- "(D) how Federal agencies can incentivize institutions of higher education to improve retention of STEM students;
- (E) ways to leverage private and nonprofit STEM investments and encourage public-private partnerships to strengthen STEM education and help build the STEM workforce pipeline;

(F) ways to incorporate workforce needs into Federal STEM education programs and activities, particularly for specific employment fields of national interest and employment fields experiencing high unemployment rates;

"(G) ways to better vertically and horizontally integrate Federal STEM education programs and activities from pre-kindergarten through graduate study and the workforce, and from in-school to outof-school in order to improve transitions for students moving through the STEM education and workforce pipelines;

'(H) the extent to which Federal STEM education programs and activities are contributing to recruitment and retention of individuals identified in sections 33 and 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b) in the STEM education and workforce pipelines; and

"(I) ways to encourage geographic diversity in the STEM education and the workforce pipelines.

- "(3) RECOMMENDATIONS.—The STEM Education Advisory Panel shall make recommendations to improve Federal STEM education programs and activities based on each assessment under paragraph (1)(B).
- "(d) FUNDING.—The Director of the Foundation, the Secretary of Education, the Administrator of the National Aeronautics and Space Administration, and the Administrator of the National Oceanic and Atmospheric Administration shall jointly make funds available on an annual basis to support the activities of the STEM Education Advisory Panel.
- "(e) REPORTS.—Not later than 1 year after the date of enactment of this Act [Jan. 6, 2017], and after each assessment under subsection (c)(1)(B), the STEM Education Advisory Panel shall submit to the appropriate committees of Congress and CoSTEM a report on its assessment under that subsection and its recommendations under subsection (c)(3).
  - '(f) TRAVEL EXPENSES OF NON-FEDERAL MEMBERS.-"(1) IN GENERAL.—Non-Federal members of the STEM Education Advisory Panel, while attending meetings of the panel or while otherwise serving at the request of a co-chairperson away from their homes or regular places of business, may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, United States Code, for individuals in the Government serving without pay.
  - (2) RULE OF CONSTRUCTION.—Nothing in this subsection shall be construed to prohibit members of the STEM Advisory Panel who are officers or employees of the United States from being allowed travel expenses, including per diem in lieu of subsistence, in accordance with existing law.
- '(g) TERMINATION.—The STEM Education Advisory Panel established under subsection (a) shall terminate on the date that is 5 years after the date that it is es-

[For definitions of terms as used in section 303 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 this

## DEFINITIONS

Pub. L. 114-59, §2, Oct. 7, 2015, 129 Stat. 540, provided that: "For purposes of carrying out STEM education activities at the National Science Foundation, the Department of Energy, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the National Institute of Standards and Technology, and the Environmental Protection Agency, the term 'STEM education' means education in the subjects of science, technology, engineering, and mathematics, including computer science.

Pub. L. 111-358, §2, Jan. 4, 2011, 124 Stat. 3984, provided that: "In this Act [see Tables for classification]:

- "(1) DIRECTOR.—In title I [enacting this section, sections 6622 to 6624 of this title, and section 3719 of Title 15, Commerce and Trade, and amending section 20144 of Title 51, National and Commercial Space Programs], the term 'Director' means the Director of the Office of Science and Technology Policy.
- "(2) STEM.—The term 'STEM' means the academic and professional disciplines of science, technology, engineering, and mathematics."

#### § 6622. Coordination of advanced manufacturing research and development

#### (a) Interagency Committee

The Director shall establish or designate a Committee on Technology under the National Science and Technology Council. The Committee shall be responsible for planning and coordinating Federal programs and activities in advanced manufacturing research and development. In furtherance of the Committee's work, the Committee shall consult with the National Economic Council.

#### (b) Responsibilities of Committee

The Committee shall-

- (1) coordinate the advanced manufacturing research and development programs and activities of the Federal agencies;
- (2) establish goals and priorities for advanced manufacturing research and development that will strengthen United States manufacturing;
- (3) work with industry organizations, Federal agencies, and Federally Funded Research and Development Centers not represented on the Committee, to identify and reduce regulatory, logistical, and fiscal barriers within the Federal government and State governments that inhibit United States manufacturing;
- (4) facilitate the transfer of intellectual property and technology based on federally supported university research into commercialization and manufacturing;
- (5) identify technological, market, or business challenges that may best be addressed by public-private partnerships, and are likely to attract both participation and primary funding from industry;
- (6) encourage the formation of public-private partnerships to respond to those challenges for transition to United States manufacturing; and
- (7) develop and update a national strategic plan for advanced manufacturing in accordance with subsection (c).

### (c) National strategic plan for advanced manufacturing

# (1) In general

The President shall submit to Congress, and publish on an Internet website that is accessible to the public, the strategic plan developed under paragraph (2).

#### (2) Development

The Committee shall develop, and update as required under paragraph (4), in coordination with the National Economic Council, a strategic plan to improve Government coordination and provide long-term guidance for Federal programs and activities in support of United States manufacturing competitiveness, including advanced manufacturing research and development.

#### (3) Contents

The strategic plan described in paragraph (2) shall—

- (A) specify and prioritize near-term and long-term objectives, including research and development objectives, the anticipated time frame for achieving the objectives, and the metrics for use in assessing progress toward the objectives;
- (B) describe the progress made in achieving the objectives from prior strategic plans, including a discussion of why specific objectives were not met;
- (C) specify the role, including the programs and activities, of each relevant Federal agency in meeting the objectives of the strategic plan:
- (D) describe how the Federal agencies and Federally funded research and development centers supporting advanced manufacturing research and development will foster the transfer of research and development results into new manufacturing technologies and United States-based manufacturing of new products and processes for the benefit of society to ensure national, energy, and economic security;
- (E) describe how such Federal agencies and centers will strengthen all levels of manufacturing education and training programs to ensure an adequate, well-trained workforce:
- (F) describe how such Federal agencies and centers will assist small and medium-sized manufacturers in developing and implementing new products and processes;
- (G) analyze factors that impact innovation and competitiveness for United States advanced manufacturing, including—
  - (i) technology transfer and commercialization activities;
  - (ii) the adequacy of the national security industrial base;
  - (iii) the capabilities of the domestic manufacturing workforce;
  - (iv) export opportunities and trade policies;
  - (v) financing, investment, and taxation policies and practices:
  - policies and practices;
    (vi) emerging technologies and markets;
    (vii) advanced manufacturing research
  - (vii) advanced manufacturing research and development undertaken by competing nations; and
  - (viii) the capabilities of the manufacturing workforce of competing nations;
- (H) elicit and consider the recommendations of a wide range of stakeholders, including representatives from diverse manufacturing companies, academia, and other relevant organizations and institutions.

#### (4) Updates

Not later than May 1, 2018, and not less frequently than once every 4 years thereafter,

the President shall submit to Congress, and publish on an Internet website that is accessible to the public, an update of the strategic plan submitted under paragraph (1). Such updates shall be developed in accordance with the procedures set forth under this subsection.

# (5) Requirement to consider strategy in the budget

In preparing the budget for a fiscal year under section 1105(a) of title 31, the President shall include information regarding the consistency of the budget with the goals and recommendations included in the strategic plan developed under this subsection applying to that fiscal year.

#### (6) AMP steering committee input

The Advanced Manufacturing Partnership Steering Committee of the President's Council of Advisors on Science and Technology shall provide input, perspective, and recommendations to assist in the development and updates of the strategic plan under this subsection.

(Pub. L. 111–358, title I, §102, Jan. 4, 2011, 124 Stat. 3985; Pub. L. 113–235, div. B, title VII, §704, Dec. 16, 2014, 128 Stat. 2229.)

#### **Editorial Notes**

#### CODIFICATION

Section was enacted as part of the America COM-PETES Reauthorization Act of 2010, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010, and not as part of the National Science and Technology Policy, Organization, and Priorities Act of 1976 which comprises this chapter.

#### AMENDMENTS

2014—Subsec. (a). Pub. L. 113–235, §704(1), inserted at end "In furtherance of the Committee's work, the Committee shall consult with the National Economic Council."

Subsec. (b)(7). Pub. L. 113–235, §704(2), added par. (7) and struck out former par. (7), which related to development and updating strategic plan to guide Federal programs and activities in support of advanced manufacturing research and development.

Subsec. (c). Pub. L. 113–235, §704(3), added subsec. (c) and struck out former subsec. (c). Prior to amendment, text read as follows: "Not later than 1 year after January 4, 2011, the Director shall transmit the strategic plan developed under subsection (b)(7) to the Senate Committee on Commerce, Science, and Transportation, and the House of Representatives Committee on Science and Technology, and shall transmit subsequent updates to those committees as appropriate."

# Statutory Notes and Related Subsidiaries

#### CHANGE OF NAME

Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

#### DEFINITION

For definition of "Director" as used in this section, see section 2 of Pub. L. 111–358, set out as a note under section 6621 of this title.

# $\S$ 6623. Interagency public access committee

# (a) Establishment

The Director shall establish a working group under the National Science and Technology