress that—

- (A) evaluates Foundation processes for ensuring the data and analysis produced by the National Center for Science and Engineering Statistics meets current and future needs; and
- (B) includes such recommendations as the Comptroller General determines are appropriate to improve such processes.

(Pub. L. 117-167, div. B, title III, §10314, Aug. 9, 2022, 136 Stat. 1529.)

**§ 18995. Cyber workforce development research and development**

**(a) In general**

The Director shall make awards on a merit-reviewed, competitive basis to institutions of higher education or nonprofit organizations (or consortia of such institutions or organizations) to carry out research on the cyber workforce.

**(b) Research**

In carrying out research pursuant to subsection (a), the Director shall support research and development activities to—

- (1) understand the current state of the cyber workforce, including factors that influence

growth, retention, and development of that workforce;

(2) examine paths to entry and re-entry into the cyber workforce;

(3) understand trends of the cyber workforce, including demographic representation, educational and professional backgrounds present, competencies available, and factors that shape employee recruitment, development, and retention and how to increase the size, diversity, and capability of the cyber workforce;

(4) examine and evaluate training practices, models, programs, and technologies; and

(5) other closely related topics as the Director determines appropriate.

**(c) Requirements**

In carrying out the activities described in subsection (b), the Director shall—

(1) collaborate with the National Institute of Standards and Technology, including the National Initiative for Cybersecurity Education, the Department of Homeland Security, the Department of Defense, the Office of Personnel Management, and other Federal departments and agencies, as appropriate;

(2) align with or build on the National Initiative on Cybersecurity Education Cybersecurity Workforce Framework wherever practicable and applicable;

(3) leverage the collective body of knowledge from existing cyber workforce development research and education activities; and

(4) engage with other Federal departments and agencies, research communities, and potential users of information produced under this subsection.

(Pub. L. 117–167, div. B, title III, §10315, Aug. 9, 2022, 136 Stat. 1530.)

**§ 18996. Cybersecurity workforce data initiative**

The Director, acting through the National Center for Science and Engineering Statistics established in section 1862p of this title and in coordination with the Director of the National Institute of Standards and Technology and other appropriate Federal statistical agencies, shall establish a cybersecurity workforce data initiative that—

(1) assesses the feasibility of providing nationally representative estimates and statistical information on the cybersecurity workforce;

(2) utilizes the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework (NIST Special Publication 800–181), or other frameworks, as appropriate, to enable a consistent measurement of the cybersecurity workforce;

(3) utilizes and complements existing data on employer requirements and unfilled positions in the cybersecurity workforce;

(4) consults key stakeholders and the broader community of practice in cybersecurity workforce development to determine data requirements needed to strengthen the cybersecurity workforce;

(5) evaluates existing Federal survey data for information pertinent to developing national estimates of the cybersecurity workforce;

(6) evaluates administrative data and other supplementary data sources, as available, to describe and measure the cybersecurity workforce; and

(7) collects statistical data, to the greatest extent practicable, on credential attainment and employment outcomes information for the cybersecurity workforce.

(Pub. L. 117–167, div. B, title III, §10317, Aug. 9, 2022, 136 Stat. 1531.)

**§ 18997. Microelectronics workforce development activities**

**(a) Creating helpful initiatives to produce personnel in needed growth industries**

**(1) In general**

The Director shall make awards to institutions of higher education, non-profit organizations, or consortia thereof, for research, development, and related activities to advance innovative approaches to developing, improving, and expanding evidence-based education and workforce development activities and learning experiences at all levels of education in fields and disciplines related to microelectronics.

**(2) Purposes**

Activities carried out under this section shall be for the purpose of supporting the growth, retention, and development of a diverse and sustainable microelectronics workforce to meet the requirements of the programs established in section 4656(c)(2)(C) of title 15 in support of the evolving needs of industry, academia, government, and Federal laboratories.

**(3) Uses of funds**

Awards made under this section shall be used to support activities, such as—

(A) development of industry-oriented curricula and teaching modules for topics relevant to microelectronics, including those that provide meaningful hands-on learning experiences;

(B) dissemination of materials developed in subparagraph (A), including through the creation and maintenance of a publicly-accessible database and online portal;

(C) development and implementation of training, research, and professional development programs for teachers, including innovative pre-service and in-service programs, in microelectronics and related fields;

(D) support for learning activities and experiences that provide physical, simulated, or remote access to training facilities and industry-standard processes and tools, including equipment and software for the design, development, manufacturing, and testing of microelectronics;

(E) increasing the integration of microelectronics content into STEM curricula at all education levels;

(F) Growing<sup>1</sup> academic research capacity in microelectronics by incentivizing the hiring of faculty in fields critical to microelectronics;

(G) support for innovative industry pathway programs that connect high school, vo-

<sup>1</sup> So in original. Probably should not be capitalized.