

REVITALIZE AMERICAN MANUFACTURING AND
INNOVATION ACT OF 2014

SEPTEMBER 15, 2014.—Committed to the Committee of the Whole House on the
State of the Union and ordered to be printed

Mr. SMITH of Texas, from the Committee on Science, Space, and
Technology, submitted the following

R E P O R T

[To accompany H.R. 2996]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science, Space, and Technology, to whom was referred the bill (H.R. 2996) to require the Secretary of Commerce to establish the Network for Manufacturing Innovation and for other purposes, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

CONTENTS

	Page
I. Amendment	2
II. Purpose and Summary	11
III. Background and Need for the Legislation	11
IV. Hearing Summary	12
V. Committee Consideration	13
VI. Committee Votes	14
VII. Summary of Major Provisions of the Bill	17
VIII. Committee Views	18
IX. Committee Oversight Findings	19
X. Statement on General Performance Goals and Objectives	19
XI. New Budget Authority, Entitlement Authority, and Tax Expenditures	19
XII. Advisory on Earmarks	20
XIII. Committee Cost Estimate	20
XIV. Congressional Budget Office Cost Estimate	20
XV. Federal Mandates Statement	23
XVI. Compliance with House Resolution 5	23
XVII. Federal Advisory Committee Statement	23
XVIII. Applicability to Legislative Branch	23
XIX. Section-by-Section Analysis of the Legislation	23
XX. Changes in Existing Law Made by the Bill, As Reported	25
XXI. Proceedings of the Full Committee Markup	47

I. AMENDMENT

The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Revitalize American Manufacturing and Innovation Act of 2014”.

SEC. 2. FINDINGS.

Congress finds the following:

(1) In 2012, manufacturers contributed \$2.03 trillion to the economy, or $\frac{1}{5}$ of United States Gross Domestic Product.

(2) For every \$1.00 spent in manufacturing, another \$1.32 is added to the economy, the highest multiplier effect of any economic sector.

(3) Manufacturing supports an estimated 17,400,000 jobs in the United States—about 1 in 6 private-sector jobs. More than 12,000,000 Americans (or 9 percent of the workforce) are employed directly in manufacturing.

(4) In 2012, the average manufacturing worker in the United States earned \$77,505 annually, including pay and benefits. The average worker in all industries earned \$62,063.

(5) Taken alone, manufacturing in the United States would be the 8th largest economy in the world.

(6) Manufacturers in the United States perform two-thirds of all private-sector research and development in the United States, driving more innovation than any other sector.

SEC. 3. ESTABLISHMENT OF NETWORK FOR MANUFACTURING INNOVATION.

The National Institute of Standards and Technology Act (15 U.S.C. 271 et seq.) is amended—

(1) by redesignating section 34 as section 35; and

(2) by inserting after section 33 (15 U.S.C. 278r) the following:

“SEC. 34. NETWORK FOR MANUFACTURING INNOVATION.

“(a) ESTABLISHMENT OF NETWORK FOR MANUFACTURING INNOVATION PROGRAM.—

“(1) IN GENERAL.—The Secretary shall establish within the Institute a program to be known as the ‘Network for Manufacturing Innovation Program’ (referred to in this section as the ‘Program’).

“(2) PURPOSES OF PROGRAM.—The purposes of the Program are—

“(A) to improve the competitiveness of United States manufacturing and to increase the production of goods manufactured predominantly within the United States;

“(B) to stimulate United States leadership in advanced manufacturing research, innovation, and technology;

“(C) to facilitate the transition of innovative technologies into scalable, cost-effective, and high-performing manufacturing capabilities;

“(D) to facilitate access by manufacturing enterprises to capital-intensive infrastructure, including high-performance electronics and computing, and the supply chains that enable these technologies;

“(E) to accelerate the development of an advanced manufacturing workforce;

“(F) to facilitate peer exchange of and the documentation of best practices in addressing advanced manufacturing challenges;

“(G) to leverage non-Federal sources of support to promote a stable and sustainable business model without the need for long-term Federal funding; and

“(H) to create and preserve jobs.

“(3) SUPPORT.—The Secretary, acting through the Director, shall carry out the purposes set forth in paragraph (2) by supporting—

“(A) the Network for Manufacturing Innovation established under subsection (b); and

“(B) the establishment of centers for manufacturing innovation.

“(4) DIRECTOR.—The Secretary shall carry out the Program through the Director.

“(b) ESTABLISHMENT OF NETWORK FOR MANUFACTURING INNOVATION.—

“(1) IN GENERAL.—As part of the Program, the Secretary shall establish a network of centers for manufacturing innovation.

“(2) DESIGNATION.—The network established under paragraph (1) shall be known as the ‘Network for Manufacturing Innovation’ (referred to in this section as the ‘Network’).

“(c) CENTERS FOR MANUFACTURING INNOVATION.—

“(1) IN GENERAL.—For purposes of this section, a ‘center for manufacturing innovation’ is a center that—

“(A) has been established by a person or group of persons to address challenges in advanced manufacturing and to assist manufacturers in retaining or expanding industrial production and jobs in the United States;

“(B) has a predominant focus on a manufacturing process, novel material, enabling technology, supply chain integration methodology, or another relevant aspect of advanced manufacturing, such as nanotechnology applications, advanced ceramics, photonics and optics, composites, biobased and advanced materials, flexible hybrid technologies, and tool development for microelectronics;

“(C) as determined by the Secretary, has the potential—

“(i) to improve the competitiveness of United States manufacturing, including key advanced manufacturing technologies such as nanotechnology, advanced ceramics, photonics and optics, composites, biobased and advanced materials, flexible hybrid technologies, and tool development for microelectronics;

“(ii) to accelerate non-Federal investment in advanced manufacturing production capacity in the United States; or

“(iii) to enable the commercial application of new technologies or industry-wide manufacturing processes; and

“(D) includes active participation among representatives from multiple industrial entities, research universities, community colleges, and such other entities as the Secretary considers appropriate, which may include industry-led consortia, career and technical education schools, Federal laboratories, State, local, and tribal governments, businesses, educational institutions, and nonprofit organizations.

“(2) ACTIVITIES.—Activities of a center for manufacturing innovation may include the following:

“(A) Research, development, and demonstration projects, including proof-of-concept development and prototyping, to reduce the cost, time, and risk of commercializing new technologies and improvements in existing technologies, processes, products, and research and development of materials to solve precompetitive industrial problems with economic or national security implications.

“(B) Development and implementation of education, training, and workforce recruitment courses, materials, and programs.

“(C) Development of innovative methodologies and practices for supply chain integration and introduction of new technologies into supply chains.

“(D) Outreach and engagement with small and medium-sized manufacturing enterprises, including women and minority owned manufacturing enterprises, in addition to large manufacturing enterprises.

“(E) Such other activities as the Secretary, in consultation with Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing, considers consistent with the purposes described in subsection (a)(2).

“(3) ADDITIONAL CENTERS FOR MANUFACTURING INNOVATION.—

“(A) IN GENERAL.—The National Additive Manufacturing Innovation Institute and other manufacturing centers formally recognized as manufacturing innovation centers pursuant to Federal law or executive actions, or under pending interagency review for such recognition as of the date of enactment of the Revitalize American Manufacturing and Innovation Act of 2014, shall be considered centers for manufacturing innovation, but such centers shall not receive any financial assistance under subsection (d).

“(B) NETWORK PARTICIPATION.—A manufacturing center that is substantially similar to those established under this subsection but that does not receive financial assistance under subsection (d) may, upon request of the center, be recognized as a center for manufacturing innovation by the Secretary for purposes of participation in the Network.

“(d) FINANCIAL ASSISTANCE TO ESTABLISH AND SUPPORT CENTERS FOR MANUFACTURING INNOVATION.—

“(1) IN GENERAL.—In carrying out the Program, the Secretary shall award financial assistance to a person or group of persons to assist the organization in planning, establishing, or supporting a center for manufacturing innovation.

“(2) APPLICATION.—A person or group of persons seeking financial assistance under paragraph (1) shall submit to the Secretary an application therefor at such time, in such manner, and containing such information as the Secretary may require. The application shall, at a minimum, describe the specific sources

and amounts of non-Federal financial support for the center on the date financial assistance is sought, as well as the anticipated sources and amounts of non-Federal financial support during the period for which the center could be eligible for continued Federal financial assistance under this section.

“(3) OPEN PROCESS.—In soliciting applications for financial assistance under paragraph (1), the Secretary shall ensure an open process that will allow for the consideration of all applications relevant to advanced manufacturing regardless of technology area.

“(4) SELECTION.—

“(A) COMPETITIVE, MERIT REVIEW.—In awarding financial assistance under paragraph (1), the Secretary shall use a competitive, merit review process that includes peer review by a diverse group of individuals with relevant expertise from both the private and public sectors.

“(B) PARTICIPATION IN PROCESS.—

“(i) IN GENERAL.—No political appointee may participate on a peer review panel. The Secretary shall implement a conflict of interest policy that ensures public transparency and accountability, and requires full disclosure of any real or potential conflicts of interest on the parts of individuals that participate in the merit selection process.

“(ii) DEFINITION.—For purposes of this subparagraph, the term ‘political appointee’ means any individual who—

“(I) is employed in a position described under sections 5312 through 5316 of title 5, United States Code, (relating to the Executive Schedule);

“(II) is a limited term appointee, limited emergency appointee, or noncareer appointee in the Senior Executive Service, as defined under paragraphs (5), (6), and (7), respectively, of section 3132(a) of title 5, United States Code; or

“(III) is employed in a position in the executive branch of the Government of a confidential or policy-determining character under schedule C of subpart C of part 213 of title 5 of the Code of Federal Regulations.

“(C) PERFORMANCE MEASUREMENT, TRANSPARENCY, AND ACCOUNTABILITY.—For each award of financial assistance under paragraph (1), the Secretary shall—

“(i) make publicly available at the time of the award a description of the bases for the award, including an explanation of the relative merits of the winning applicant as compared to other applications received, if applicable; and

“(ii) develop and implement metrics-based performance measures to assess the effectiveness of the activities funded.

“(D) COLLABORATION.—In awarding financial assistance under paragraph (1), the Secretary shall, acting through the National Program Office established under subsection (f)(1), collaborate with Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing.

“(E) CONSIDERATIONS.—In selecting a person who submitted an application under paragraph (2) for an award of financial assistance under paragraph (1), the Secretary shall consider, at a minimum, the following:

“(i) The potential of the center for manufacturing innovation to advance domestic manufacturing and the likelihood of economic impact, including the creation or preservation of jobs, in the predominant focus areas of the center for manufacturing innovation.

“(ii) The commitment of continued financial support, advice, participation, and other contributions from non-Federal sources, to provide leverage and resources to promote a stable and sustainable business model without the need for long-term Federal funding.

“(iii) Whether the financial support provided to the center for manufacturing innovation from non-Federal sources significantly exceeds the requested Federal financial assistance.

“(iv) How the center for manufacturing innovation will increase the non-Federal investment in advanced manufacturing research in the United States.

“(v) How the center for manufacturing innovation will engage with small and medium-sized manufacturing enterprises, to improve the capacity of such enterprises to commercialize new processes and technologies.

“(vi) How the center for manufacturing innovation will carry out educational and workforce activities that meet industrial needs related to the predominant focus areas of the center.

“(vii) How the center for manufacturing innovation will advance economic competitiveness and generate substantial benefits to the Nation that extend beyond the direct return to participants in the Program.

“(viii) Whether the predominant focus of the center for manufacturing innovation is a manufacturing process, novel material, enabling technology, supply chain integration methodology, or other relevant aspect of advanced manufacturing that has not already been commercialized, marketed, distributed, or sold by another entity.

“(ix) How the center for manufacturing innovation will strengthen and leverage the assets of a region.

“(x) How the center for manufacturing will encourage the education and training of veterans and individuals with disabilities.

“(5) LIMITATIONS ON AWARDS.—

“(A) IN GENERAL.—No award of financial assistance may be made under paragraph (1) to a center of manufacturing innovation after the 7-year period beginning on the date on which the Secretary first awards financial assistance to that center under that paragraph.

“(B) MATCHING FUNDS AND PREFERENCES.—The total Federal financial assistance awarded to a center of manufacturing innovation, including the financial assistance under paragraph (1), in a given year shall not exceed 50 percent of the total funding of the center in that year, except that the Secretary may make an exception in the case of large capital facilities or equipment purchases. The Secretary shall give weighted preference to applicants seeking less than the maximum Federal share of funds allowed under this paragraph.

“(C) FUNDING DECREASE.—The amount of financial assistance provided to a center of manufacturing innovation under paragraph (1) shall decrease after the second year of funding for the center, and shall continue to decrease thereafter in each year in which financial assistance is provided, unless the Secretary determines that—

“(i) the center is otherwise meeting its stated goals and metrics under this section;

“(ii) unforeseen circumstances have altered the center’s anticipated funding; and

“(iii) the center can identify future non-Federal funding sources that would warrant a temporary exemption from the limitations established in this subparagraph.

“(e) 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.—

“(A) NIST INDUSTRIAL TECHNICAL SERVICES ACCOUNT.—The Secretary may use not to exceed \$5,000,000 for each of the fiscal years 2015 through 2024 to carry out this section from amounts appropriated to the Institute for Industrial Technical Services.

“(B) ENERGY EFFICIENCY AND RENEWABLE ENERGY ACCOUNT.—The Secretary of Energy may transfer to the Institute not to exceed \$250,000,000 for the period encompassing fiscal years 2015 through 2024 for the Secretary to carry out this section from amounts appropriated for advanced manufacturing research and development within the Energy Efficiency and Renewable Energy account for the Department of Energy.

“(f) NATIONAL PROGRAM OFFICE.—

“(1) ESTABLISHMENT.—The Secretary shall establish, within the Institute, the National Office of the Network for Manufacturing Innovation Program (referred to in this section as the ‘National Program Office’), which shall oversee and carry out the Program.

“(2) FUNCTIONS.—The functions of the National Program Office are—

“(A) to oversee the planning, management, and coordination of the Program;

“(B) to enter into memorandums of understanding with Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing, to carry out the purposes described in subsection (a)(2);

“(C) to develop, not later than 1 year after the date of enactment of the Revitalize American Manufacturing and Innovation Act of 2014, and update

not less frequently than once every 3 years thereafter, a strategic plan to guide the Program;

“(D) to establish such procedures, processes, and criteria as may be necessary and appropriate to maximize cooperation and coordinate the activities of the Program with programs and activities of other Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing;

“(E) to establish a clearinghouse of public information related to the activities of the Program; and

“(F) to act as a convener of the Network.

“(3) RECOMMENDATIONS.—In developing and updating the strategic plan under paragraph (2)(C), the Secretary shall solicit recommendations and advice from a wide range of stakeholders, including industry, small and medium-sized manufacturing enterprises, research universities, community colleges, and other relevant organizations and institutions on an ongoing basis.

“(4) REPORT TO CONGRESS.—Upon completion, the Secretary shall transmit the strategic plan required under paragraph (2)(C) to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.

“(5) HOLLINGS MANUFACTURING EXTENSION PARTNERSHIP.—The Secretary shall ensure that the National Program Office incorporates the Hollings Manufacturing Extension Partnership into Program planning to ensure that the results of the Program reach small and medium-sized entities.

“(6) DETAILEES.—Any Federal Government employee may be detailed to the National Program Office without reimbursement. Such detail shall be without interruption or loss of civil service status or privilege.

“(g) REPORTING AND AUDITING.—

“(1) ANNUAL REPORTS TO THE SECRETARY.—

“(A) IN GENERAL.—The Secretary shall require each recipient of financial assistance under subsection (d)(1) to annually submit a report to the Secretary that describes the finances and performance of the center for manufacturing innovation for which such assistance was awarded.

“(B) ELEMENTS.—Each report submitted under subparagraph (A) shall include—

“(i) an accounting of expenditures of amounts awarded to the recipient under subsection (d)(1); and

“(ii) consistent with the metrics-based performance measures developed and implemented by the Secretary under this section, a description of the performance of the center for manufacturing innovation with respect to—

“(I) its goals, plans, financial support, and accomplishments; and

“(II) how the center for manufacturing innovation has furthered the purposes described in subsection (a)(2).

“(2) ANNUAL REPORTS TO CONGRESS.—

“(A) IN GENERAL.—Not less frequently than once each year until December 31, 2024, the Secretary shall submit a report to Congress that describes the performance of the Program during the most recent 1-year period.

“(B) ELEMENTS.—Each report submitted under subparagraph (A) shall include, for the period covered by the report—

“(i) a summary and assessment of the reports received by the Secretary under paragraph (1);

“(ii) an accounting of the funds expended by the Secretary under the Program, including any temporary exemptions granted from the requirements of subsection (d)(5)(C);

“(iii) an assessment of the participation in, and contributions to, the Network by any centers for manufacturing innovation not receiving financial assistance under subsection (d)(1); and

“(iv) an assessment of the Program with respect to meeting the purposes described in subsection (a)(2).

“(3) ASSESSMENTS BY GAO.—

“(A) ASSESSMENTS.—Not less frequently than once every 2 years, the Comptroller General shall submit to Congress an assessment of the operation of the Program during the most recent 2-year period.

“(B) FINAL ASSESSMENT.—Not later than December 31, 2024, the Comptroller General shall submit to Congress a final report regarding the overall success of the Program.

“(C) ELEMENTS.—Each assessment submitted under subparagraph (A) or (B) shall include, for the period covered by the report—

“(i) a review of the management, coordination, and industry utility of the Program;

“(ii) an assessment of the extent to which the Program has furthered the purposes described in subsection (a)(2);

“(iii) such recommendations for legislative and administrative action as the Comptroller General considers appropriate to improve the Program; and

“(iv) an assessment as to whether any prior recommendations for improvement made by the Comptroller General have been implemented or adopted.

“(h) ADDITIONAL AUTHORITIES.—

“(1) APPOINTMENT OF PERSONNEL AND CONTRACTS.—The Secretary may appoint such personnel and enter into such contracts, financial assistance agreements, and other agreements as the Secretary considers necessary or appropriate to carry out the Program, including support for research and development activities involving a center for manufacturing innovation.

“(2) TRANSFER OF FUNDS.—The Secretary may transfer to other Federal agencies such sums as the Secretary considers necessary or appropriate to carry out the Program. No funds so transferred may be used to reimburse or otherwise pay for the costs of financial assistance incurred or commitments of financial assistance made prior to the date of enactment of the Revitalize American Manufacturing and Innovation Act of 2014.

“(3) AUTHORITY OF OTHER AGENCIES.—In the event that the Secretary exercises the authority to transfer funds to another agency under paragraph (2), such agency may accept such funds to award and administer, under the same conditions and constraints applicable to the Secretary, all aspects of financial assistance awards under this section.

“(4) USE OF RESOURCES.—In furtherance of the purposes of the Program, the Secretary may use, with the consent of a covered entity and with or without reimbursement, the land, services, equipment, personnel, and facilities of such covered entity.

“(5) ACCEPTANCE OF RESOURCES.—In addition to amounts appropriated to carry out the Program, the Secretary may accept funds, services, equipment, personnel, and facilities from any covered entity to carry out the Program, subject to the same conditions and constraints otherwise applicable to the Secretary under this section.

“(6) COVERED ENTITY.—For purposes of this subsection, a covered entity is any Federal department, Federal agency, instrumentality of the United States, State, local government, tribal government, territory, or possession of the United States, or of any political subdivision thereof, or international organization, or any public or private entity or individual.

“(i) PATENTS.—Chapter 18 of title 35, United States Code, shall apply to any funding agreement (as defined in section 201 of that title) awarded to new or existing centers for manufacturing innovation.”

SEC. 4. NATIONAL STRATEGIC PLAN FOR ADVANCED MANUFACTURING.

Section 102 of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 6622) is amended—

(1) in subsection (a), by adding at the end the following: “In furtherance of the Committee’s work, the Committee shall consult with the National Economic Council.”;

(2) in subsection (b), by striking paragraph (7) and inserting the following:

“(7) develop and update a national strategic plan for advanced manufacturing in accordance with subsection (c).”; and

(3) by striking subsection (c) and inserting the following:

“(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 achiev-

ing 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;

“(vi) emerging technologies and markets;

“(vii) advanced manufacturing research and development undertaken by competing nations; and

“(viii) the capabilities of the manufacturing workforce of competing nations; and

“(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, United States Code, 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.”.

SEC. 5. REGIONAL INNOVATION PROGRAM.

Section 27 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3722) is amended to read as follows:

“SEC. 27. REGIONAL INNOVATION PROGRAM.

“(a) ESTABLISHMENT.—The Secretary shall establish a regional innovation program to encourage and support the development of regional innovation strategies, including regional innovation clusters.

“(b) CLUSTER GRANTS.—

“(1) IN GENERAL.—As part of the program established under subsection (a), the Secretary may award grants on a competitive basis to eligible recipients for activities relating to the formation and development of regional innovation clusters.

“(2) PERMISSIBLE ACTIVITIES.—Grants awarded under this subsection may be used for activities determined appropriate by the Secretary, including the following:

“(A) Feasibility studies.

“(B) Planning activities.

“(C) Technical assistance.

“(D) Developing or strengthening communication and collaboration between and among participants of a regional innovation cluster.

“(E) Attracting additional participants to a regional innovation cluster.
 “(F) Facilitating market development of products and services developed by a regional innovation cluster, including through demonstration, deployment, technology transfer, and commercialization activities.

“(G) Developing relationships between a regional innovation cluster and entities or clusters in other regions.

“(H) Interacting with the public and State and local governments to meet the goals of the cluster.

“(3) ELIGIBLE RECIPIENT DEFINED.—In this subsection, the term ‘eligible recipient’ means—

“(A) a State;

“(B) an Indian tribe;

“(C) a city or other political subdivision of a State;

“(D) an entity that—

“(i) 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

“(ii) has an application that is supported by a State or a political subdivision of a State; or

“(E) a consortium of any of the entities described in subparagraphs (A) through (D).

“(4) APPLICATION.—

“(A) IN GENERAL.—An eligible recipient shall submit an application to the Secretary at such time, in such manner, and containing such information and assurances as the Secretary may require.

“(B) COMPONENTS.—The application shall include, at a minimum, a description of the regional innovation cluster supported by the proposed activity, including a description of—

“(i) whether the regional innovation cluster is supported by the private sector, State and local governments, and other relevant stakeholders;

“(ii) how the existing participants in the regional innovation cluster will encourage and solicit participation by all types of entities that might benefit from participation, including newly formed entities and those rival existing participants;

“(iii) the extent to which the regional innovation cluster is likely to stimulate innovation and have a positive impact on regional economic growth and development;

“(iv) whether the participants in the regional innovation cluster have access to, or contribute to, a well-trained workforce;

“(v) whether the participants in the regional innovation cluster are capable of attracting additional funds from non-Federal sources; and

“(vi) the likelihood that the participants in the regional innovation cluster will be able to sustain activities once grant funds under this subsection have been expended.

“(C) SPECIAL CONSIDERATION.—The Secretary shall give special consideration to applications from regions that contain communities negatively impacted by trade.

“(5) SPECIAL CONSIDERATION.—The Secretary shall give special consideration to an eligible recipient who agrees to collaborate with local workforce investment area boards.

“(6) COST SHARE.—The Secretary may not provide more than 50 percent of the total cost of any activity funded under this subsection.

“(7) OUTREACH TO RURAL COMMUNITIES.—The Secretary shall conduct outreach to public and private sector entities in rural communities to encourage those entities to participate in regional innovation cluster activities under this subsection.

“(8) FUNDING.—The Secretary may accept funds from other Federal agencies to support grants and activities under this subsection.

“(c) REGIONAL INNOVATION RESEARCH AND INFORMATION PROGRAM.—

“(1) IN GENERAL.—As part of the program established under subsection (a), the Secretary shall establish a regional innovation research and information program—

“(A) to gather, analyze, and disseminate information on best practices for regional innovation strategies (including regional innovation clusters), including information relating to how innovation, productivity, and economic development can be maximized through such strategies;

“(B) to provide technical assistance, including through the development of technical assistance guides, for the development and implementation of regional innovation strategies (including regional innovation clusters);

“(C) to support the development of relevant metrics and measurement standards to evaluate regional innovation strategies (including regional innovation clusters), including the extent to which such strategies stimulate innovation, productivity, and economic development; and

“(D) to collect and make available data on regional innovation cluster activity in the United States, including data on—

“(i) the size, specialization, and competitiveness of regional innovation clusters;

“(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 clusters; and

“(iii) supply chain product and service flows within and between regional innovation clusters.

“(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 subsection.

“(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 under subsection (b) into the program established under this subsection.

“(d) 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 other Federal agencies.

“(2) COLLABORATION.—

“(A) IN GENERAL.—The Secretary shall explore and pursue collaboration with other Federal agencies, including through multiagency 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.

“(e) EVALUATION.—

“(1) IN GENERAL.—Not later than 3 years after the date of enactment of the Revitalize American Manufacturing and Innovation Act of 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.—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.”.

II. PURPOSE AND SUMMARY

The purpose of H.R. 2996 is to support a Network for Manufacturing Innovation (NMI) Program within NIST to improve American manufacturing competitiveness; stimulate innovation; facilitate transition of novel technologies to commercialization; accelerate workforce development; and leverage non-Federal capital.

III. BACKGROUND AND NEED FOR THE LEGISLATION

Manufacturing has been a significant part of American productivity since the industrial revolution. Manufacturing’s share of gross domestic product is approximately 11 percent, and manufacturing output has risen by 13 percent in the last several years. However, employment in the manufacturing sector as a share of the economy is significantly lower than in the post-World War II era. Despite some modest increases recently, American manufacturing has seen large employment declines since 2000.^{1,2,3} Some reports have cited declines in manufacturing employment as an indicator of a decrease in U.S. economic competitiveness, while others suggest that declines are primarily attributed to increases in productivity.^{4,5}

Most analysts agree that manufacturing continues to be an important part of the American economy. Manufacturing is generally more research and development intensive than other sectors of the economy, and therefore more closely tied to the Nation’s innovative capacity.^{6,7}

The National Network for Manufacturing Innovation (NNMI)

The President’s FY13 and FY14 budget requests included a proposal for a one-time mandatory fund of \$1 billion to establish the National Network for Manufacturing Innovation (NNMI), a public-private partnership of competitively-selected institutes that would each concentrate on a particular area of advanced manufacturing technology development. According to background information provided by the Administration, the goal of the institutes is to “bring together industry, universities and community colleges, federal agencies, and regional and state organizations to accelerate innovation by investing in industrially relevant manufacturing technologies with broad applications, and to support manufacturing

¹ Made in America, Again, August 2011, Boston Consulting Group.

² Manufacturing’s Secret Shift: Gaining Competitive Advantage by Getting Closer to the Customer; March 2011, Accenture.

³ Bureau of Labor Statistics, <http://www.bls.gov/data/>.

⁴ S. Ezell and R. Atkinson, “The Case for a National Manufacturing Strategy,” April, 2011, The Information Technology and Innovation Foundation. <http://www.itif.org/files/2011-national-manufacturing-strategy.pdf>.

⁵ Council on Competitiveness Report, Make: An American Manufacturing Movement, December 2011, <http://www.compete.org/publications/detail/2064/make/>.

⁶ OECD Science, Technology and R&D Statistics <http://www.oecd-ilibrary.org/content/data/data-00183-en>.

⁷ S. Ezell and R. Atkinson, “The Case for a National Manufacturing Strategy,” April, 2011, The Information Technology and Innovation Foundation. <http://www.itif.org/files/2011-national-manufacturing-strategy.pdf>.

technology commercialization by bridging the gap between the laboratory and the market.”⁸

The NNMI also includes an emphasis on education and workforce development in advanced manufacturing skills. The Administration proposed up to 15 institutes across the country, with the federal support to last 5–7 years. The Committee on Science, Space and Technology held a hearing to review the Administration’s NNMI proposal in the 112th Congress.⁹

In August 2012, the Administration announced a pilot manufacturing institute, the “National Additive Manufacturing Innovation Institute (NAMII),” based in Youngstown, Ohio to accelerate and integrate additive manufacturing technologies to the U.S. manufacturing sector and to increase domestic manufacturing competitiveness. The pilot institute was established by reprogramming \$30 million in appropriations for the Department of Defense (DOD), the Department of Energy (DOE), NASA, NSF and other federal agencies.

In the 2013 State of the Union Address, the President announced plans for three additional manufacturing institutes to be funded through DOD and DOE appropriations, which were subsequently awarded in 2013:

- Digital Manufacturing & Design Innovation Institute, led by an Illinois consortium led by UI Labs
- Lightweight & Modern Metals Manufacturing Innovation (LM3I) Institute, led by a Michigan-headquartered consortium of businesses and universities
- Next Generation Power Electronics National Manufacturing Innovation Institute, to be developed by a consortium of businesses and universities led by North Carolina State University

The White House subsequently announced plans for additional awards in 2014 and has issued solicitations for proposals for the Clean Energy Manufacturing Innovation Institute for Composites Materials and Structures and a Department of Defense Request for Information from Industry and Academia, as part of an effort to determine technology focus areas for future Institutes for Manufacturing Innovation.

IV. HEARING SUMMARY

On Wednesday, July 10, 2013, the Subcommittee on Research and Technology held a hearing on the need for strategic planning for national manufacturing competitiveness. The hearing focused specifically on H.R. 2447, the “American Manufacturing Competitiveness Act”, sponsored by Rep. Dan Lipinski. The legislation would modify an existing report required by the America COMPETES Reauthorization Act of 2010 by directing the National Science and Technology Council’s Committee on Technology to lead other agencies and stakeholders in developing a national manufacturing competitiveness strategy every four years. The Subcommittee heard from three witnesses:

⁸National Network for Manufacturing Innovation <http://www.manufacturing.gov/amp/nnmi.html>.

⁹“Technology and Innovation Subcommittee Hearing—Examining the Proposed National Network for Manufacturing Innovation”. May 31, 2012. <http://science.house.gov/hearing/technology-and-innovation-subcommittee-hearing-assembling-facts-examining-proposed-national>.

- Dr. Jonathan Rich, Chairman and CEO, Berry Plastics, Inc.;
- Ms. Deborah Wince-Smith, President and CEO, Council on Competitiveness ; and
- Mr. Zach Mottl, Chief Alignment Officer, Atlas Tool and Die Works, Inc.

On Tuesday, September 10, 2013, the Subcommittee on Research and Technology held a hearing to examine federal advanced manufacturing programs, with a focus on research and development programs at the National Institute of Standards and Technology, and to review H.R. 1421, the “Advancing Innovative Manufacturing Act of 2013” sponsored by Committee Ranking Member Eddie Bernice Johnson. The Subcommittee heard from three witnesses:

- Dr. Alan Taub, Professor, Material Science and Engineering, University of Michigan
- Dr. Thomas Baer, Executive Director, Stanford Photonics Research Center, Stanford University
- Mr. Mark Muro, Senior Fellow and Policy Director, Metropolitan Policy Program, Brookings Institution

On Thursday, December 12, 2013 the Subcommittee on Research and Technology held a legislative hearing to examine the need for a manufacturing innovation network and to review H.R. 2996, the “Revitalize American Manufacturing and Innovation Act of 2013,” sponsored by Representatives Tom Reed (R–NY) and Joe Kennedy (D–MA). The Subcommittee heard from two panels of witnesses:

Panel I

- The Honorable Tom Reed, Member, U.S. House of Representatives; and
- The Honorable Joseph P. Kennedy, III, Member, U.S. House of Representatives.

Panel II

- Mr. Jonathan Davis, Global Vice President of Advocacy, SEMI;
- Dr. Richard A. Aubrecht, Vice Chairman of the Board, Vice President, Strategy & Technology, Moog Inc.;
- Dr. Stephan Biller, Chief Scientist Manufacturing Technology, GE Global Research; and
- Dr. Stan A. Veuger, Resident Scholar, American Enterprise Institute for Public Policy Research

V. COMMITTEE CONSIDERATION

The Committee on Science, Space, and Technology met to consider H.R. 2996 on Friday, July 25, 2014. The Committee considered and approved by voice vote an amendment in the nature of a substitute offered by Mr. Smith and Mr. Kennedy to H.R. 2996. The Committee also considered six amendments to the amendment in the nature of a substitute. The amendments were considered en bloc and passed by voice vote. The bill, as amended, was agreed to by voice vote, and was favorably reported to the House.

VI. COMMITTEE VOTES

Clause 3(b) of rule XIII of the Rules of the House of Representatives requires the Committee to list the recorded votes on the motion to report legislation and amendments thereto. A motion to order H.R. 2996 favorably reported to the House, as amended, was agreed to by voice vote.

During Full Committee consideration of H.R. 2996, the following amendments were considered:

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
July 25, 2014

AMENDMENT ROSTER

H.R. 2996, the “Revitalize American Manufacturing and Innovation Act of 2014”

No.	Amendment	Summary	
1	Amendment in the Nature of a Substitute Offered by Mr. Smith (TX) and Mr. Kennedy (MA) #002	The ANS makes several changes in H.R. 2996 to strengthen certain policy aspects of the measure and assure that it would not increase the federal deficit. The ANS also includes two related sections: strategic planning to coordinate government policies and programs for advanced manufacturing, and changes to the Regional Innovation Program. The ANS includes the Network for Manufacturing Innovation at NIST and authorizes NIST to carry out competitive, merit-based selection of manufacturing innovation centers. Maximum funding for this program is up to \$300 million over 10 years. There is no authorization of appropriations. The Secretary of Commerce is authorized to use up to \$5 million per fiscal year in NIST appropriations for fiscal years 2015 – 2024 to carry out the program and the Secretary of Energy is authorized to transfer up to an aggregate of \$250 million over fiscal years 2015 – 2024 from funds appropriated for advanced manufacturing research and development.	Agreed to by Voice Vote
2	Amendment to the ANS Offered by Mr. Grayson (FL) #297	In Section 3, adds to the requirements of a center for manufacturing innovation that it increase “the production of goods manufactured predominantly within the United States.”	En Bloc Amendment (1 of 6) Agreed to by Voice Vote
3	Amendment to the ANS Offered by Mr. Grayson (FL) #295	In Section 3, adds “to create and preserve jobs” to the purposes of the Network for Manufacturing Innovation Program; adds “including the creation or preservation of jobs” after “economic impact” as part of the considerations for selection of a Center.	En Bloc Amendment (2 of 6) Agreed to by Voice Vote
4	Amendment to the ANS Offered by Mr. Schweikert (AZ) #059	In Section 3, adds “flexible hybrid technologies” to the list of possible advanced manufacturing items that a center for manufacturing innovation could focus on; adds “flexible hybrid technologies” to the list of possible areas for improving competitiveness in key manufacturing technologies.	En Bloc Amendment (3 of 6) Agreed to by Voice Vote
5	Amendment to the ANS Offered by Ms. Kelly (IL) #036	In Section3, adds “including women and minority owned manufacturing enterprises” to those receiving outreach from the Centers.	En Bloc Amendment (4 of 6) Agreed to by Voice Vote

6	Amendment to the ANS Offered by Ms. Wilson (FL) and Mr. Hall (TX) #049	In Section 3, adds "How the center for manufacturing will encourage the education and training of veterans and individuals with disabilities to the criteria for selection of a Center.	En Bloc Amendment (5 of 6) Agreed to by Voice Vote
7	Amendment to the ANS Offered by Mr. Rohrabacher (CA) #055	In Section 4, adds "the capabilities of the manufacturing workforce of competing nations" to the subsection requiring an analysis in the strategic plan of factors that impact US innovation and competitiveness.	En Bloc Amendment (6 of 6) Agreed to by Voice Vote

VII. SUMMARY OF MAJOR PROVISIONS OF THE BILL

H.R. 2996 would support a Network for Manufacturing Innovation (NMI) Program within NIST to improve American manufacturing competitiveness; stimulate innovation; facilitate transition of novel technologies to commercialization; accelerate workforce development; and leverage non-Federal capital.

The bill would fund Centers for Manufacturing Innovation (CMI) to address challenges in advanced manufacturing and focus on manufacturing processes, new materials or technologies, and supply chain methodologies. CMIs would include active participation from industry, research universities, community colleges, and other entities. Activities of the CMIs include research and development, proof-of-concept and prototyping, and reducing the cost, time, and risk of commercialization of new technologies and processes. CMIs would also develop education and training programs and conduct outreach and engagement with small and mid-size businesses. Existing manufacturing centers, including the National Additive Manufacturing Innovation Institute, would be considered part of the NMI.

Under the bill, federal funding for CMIs would be awarded by the Secretary to assist in the planning, establishment, and support of centers through an open, merit-based application process. Federal funding to Centers will be limited to seven years, after which Centers will need to be self-sustaining.

H.R. 2996 would fund a National Program Office to carry out the planning, management and coordination of the centers for innovation. The Office would coordinate with other federal agencies engaged in advanced manufacturing including: DOD, Education, DOE, NASA, NSF and NIST. Within one year, the program offices must develop a strategic plan to guide the entire program. The Office is to work with the Hollings Manufacturing Extension Partnership programs in order to coordinate and avoid duplication of efforts.

The bill also requires the President to develop and submit to Congress and to the public a national strategic plan for Advanced Manufacturing, commencing no later than May 1, 2018 and with updates to be published no less frequently than every four years. The plan would establish short- and long-term objectives, timelines for achievement, and metrics for assessing progress.

The plan would describe how Federal agencies and Federally-funded research and development centers supporting advanced manufacturing R&D will abet the transfer of new manufacturing technologies in the U.S. The plan is to be developed in consultation with a broad array of stakeholders and must include analyses of all factors that affect innovation within, and the competitiveness of, U.S. advanced manufacturing.

H.R. 2996 would develop a regional innovation program to encourage and support the development of regional innovation strategies and regional innovation clusters. The Secretary would be authorized to award competitive grants in support of such regional efforts, including: feasibility studies, planning, technical assistance, regional collaboration and communication, market development, and interaction with other regional innovation groups. The Secretary may not provide more than 50 percent of the total cost of

any activity funded under this program. In awarding competitive grants, the Secretary would accord preference for eligible recipients that will cooperate with local workforce investment boards. The Secretary would also conduct outreach to stakeholders in rural communities to encourage participation, and would ensure that small business needs are recognized and prioritized.

Under the bill, the Secretary would develop a regional innovation research and information program to gather, analyze and disseminate information about best practices for regional innovation; provide technical assistance; support development of relevant metrics for results of regional innovation strategies; and collect and make available other relevant data regarding regional innovation cluster activity in the U.S.

VIII. COMMITTEE VIEWS

Section 3

At (c)(1)(B) and (c)(1)(C)(i), the Committee lists key advanced manufacturing technologies to be considered for establishment of the Network for Manufacturing Innovation Program: “. . . such as nanotechnology applications, advanced ceramics, photonics and optics, composites, bio-based and advanced materials, flexible hybrid technologies, and tool development for microelectronics.” The Committee expects the Secretary and the Director will consult with a broad array of private and public stakeholders in order to assure that all aspects of advanced manufacturing in the United States are considered for the Program. In this regard, the committee recognizes that advanced manufacturing innovations can and do come from all over the United States, and that these innovations often reflect regional strengths and priorities. As such, the committee encourages the Director to seek input from and consider geographically diverse entities in an effort to reflect these regional differences.

At (d)(4), the Secretary is directed to establish a competitive, merit-based and transparent process for awarding financial assistance under the program. This process is to include peer-review through which public and private sector experts in fields that relate to advanced manufacturing competitiveness in the United States, including manufacturing technologies and processes, international trade, business finance, and international economics provide their evaluations of proposals as part of peer-review panels or otherwise. The Committee further directs at Section (d)(4)(B)(i) that no political appointee, as defined at (4)(B)(ii) may serve on a peer review panel. However, the Committee does not intend to prohibit federal career employees and temporary federal employees with responsibilities comparable to career employees, such as those hired specifically for their scientific and technical expertise, from participating in peer-review. Further, the Committee recognizes that final sign-off on any major award may require approval by senior agency officials.

At (d)(4)(C)(i), the Secretary is required to make available publicly at the time of an award of financial assistance an explanation of the bases for selection of a winning application, including its relative strengths. The Committee intends that such explanations will

be focused on winning applications, rather than on competing applications which were not funded.

At (e)(2)(A), the Secretary is authorized to use up to \$5 million for each of fiscal years 2015 through 2024 from amounts appropriated for Industrial Technical Services. The committee intends that the Secretary will not use funds appropriated for the Hollings Manufacturing Extension Partnership program.

At (g)(2), the Secretary is required to submit an Annual Report to Congress about the Program, including (g)(2)(B)(iv), which specifies “an assessment of the Program with respect to meeting the purposes described in subsection (a)(2).” The Committee intends that the Annual Report should include a review and assessment of the relevant capabilities of competing nations since the previous Annual Report, including investments in advanced manufacturing research and development, investments in education and workforce training for advanced manufacturing, implementation of trade and non-trade barriers which result in competitive advantages in advanced manufacturing, effectiveness of business and government espionage in advanced manufacturing industries, and overall economic growth tied to advanced manufacturing.

Section 4

Regarding (c)(6), the committee recognizes that the Office of Science and Technology Policy has already established the Advanced Manufacturing Partnership Steering Committee of the President’s Council of Advisers on Science and Technology. The existing Steering Committee will be sufficient to fulfill the duties spelled out in this section.

IX. COMMITTEE OVERSIGHT FINDINGS

Pursuant to clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Committee held an oversight hearing and made findings that are reflected in the descriptive portions of this report.

X. STATEMENT ON GENERAL PERFORMANCE GOALS AND OBJECTIVES

In accordance with clause 3(c)(4) of rule XIII of the Rules of the House of Representatives, the performance goals and objectives of the Committee are reflected in the descriptive portions of this report, including the goal to support a Network for Manufacturing Innovation (NMI) Program within NIST to improve American manufacturing competitiveness; stimulate innovation; facilitate transition of novel technologies to commercialization; accelerate workforce development; and leverage non-Federal capital

XI. NEW BUDGET AUTHORITY, ENTITLEMENT AUTHORITY, AND TAX EXPENDITURES

In compliance with clause 3(c)(2) of rule XIII of the Rules of the House of Representatives, the Committee adopts as its own the estimate of new budget authority, entitlement authority, or tax expenditures or revenues contained in the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

XII. ADVISORY ON EARMARKS

In compliance with clause 9(e), 9(f), and 9(g) of rule XXI, the Committee finds that H.R. 2996, the “Revitalize American Manufacturing and Innovation Act of 2013,” contains no earmarks.

XIII. COMMITTEE COST ESTIMATE

The Committee adopts as its own the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

XIV. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

Pursuant to clause 3(c)(3) of rule XIII of the Rules of the House of Representatives, the following is the cost estimate provided by the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, September 15, 2014.

Hon. LAMAR SMITH,
*Chairman, Committee on Science, Space, and Technology,
House of Representatives, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 2996, the Revitalize American Manufacturing and Innovation Act of 2014.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Susan Willie.

Sincerely,

DOUGLAS W. ELMENDORF.

Enclosure.

H.R. 2996—Revitalize American Manufacturing and Innovation Act of 2014

Summary: H.R. 2996 would establish the Network for Manufacturing Innovation Program (NMIP) within the National Institute of Standards and Technology (NIST). Under the program, NIST would award grants to establish a network of centers of innovation to improve the competitiveness of domestic manufacturers. H.R. 2996 also would reauthorize a program to develop regional clusters of businesses that operate in similar or complementary industries. Finally, the bill would require the Government Accountability Office (GAO) to assess the NMIP every two years and direct NIST to develop a strategic plan for advanced manufacturing that would be updated every four years.

CBO estimates that implementing H.R. 2996 would cost \$105 million over the 2015–2019 period, assuming appropriation actions consistent with the bill. Enacting H.R. 2996 also would affect direct spending; therefore, pay-as-you-go procedures apply. CBO estimates, however, that such effects would be insignificant. Enacting H.R. 2996 would not affect revenues.

H.R. 2996 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA), and any costs to state, local, or tribal governments, including

matching funds, would be incurred as conditions of receiving federal assistance.

Estimated cost to the Federal Government: The estimated budgetary effect of H.R. 2996 is shown in the following table. The costs of this legislation fall within budget functions 370 (commerce and housing credit) and 450 (community development).

	By fiscal year, in millions of dollars—					
	2015	2016	2017	2018	2019	2015-2019
CHANGES IN SPENDING SUBJECT TO APPROPRIATION ^a						
Network for Manufacturing Innovation:						
Estimated Authorization Level ^b	30	30	30	30	30	150
Estimated Outlays	3	9	17	23	26	77
Regional Innovation Program:						
Authorization Level	10	10	10	10	10	50
Estimated Outlays	1	3	5	8	10	25
Reports						
Estimated Authorization Level	2	0	1	2	*	5
Estimated Outlays	1	1	0	1	1	4
Total Changes:						
Estimated Authorization Level	42	40	41	42	40	205
Estimated Outlays	5	12	21	31	36	105

Note: * = less than \$500,000; components may not sum to totals because of rounding.

^a CBO estimates that enacting H.R. 2996 also would have an insignificant effect on direct spending.

^b An additional \$150 million would be authorized to be appropriated over the 2020–2024 period.

Basis of estimate: For this estimate, CBO assumes that H.R. 2996 will be enacted near the end of 2014, that the necessary amounts will be appropriated near the beginning of each fiscal year, and that spending will follow historical patterns for similar programs.

Spending subject to appropriation

Network for Manufacturing Innovation. H.R. 2996 would authorize NIST to establish a network of centers to support research and development, education, training, and other efforts to improve the capacity of domestic manufacturers to use advanced technology. Under the bill, NIST would be required to develop a strategic plan for the program and a system to award and oversee grants to eligible applicants, and to report to the Congress annually on program performance.

H.R. 2996 would authorize appropriations of \$300 million over the 2015–2024 period to establish the network; the bill would authorize a portion of that amount (\$50 million) to be transferred from future appropriations for other programs at NIST and the balance (\$250 million) to be transferred from future appropriations for the Energy Efficiency and Renewable Energy (EERE) program at the Department of Energy (DOE). In 2013, DOE obligated \$128 million for advanced manufacturing activities from the EERE program. We expect that the transfers would be spread evenly over the period they are authorized.

Based on information from NIST, CBO expects that the agency would eventually create four institutes with the funds authorized under the bill. Those new institutes would join four existing institutes that were created with funds from the Departments of Defense and Energy and four other institutes currently under development. CBO estimates that fully funding the NMIP would require appropriations totaling \$150 million over the 2015–2019 period and

cost \$77 million over the same period. The remaining \$150 million would be authorized over the 2020–2024 period.

Regional Innovation Program. H.R. 2996 would reauthorize a program to encourage the development of regional innovation clusters that is, networks of similar or complementary entities that, among other things, are located within a certain geographic area, are engaged with a specific industry sector, and share specialized infrastructure, labor markets, and services. As part of the program, the bill would support research and information collection efforts that would provide data on the activities of regional clusters.

H.R. 2996 would provide authority for \$10 million per year over the 2015–2019 period from funds for economic development assistance programs. This amount is similar to the amount provided by the Congress for this activity in 2014. Based on historical spending patterns, CBO estimates that that fully funding those provisions of H.R. 2996 would require appropriations totaling \$50 million over the 2015–2019 period and cost \$25 million over the same period.

Reports. The bill also would require NIST to develop a national strategic plan for advanced manufacturing that would be updated every four years and require a report to the Congress by GAO assessing NMIP operations every two years.

Based on information from the agencies, CBO estimates that preparing the strategic plan and the GAO reports would cost about \$4 million over the 2015–2019 period, assuming appropriation of the necessary amounts.

Direct spending

H.R. 2996 would authorize NIST to accept funds from private entities to carry out the NMIP and would make those amounts available to the agency without further appropriation. Based on information from NIST, CBO estimates that this provision would have an insignificant effect on net direct spending because amounts collected would be small, less than \$500,000 per year. Any additional collections would be spent by the agency.

Pay-As-You-Go considerations: The Statutory Pay-As-You-Go Act of 2010 establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. CBO estimates that enacting H.R. 2996 would affect direct spending because the bill would authorize NIST to accept and spend gifts from private entities without further appropriation action, but those effects would be insignificant. Enacting H.R. 2996 would not affect revenues.

Intergovernmental and private-sector impact: H.R. 2996 contains no intergovernmental or private-sector mandates as defined in UMRA, and any costs to state, local, or tribal governments, including matching funds, would be incurred as conditions of receiving federal assistance.

Previous CBO estimate: On June 6, 2014, CBO transmitted a cost estimate for S. 1468, the Revitalize American Manufacturing and Innovation Act of 2014, as ordered reported by the Committee on Commerce, Science, and Transportation on April 9, 2014. The Senate bill would authorize the appropriation of \$300 million in 2015 to develop the NMIP; CBO estimates that implementing S. 1468 would cost \$255 million over the 2015–2019 period.

Estimate Prepared by: Federal costs: Susan Willie and Dan Hoople; Impact on state, local, and tribal governments: Jon Sperl; Impact on the private sector: Marin Burnett.

Estimate approved by: Theresa Gullo, Deputy Assistant Director for Budget Analysis.

XV. FEDERAL MANDATES STATEMENT

The Committee adopts as its own the estimate of Federal mandates prepared by the Director of the Congressional Budget Office pursuant to section 423 of the Unfunded Mandates Reform Act.

XVI. COMPLIANCE WITH H. RES. 5

A. Directed Rule Making. This bill does not direct any executive branch official to conduct any specific rule-making proceedings.

B. Duplication of Existing Programs. This bill does not establish or reauthorize a program of the federal government known to be duplicative of another program. Such program was not included in any report from the Government Accountability Office to Congress pursuant to section 21 of Public Law 111-139 or identified in the most recent Catalog of Federal Domestic Assistance published pursuant to the Federal Program Information Act (Public Law 95-220, as amended by Public Law 98-169) as relating to other programs.

XVII. FEDERAL ADVISORY COMMITTEE STATEMENT

No advisory committees within the meaning of section 5(b) of the Federal Advisory Committee Act were created by this legislation.

XVIII. APPLICABILITY TO LEGISLATIVE BRANCH

The Committee finds that the legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act.

XIX. SECTION-BY-SECTION ANALYSIS

Section 1. Short title

This act may be cited as the “Revitalize American Manufacturing and Innovation Act of 2014.”

Sec. 2. Findings

This section contains findings regarding the economic impact of manufacturing in the United States. This section states that manufacturers in the United States perform two-thirds of all private-sector research and development in the United States, driving more innovation than any other sector.

Sec. 3. Establishment of Network for Manufacturing Innovation

This section revises the National Institute of Standards and Technology Act to include a new section to support a Network for Manufacturing Innovation Program. The purpose of the NMI Program is: to improve competitiveness of United States Manufacturing and to increase the production of goods manufactured predominantly within the United States; to stimulate United States leadership in advance manufacturing research; to facilitate the

transition of innovative technologies into manufacturing capabilities; to facilitate access by manufacturing enterprises to capital-intensive infrastructure; to accelerate the development of an advanced manufacturing workforce; to facilitate peer exchange and documentation of best practices; to leverage non-Federal sources of support to promote a stable and sustainable business model; and to create and preserve jobs.

This section authorizes support for a network of centers for manufacturing innovation. The purpose of the centers is to: address challenges in advanced manufacturing; have potential to improve the competitiveness of United States manufacturing; accelerate non-Federal investment in advanced manufacturing production capacity or enable the commercial application of new technologies or manufacturing processes; and elicit participation among representatives of specified entities. This section specifies the activities that may be undertaken by the centers.

This section stipulates that other existing or planned manufacturing centers formally recognized as manufacturing innovation centers under federal law or executive action shall be considered centers for manufacturing innovation under this act and may, upon request, be recognized as a center for participation in the network. This section also states that such centers may not receive funds authorized by this act.

This section states that in carrying out the NMI Program, the Secretary of Commerce shall award financial assistance to a person or group of persons to assist in planning, establishing, or supporting a center for manufacturing innovation. This section provides guidelines for applications for assistance and for competitive, merit awards of financial assistance. This section provides guidelines for publicizing information regarding the awards.

This section does not authorize appropriations for the NMI Program. It states that the Secretary may use not to exceed \$5 million for each of the fiscal years 2015 to 2024 to carry out this section from the amounts appropriated to the National Institute of Standards and Technology (NIST) for Industrial Technical Services. The section also authorizes the Secretary of Energy to transfer not to exceed \$250 million for the period encompassing fiscal years 2015 to 2024 to carry out this section from amounts appropriated for advanced manufacturing research and development within the Energy Efficiency and Renewable Energy account for the Department of Energy. This section specifies certain limitations on funding to centers.

This section directs the Secretary to support, within NIST, the National Office of the Network for Manufacturing Innovation Program, to oversee and carry out the NMI Program. This section specifies the functions of the National Program Office, including the development and submission to Congress of a regularly updated strategic plan to guide the NMI Program. This section requires the Secretary to solicit recommendations from a wide range of stakeholders in developing and updating the strategic plan. This section requires the Comptroller General to submit to Congress a biennial assessment of the NMI Program's operation. This section requires the Secretary to ensure that the National Program Office incorporates the Hollings Manufacturing Extension Partnership into NMI Program planning.

Sec. 4. National Strategic Plan for Advanced Manufacturing

This section amends the America COMPETES Reauthorization Act of 2010 to require the Committee under the National Science and Technology Council, in consultation with the National Economic Council and various public and private stakeholders, to develop and update a strategic plan to provide guidance for Federal programs and activities in support of United States advanced manufacturing competitiveness. This section requires the strategic plan to describe the progress made in achieving the objectives from prior strategic plans and analyze factors that impact innovation and competitiveness for United States advanced manufacturing. This section specifies a schedule for updating the strategic plan. This section requires the President to include information regarding the consistency of the budget with the goals and recommendations included in the strategic plan developed under this section. This section requires the Advanced Manufacturing Partnership Steering Committee of the President’s Council of Advisors on Science and Technology to provide input, perspective, and recommendations to assist in the development and updates of the strategic plan under this section.

Sec. 5. Regional Innovation Program

This section amends the Stevenson-Wydler Act. The Secretary may award funds to Regional Innovation Centers from appropriations for economic development assistance programs, not to exceed \$10,000,000 per fiscal year for fiscal years 2015–2024. No funds are authorized to be appropriated for the NMI Program. This section provides that the Secretary shall conduct outreach in rural communities regarding program participation.

XX. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

**NATIONAL INSTITUTE OF STANDARDS AND
TECHNOLOGY ACT**

* * * * *

SEC. 34. NETWORK FOR MANUFACTURING INNOVATION.

(a) *ESTABLISHMENT OF NETWORK FOR MANUFACTURING INNOVATION PROGRAM.*—

(1) *IN GENERAL.*— *The Secretary shall establish within the Institute a program to be known as the “Network for Manufacturing Innovation Program” (referred to in this section as the “Program”).*

(2) *PURPOSES OF PROGRAM.*— *The purposes of the Program are—*

(A) *to improve the competitiveness of United States manufacturing and to increase the production of goods manufactured predominantly within the United States;*

(B) to stimulate United States leadership in advanced manufacturing research, innovation, and technology;

(C) to facilitate the transition of innovative technologies into scalable, cost-effective, and high-performing manufacturing capabilities;

(D) to facilitate access by manufacturing enterprises to capital-intensive infrastructure, including high-performance electronics and computing, and the supply chains that enable these technologies;

(E) to accelerate the development of an advanced manufacturing workforce;

(F) to facilitate peer exchange of and the documentation of best practices in addressing advanced manufacturing challenges;

(G) to leverage non-Federal sources of support to promote a stable and sustainable business model without the need for long-term Federal funding; and

(H) to create and preserve jobs.

(3) SUPPORT.— The Secretary, acting through the Director, shall carry out the purposes set forth in paragraph (2) by supporting—

(A) the Network for Manufacturing Innovation established under subsection (b); and

(B) the establishment of centers for manufacturing innovation.

(4) DIRECTOR.— The Secretary shall carry out the Program through the Director.

(b) ESTABLISHMENT OF NETWORK FOR MANUFACTURING INNOVATION.—

(1) IN GENERAL.— As part of the Program, the Secretary shall establish a network of centers for manufacturing innovation.

(2) DESIGNATION.— The network established under paragraph (1) shall be known as the “Network for Manufacturing Innovation” (referred to in this section as the “Network”).

(c) CENTERS FOR MANUFACTURING INNOVATION.—

(1) IN GENERAL.— For purposes of this section, a “center for manufacturing innovation” is a center that—

(A) has been established by a person or group of persons to address challenges in advanced manufacturing and to assist manufacturers in retaining or expanding industrial production and jobs in the United States;

(B) has a predominant focus on a manufacturing process, novel material, enabling technology, supply chain integration methodology, or another relevant aspect of advanced manufacturing, such as nanotechnology applications, advanced ceramics, photonics and optics, composites, biobased and advanced materials, flexible hybrid technologies, and tool development for microelectronics;

(C) as determined by the Secretary, has the potential—

(i) to improve the competitiveness of United States manufacturing, including key advanced manufacturing technologies such as nanotechnology, advanced ceramics, photonics and optics, composites, biobased and advanced materials, flexible hybrid technologies, and tool development for microelectronics;

(ii) to accelerate non-Federal investment in advanced manufacturing production capacity in the United States; or

(iii) to enable the commercial application of new technologies or industry-wide manufacturing processes; and

(D) includes active participation among representatives from multiple industrial entities, research universities, community colleges, and such other entities as the Secretary considers appropriate, which may include industry-led consortia, career and technical education schools, Federal laboratories, State, local, and tribal governments, businesses, educational institutions, and nonprofit organizations.

(2) **ACTIVITIES.**— Activities of a center for manufacturing innovation may include the following:

(A) Research, development, and demonstration projects, including proof-of-concept development and prototyping, to reduce the cost, time, and risk of commercializing new technologies and improvements in existing technologies, processes, products, and research and development of materials to solve precompetitive industrial problems with economic or national security implications.

(B) Development and implementation of education, training, and workforce recruitment courses, materials, and programs.

(C) Development of innovative methodologies and practices for supply chain integration and introduction of new technologies into supply chains.

(D) Outreach and engagement with small and medium-sized manufacturing enterprises, including women and minority owned manufacturing enterprises, in addition to large manufacturing enterprises.

(E) Such other activities as the Secretary, in consultation with Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing, considers consistent with the purposes described in subsection (a)(2).

(3) **ADDITIONAL CENTERS FOR MANUFACTURING INNOVATION.**—

(A) **IN GENERAL.**— The National Additive Manufacturing Innovation Institute and other manufacturing centers formally recognized as manufacturing innovation centers pursuant to Federal law or executive actions, or under pending interagency review for such recognition as of the date of enactment of the Revitalize American Manufacturing and Innovation Act of 2014, shall be considered centers for manufacturing innovation, but such centers shall not receive any financial assistance under subsection (d).

(B) **NETWORK PARTICIPATION.**— A manufacturing center that is substantially similar to those established under this subsection but that does not receive financial assistance under subsection (d) may, upon request of the center, be recognized as a center for manufacturing innovation by the Secretary for purposes of participation in the Network.

(d) *FINANCIAL ASSISTANCE TO ESTABLISH AND SUPPORT CENTERS FOR MANUFACTURING INNOVATION.*—

(1) *IN GENERAL.*— *In carrying out the Program, the Secretary shall award financial assistance to a person or group of persons to assist the organization in planning, establishing, or supporting a center for manufacturing innovation.*

(2) *APPLICATION.*— *A person or group of persons seeking financial assistance under paragraph (1) shall submit to the Secretary an application therefor at such time, in such manner, and containing such information as the Secretary may require. The application shall, at a minimum, describe the specific sources and amounts of non-Federal financial support for the center on the date financial assistance is sought, as well as the anticipated sources and amounts of non-Federal financial support during the period for which the center could be eligible for continued Federal financial assistance under this section.*

(3) *OPEN PROCESS.*— *In soliciting applications for financial assistance under paragraph (1), the Secretary shall ensure an open process that will allow for the consideration of all applications relevant to advanced manufacturing regardless of technology area.*

(4) *SELECTION.*—

(A) *COMPETITIVE, MERIT REVIEW.*— *In awarding financial assistance under paragraph (1), the Secretary shall use a competitive, merit review process that includes peer review by a diverse group of individuals with relevant expertise from both the private and public sectors.*

(B) *PARTICIPATION IN PROCESS.*—

(i) *IN GENERAL.*— *No political appointee may participate on a peer review panel. The Secretary shall implement a conflict of interest policy that ensures public transparency and accountability, and requires full disclosure of any real or potential conflicts of interest on the parts of individuals that participate in the merit selection process.*

(ii) *DEFINITION.*— *For purposes of this subparagraph, the term “political appointee” means any individual who—*

(I) is employed in a position described under sections 5312 through 5316 of title 5, United States Code, (relating to the Executive Schedule);

(II) is a limited term appointee, limited emergency appointee, or noncareer appointee in the Senior Executive Service, as defined under paragraphs (5), (6), and (7), respectively, of section 3132(a) of title 5, United States Code; or

(III) is employed in a position in the executive branch of the Government of a confidential or policy-determining character under schedule C of subpart C of part 213 of title 5 of the Code of Federal Regulations.

(C) *PERFORMANCE MEASUREMENT, TRANSPARENCY, AND ACCOUNTABILITY.*— *For each award of financial assistance under paragraph (1), the Secretary shall—*

(i) make publicly available at the time of the award a description of the bases for the award, including an explanation of the relative merits of the winning applicant as compared to other applications received, if applicable; and

(ii) develop and implement metrics-based performance measures to assess the effectiveness of the activities funded.

(D) *COLLABORATION.*— In awarding financial assistance under paragraph (1), the Secretary shall, acting through the National Program Office established under subsection (f)(1), collaborate with Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing.

(E) *CONSIDERATIONS.*— In selecting a person who submitted an application under paragraph (2) for an award of financial assistance under paragraph (1), the Secretary shall consider, at a minimum, the following:

(i) The potential of the center for manufacturing innovation to advance domestic manufacturing and the likelihood of economic impact, including the creation or preservation of jobs, in the predominant focus areas of the center for manufacturing innovation.

(ii) The commitment of continued financial support, advice, participation, and other contributions from non-Federal sources, to provide leverage and resources to promote a stable and sustainable business model without the need for long-term Federal funding.

(iii) Whether the financial support provided to the center for manufacturing innovation from non-Federal sources significantly exceeds the requested Federal financial assistance.

(iv) How the center for manufacturing innovation will increase the non-Federal investment in advanced manufacturing research in the United States.

(v) How the center for manufacturing innovation will engage with small and medium-sized manufacturing enterprises, to improve the capacity of such enterprises to commercialize new processes and technologies.

(vi) How the center for manufacturing innovation will carry out educational and workforce activities that meet industrial needs related to the predominant focus areas of the center.

(vii) How the center for manufacturing innovation will advance economic competitiveness and generate substantial benefits to the Nation that extend beyond the direct return to participants in the Program.

(viii) Whether the predominant focus of the center for manufacturing innovation is a manufacturing process, novel material, enabling technology, supply chain integration methodology, or other relevant aspect of advanced manufacturing that has not already been commercialized, marketed, distributed, or sold by another entity.

(ix) *How the center for manufacturing innovation will strengthen and leverage the assets of a region.*

(x) *How the center for manufacturing will encourage the education and training of veterans and individuals with disabilities.*

(5) **LIMITATIONS ON AWARDS.—**

(A) **IN GENERAL.—** *No award of financial assistance may be made under paragraph (1) to a center of manufacturing innovation after the 7-year period beginning on the date on which the Secretary first awards financial assistance to that center under that paragraph.*

(B) **MATCHING FUNDS AND PREFERENCES.—** *The total Federal financial assistance awarded to a center of manufacturing innovation, including the financial assistance under paragraph (1), in a given year shall not exceed 50 percent of the total funding of the center in that year, except that the Secretary may make an exception in the case of large capital facilities or equipment purchases. The Secretary shall give weighted preference to applicants seeking less than the maximum Federal share of funds allowed under this paragraph.*

(C) **FUNDING DECREASE.—** *The amount of financial assistance provided to a center of manufacturing innovation under paragraph (1) shall decrease after the second year of funding for the center, and shall continue to decrease thereafter in each year in which financial assistance is provided, unless the Secretary determines that—*

(i) *the center is otherwise meeting its stated goals and metrics under this section;*

(ii) *unforeseen circumstances have altered the center's anticipated funding; and*

(iii) *the center can identify future non-Federal funding sources that would warrant a temporary exemption from the limitations established in this subparagraph.*

(e) **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.—**

(A) **NIST INDUSTRIAL TECHNICAL SERVICES ACCOUNT.—** *The Secretary may use not to exceed \$5,000,000 for each of the fiscal years 2015 through 2024 to carry out this section from amounts appropriated to the Institute for Industrial Technical Services.*

(B) **ENERGY EFFICIENCY AND RENEWABLE ENERGY ACCOUNT.—** *The Secretary of Energy may transfer to the Institute not to exceed \$250,000,000 for the period encompassing fiscal years 2015 through 2024 for the Secretary to carry out this section from amounts appropriated for advanced manufacturing research and development within the Energy Efficiency and Renewable Energy account for the Department of Energy.*

(f) **NATIONAL PROGRAM OFFICE.—**

(1) *ESTABLISHMENT.*— *The Secretary shall establish, within the Institute, the National Office of the Network for Manufacturing Innovation Program (referred to in this section as the “National Program Office”), which shall oversee and carry out the Program.*

(2) *FUNCTIONS.*— *The functions of the National Program Office are—*

(A) *to oversee the planning, management, and coordination of the Program;*

(B) *to enter into memorandums of understanding with Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing, to carry out the purposes described in subsection (a)(2);*

(C) *to develop, not later than 1 year after the date of enactment of the Revitalize American Manufacturing and Innovation Act of 2014, and update not less frequently than once every 3 years thereafter, a strategic plan to guide the Program;*

(D) *to establish such procedures, processes, and criteria as may be necessary and appropriate to maximize cooperation and coordinate the activities of the Program with programs and activities of other Federal departments and agencies whose missions contribute to or are affected by advanced manufacturing;*

(E) *to establish a clearinghouse of public information related to the activities of the Program; and*

(F) *to act as a convener of the Network.*

(3) *RECOMMENDATIONS.*— *In developing and updating the strategic plan under paragraph (2)(C), the Secretary shall solicit recommendations and advice from a wide range of stakeholders, including industry, small and medium-sized manufacturing enterprises, research universities, community colleges, and other relevant organizations and institutions on an ongoing basis.*

(4) *REPORT TO CONGRESS.*— *Upon completion, the Secretary shall transmit the strategic plan required under paragraph (2)(C) to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.*

(5) *HOLLINGS MANUFACTURING EXTENSION PARTNERSHIP.*— *The Secretary shall ensure that the National Program Office incorporates the Hollings Manufacturing Extension Partnership into Program planning to ensure that the results of the Program reach small and medium-sized entities.*

(6) *DETAILEES.*— *Any Federal Government employee may be detailed to the National Program Office without reimbursement. Such detail shall be without interruption or loss of civil service status or privilege.*

(g) *REPORTING AND AUDITING.*—

(1) *ANNUAL REPORTS TO THE SECRETARY.*—

(A) *IN GENERAL.*— *The Secretary shall require each recipient of financial assistance under subsection (d)(1) to annually submit a report to the Secretary that describes the finances and performance of the center for manufacturing innovation for which such assistance was awarded.*

(B) *ELEMENTS.*— *Each report submitted under subparagraph (A) shall include—*

(i) *an accounting of expenditures of amounts awarded to the recipient under subsection (d)(1); and*

(ii) *consistent with the metrics-based performance measures developed and implemented by the Secretary under this section, a description of the performance of the center for manufacturing innovation with respect to—*

(I) *its goals, plans, financial support, and accomplishments; and*

(II) *how the center for manufacturing innovation has furthered the purposes described in subsection (a)(2).*

(2) *ANNUAL REPORTS TO CONGRESS.*—

(A) *IN GENERAL.*— *Not less frequently than once each year until December 31, 2024, the Secretary shall submit a report to Congress that describes the performance of the Program during the most recent 1-year period.*

(B) *ELEMENTS.*— *Each report submitted under subparagraph (A) shall include, for the period covered by the report—*

(i) *a summary and assessment of the reports received by the Secretary under paragraph (1);*

(ii) *an accounting of the funds expended by the Secretary under the Program, including any temporary exemptions granted from the requirements of subsection (d)(5)(C);*

(iii) *an assessment of the participation in, and contributions to, the Network by any centers for manufacturing innovation not receiving financial assistance under subsection (d)(1); and*

(iv) *an assessment of the Program with respect to meeting the purposes described in subsection (a)(2).*

(3) *ASSESSMENTS BY GAO.*—

(A) *ASSESSMENTS.*— *Not less frequently than once every 2 years, the Comptroller General shall submit to Congress an assessment of the operation of the Program during the most recent 2-year period.*

(B) *FINAL ASSESSMENT.*— *Not later than December 31, 2024, the Comptroller General shall submit to Congress a final report regarding the overall success of the Program.*

(C) *ELEMENTS.*— *Each assessment submitted under subparagraph (A) or (B) shall include, for the period covered by the report—*

(i) *a review of the management, coordination, and industry utility of the Program;*

(ii) *an assessment of the extent to which the Program has furthered the purposes described in subsection (a)(2);*

(iii) *such recommendations for legislative and administrative action as the Comptroller General considers appropriate to improve the Program; and*

(iv) an assessment as to whether any prior recommendations for improvement made by the Comptroller General have been implemented or adopted.

(h) **ADDITIONAL AUTHORITIES.**—

(1) **APPOINTMENT OF PERSONNEL AND CONTRACTS.**— The Secretary may appoint such personnel and enter into such contracts, financial assistance agreements, and other agreements as the Secretary considers necessary or appropriate to carry out the Program, including support for research and development activities involving a center for manufacturing innovation.

(2) **TRANSFER OF FUNDS.**— The Secretary may transfer to other Federal agencies such sums as the Secretary considers necessary or appropriate to carry out the Program. No funds so transferred may be used to reimburse or otherwise pay for the costs of financial assistance incurred or commitments of financial assistance made prior to the date of enactment of the Revitalize American Manufacturing and Innovation Act of 2014.

(3) **AUTHORITY OF OTHER AGENCIES.**— In the event that the Secretary exercises the authority to transfer funds to another agency under paragraph (2), such agency may accept such funds to award and administer, under the same conditions and constraints applicable to the Secretary, all aspects of financial assistance awards under this section.

(4) **USE OF RESOURCES.**— In furtherance of the purposes of the Program, the Secretary may use, with the consent of a covered entity and with or without reimbursement, the land, services, equipment, personnel, and facilities of such covered entity.

(5) **ACCEPTANCE OF RESOURCES.**— In addition to amounts appropriated to carry out the Program, the Secretary may accept funds, services, equipment, personnel, and facilities from any covered entity to carry out the Program, subject to the same conditions and constraints otherwise applicable to the Secretary under this section.

(6) **COVERED ENTITY.**— For purposes of this subsection, a covered entity is any Federal department, Federal agency, instrumentality of the United States, State, local government, tribal government, territory, or possession of the United States, or of any political subdivision thereof, or international organization, or any public or private entity or individual.

(i) **PATENTS.**—Chapter 18 of title 35, United States Code, shall apply to any funding agreement (as defined in section 201 of that title) awarded to new or existing centers for manufacturing innovation.

SEC. [34.] 35. This Act may be cited as the National Institute of Standards and Technology Act.

AMERICA COMPETES REAUTHORIZATION ACT OF 2010

* * * * *

TITLE I—OFFICE OF SCIENCE AND TECHNOLOGY POLICY

* * * * *

SEC. 102. 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) * * *

* * * * *

[(7) develop, and update every 5 years, a strategic plan to guide Federal programs and activities in support of advanced manufacturing research and development, which shall—

[(A) specify and prioritize near-term and long-term research and development objectives, the anticipated time frame for achieving the objectives, and the metrics for use in assessing progress toward the objectives;

[(B) specify the role of each Federal agency in carrying out or sponsoring research and development to meet the objectives of the strategic plan;

[(C) 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;

[(D) describe how Federal agencies and Federally Funded Research and Development Centers supporting advanced manufacturing research and development will strengthen all levels of manufacturing education and training programs to ensure an adequate, well-trained workforce;

[(E) describe how the Federal agencies and Federally Funded Research and Development Centers supporting advanced manufacturing research and development will assist small- and medium-sized manufacturers in developing and implementing new products and processes; and

[(F) take into consideration the recommendations of a wide range of stakeholders, including representatives from diverse manufacturing companies, academia, and other relevant organizations and institutions.]

(7) develop and update a national strategic plan for advanced manufacturing in accordance with subsection (c).

[(c) REPORT.—Not later than 1 year after the date of enactment of this Act, 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.]

(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;*

(vi) *emerging technologies and markets;*

(vii) *advanced manufacturing research and development undertaken by competing nations; and*

(viii) *the capabilities of the manufacturing workforce of competing nations; and*

(H) *elicit and consider the recommendations of a wide range of stakeholders, including representatives from di-*

verse 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, United States Code, 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.

* * * * *

STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT OF 1980

* * * * *

[SEC. 27. REGIONAL INNOVATION PROGRAM.

[(a) ESTABLISHMENT.—The Secretary shall establish a regional innovation program to encourage and support the development of regional innovation strategies, including regional innovation clusters and science and research parks.

[(b) CLUSTER GRANTS.—

[(1) IN GENERAL.— As part of the program established under subsection (a), the Secretary may award grants on a competitive basis to eligible recipients for activities relating to the formation and development of regional innovation clusters.

[(2) PERMISSIBLE ACTIVITIES.— Grants awarded under this subsection may be used for activities determined appropriate by the Secretary, including the following:

[(A) Feasibility studies.

[(B) Planning activities.

[(C) Technical assistance.

[(D) Developing or strengthening communication and collaboration between and among participants of a regional innovation cluster.

[(E) Attracting additional participants to a regional innovation cluster.

[(F) Facilitating market development of products and services developed by a regional innovation cluster, including through demonstration, deployment, technology transfer, and commercialization activities.

[(G) Developing relationships between a regional innovation cluster and entities or clusters in other regions.

[(H) Interacting with the public and State and local governments to meet the goals of the cluster.

[(3) ELIGIBLE RECIPIENT DEFINED.— In this subsection, the term “eligible recipient” means—

[(A) a State;

[(B) an Indian tribe;

[(C) a city or other political subdivision of a State;

[(D) an entity that—

[(i) 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

[(ii) has an application that is supported by a State or a political subdivision of a State; or

[(E) a consortium of any of the entities described in subparagraphs (A) through (D).

[(4) APPLICATION.—

[(A) IN GENERAL.— An eligible recipient shall submit an application to the Secretary at such time, in such manner, and containing such information and assurances as the Secretary may require.

[(B) COMPONENTS.— The application shall include, at a minimum, a description of the regional innovation cluster supported by the proposed activity, including a description of—

[(i) whether the regional innovation cluster is supported by the private sector, State and local governments, and other relevant stakeholders;

[(ii) how the existing participants in the regional innovation cluster will encourage and solicit participation by all types of entities that might benefit from participation, including newly formed entities and those rival existing participants;

[(iii) the extent to which the regional innovation cluster is likely to stimulate innovation and have a positive impact on regional economic growth and development;

[(iv) whether the participants in the regional innovation cluster have access to, or contribute to, a well-trained workforce;

[(v) whether the participants in the regional innovation cluster are capable of attracting additional funds from non-Federal sources; and

[(vi) the likelihood that the participants in the regional innovation cluster will be able to sustain activities once grant funds under this subsection have been expended.

[(C) SPECIAL CONSIDERATION.— The Secretary shall give special consideration to applications from regions that contain communities negatively impacted by trade.

[(5) SPECIAL CONSIDERATION.— The Secretary shall give special consideration to an eligible recipient who agrees to collaborate with local workforce investment area boards.

[(6) COST SHARE.— The Secretary may not provide more than 50 percent of the total cost of any activity funded under this subsection.

[(7) USE AND APPLICATION OF RESEARCH AND INFORMATION PROGRAM.— To the maximum extent practicable, the Secretary shall ensure that activities funded under this subsection use and apply any relevant research, best practices, and metrics developed under the program established in subsection (c).

[(c) SCIENCE AND RESEARCH PARK DEVELOPMENT GRANTS.—

[(1) IN GENERAL.— As part of the program established under subsection (a), the Secretary may award grants for the development of feasibility studies and plans for the construction of new science parks or the renovation or expansion of existing science parks.

[(2) LIMITATION ON AMOUNT OF GRANTS.— The amount of a grant awarded under this subsection may not exceed \$750,000.

[(3) AWARD.—

[(A) COMPETITION REQUIRED.— The Secretary shall award grants under this subsection pursuant to a full and open competition.

[(B) GEOGRAPHIC DISPERSION.— In conducting a competitive process, the Secretary shall consider the need to avoid undue geographic concentration among any one category of States based on their predominant rural or urban character as indicated by population density.

[(C) SELECTION CRITERIA.— The Secretary shall publish the criteria to be utilized in any competition for the selection of recipients of grants under this subsection, which shall include requirements relating to the—

[(i) effect the science park will have on regional economic growth and development;

[(ii) number of jobs to be created at the science park and the surrounding regional community each year during its first 3 years;

[(iii) funding to be required to construct, renovate or expand the science park during its first 3 years;

[(iv) amount and type of financing and access to capital available to the applicant;

[(v) types of businesses and research entities expected in the science park and surrounding regional community;

[(vi) letters of intent by businesses and research entities to locate in the science park;

[(vii) capability to attract a well trained workforce to the science park;

[(viii) the management of the science park during its first 5 years;

[(ix) expected financial risks in the construction and operation of the science park and the risk mitigation strategy;

[(x) physical infrastructure available to the science park, including roads, utilities, and telecommunications;

[(xi) utilization of energy-efficient building technology including nationally recognized green building design practices, renewable energy, cogeneration, and other methods that increase energy efficiency and conservation;

[(xii) consideration to the transformation of military bases affected by the base realignment and closure process or the redevelopment of existing buildings, structures, or brownfield sites that are abandoned, idled, or underused into single or multiple building facilities for science and technology companies and institutions;

[(xiii) ability to collaborate with other science parks throughout the world;

[(xiv) consideration of sustainable development practices and the quality of life at the science park; and

[(xv) other such criteria as the Secretary shall prescribe.

[(4) ALLOCATION CONSTRAINTS.— The Secretary may not allocate less than one-third of the total grant funding allocated under this section for any fiscal year to grants under subsection (b) or this subsection without written notification to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committees on Science and Technology and on Energy and Commerce.

[(d) LOAN GUARANTEES FOR SCIENCE PARK INFRASTRUCTURE.—

[(1) IN GENERAL.— Subject to paragraph (2), the Secretary may guarantee up to 80 percent of the loan amount for projects for the construction or expansion, including renovation and modernization, of science park infrastructure.

[(2) LIMITATIONS ON GUARANTEE AMOUNTS.— The maximum amount of loan principal guaranteed under this subsection may not exceed—

[(A) \$50,000,000 with respect to any single project; and

[(B) \$300,000,000 with respect to all projects.

[(3) SELECTION OF GUARANTEE RECIPIENTS.— The Secretary shall select recipients of loan guarantees under this subsection based upon the ability of the recipient to collateralize the loan amount through bonds, equity, property, and such other things of values as the Secretary shall deem necessary. Recipients of grants under subsection (c) are not eligible for a loan guarantee during the period of the grant. To the extent that the Secretary determines it to be feasible, the Secretary may select recipients of guarantee assistance in accord with a competitive process that takes into account the factors set out in subsection (c)(3)(C) of this section.

[(4) TERMS AND CONDITIONS FOR LOAN GUARANTEES.— The loans guaranteed under this subsection shall be subject to such terms and conditions as the Secretary may prescribe, except that—

[(A) the final maturity of such loans made or guaranteed may not exceed the lesser of—

[(i) 30 years; or

[(ii) 90 percent of the useful life of any physical asset to be financed by the loan;

[(B) a loan guaranteed under this subsection may not be subordinated to another debt contracted by the borrower or

to any other claims against the borrowers in the case of default;

[(C) a loan may not be guaranteed under this subsection unless the Secretary determines that the lender is responsible and that provision is made for servicing the loan on reasonable terms and in a manner that adequately protects the financial interest of the United States;

[(D) a loan may not be guaranteed under this subsection if—

[(i) the income from the loan is excluded from gross income for purposes of chapter 1 of the Internal Revenue Code of 1986; or

[(ii) the guarantee provides significant collateral or security, as determined by the Secretary in coordination with the Secretary of the Treasury, for other obligations the income from which is so excluded;

[(E) any guarantee provided under this subsection shall be conclusive evidence that—

[(i) the guarantee has been properly obtained;

[(ii) the underlying loan qualified for the guarantee;

and

[(iii) absent fraud or material misrepresentation by the holder, the guarantee is presumed to be valid, legal, and enforceable;

[(F) the Secretary may not extend credit assistance unless the Secretary has determined that there is a reasonable assurance of repayment; and

[(G) new loan guarantees may not be committed except to the extent that appropriations of budget authority to cover their costs are made in advance, as required under section 504 of the Federal Credit Reform Act of 1990 (2 U.S.C. 661c).

[(5) PAYMENT OF LOSSES.—

[(A) IN GENERAL.— If, as a result of a default by a borrower under a loan guaranteed under this subsection, after the holder has made such further collection efforts and instituted such enforcement proceedings as the Secretary may require, the Secretary determines that the holder has suffered a loss, the Secretary shall pay to the holder the percentage of the loss specified in the guarantee contract. Upon making any such payment, the Secretary shall be subrogated to all the rights of the recipient of the payment. The Secretary shall be entitled to recover from the borrower the amount of any payments made pursuant to any guarantee entered into under this section.

[(B) ENFORCEMENT OF RIGHTS.— The Attorney General shall take such action as may be appropriate to enforce any right accruing to the United States as a result of the issuance of any guarantee under this section.

[(C) FORBEARANCE.— Nothing in this section may be construed to preclude any forbearance for the benefit of the borrower which may be agreed upon by the parties to the guaranteed loan and approved by the Secretary, if budget authority for any resulting subsidy costs (as de-

financed in section 502(5) of the Federal Credit Reform Act of 1990) is available.

[(6) EVALUATION OF CREDIT RISK.—

[(A) The Secretary shall periodically assess the credit risk of new and existing direct loans or guaranteed loans.

[(B) Not later than 2 years after the date of the enactment of the America COMPETES Reauthorization Act of 2010, the Comptroller General of the United States shall—

[(i) conduct a review of the subsidy estimates for the loan guarantees under this section; and

[(ii) submit to Congress a report on the review conducted under this paragraph.

[(7) TERMINATION.— A loan may not be guaranteed under this section after September 30, 2013.

[(8) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated \$7,000,000 for each of fiscal years 2011 through 2013 for the cost (as defined in section 502(5) of the Federal Credit Reform Act of 1990) of guaranteeing \$300,000,000 in loans under this section, such sums to remain available until expended.

[(e) REGIONAL INNOVATION RESEARCH AND INFORMATION PROGRAM.—

[(1) IN GENERAL.— As part of the program established under subsection (a), the Secretary shall establish a regional innovation research and information program—

[(A) to gather, analyze, and disseminate information on best practices for regional innovation strategies (including regional innovation clusters), including information relating to how innovation, productivity, and economic development can be maximized through such strategies;

[(B) to provide technical assistance, including through the development of technical assistance guides, for the development and implementation of regional innovation strategies (including regional innovation clusters);

[(C) to support the development of relevant metrics and measurement standards to evaluate regional innovation strategies (including regional innovation clusters), including the extent to which such strategies stimulate innovation, productivity, and economic development; and

[(D) to collect and make available data on regional innovation cluster activity in the United States, including data on—

[(i) the size, specialization, and competitiveness of regional innovation clusters;

[(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 clusters; and

[(iii) supply chain product and service flows within and between regional innovation clusters.

[(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 subsection.

[(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 under subsection (b) or (c) and any loan guarantee under subsection (d) into the program established under this subsection.

[(f) 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 other Federal agencies.

[(2) COLLABORATION.—

[(A) IN GENERAL.— The Secretary shall explore and pursue collaboration with other Federal agencies, including through multiagency 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.

[(g) EVALUATION.—

[(1) IN GENERAL.— Not later than 3 years after the date of enactment of the America COMPETES Reauthorization Act of 2010, 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.

[(h) 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;

[(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) SCIENCE PARK.— The term “Science park” means a property-based venture, which has—

[(A) master-planned property and buildings designed primarily for private-public research and development activities, high technology and science-based companies, and research and development support services;

[(B) a contractual or operational relationship with one or more science- or research-related institution of higher

education or governmental or non-profit research laboratories;

[(C) a primary mission to promote research and development through industry partnerships, assisting in the growth of new ventures and promoting innovation-driven economic development;

[(D) a role in facilitating the transfer of technology and business skills between researchers and industry teams; and

[(E) a role in promoting technology-led economic development for the community or region in which the science park is located. A science park may be owned by a governmental or not-for-profit entity, but it may enter into partnerships or joint ventures with for-profit entities for development or management of specific components of the park.

[(3) 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.

[(i) AUTHORIZATION OF APPROPRIATIONS.—Except as provided in subsection (d)(8), there are authorized to be appropriated \$100,000,000 for each of fiscal years 2011 through 2013 to carry out this section (other than for loan guarantees under subsection (d)).]

SEC. 27. REGIONAL INNOVATION PROGRAM.

(a) *ESTABLISHMENT.*—*The Secretary shall establish a regional innovation program to encourage and support the development of regional innovation strategies, including regional innovation clusters.*

(b) *CLUSTER GRANTS.*—

(1) *IN GENERAL.*—*As part of the program established under subsection (a), the Secretary may award grants on a competitive basis to eligible recipients for activities relating to the formation and development of regional innovation clusters.*

(2) *PERMISSIBLE ACTIVITIES.*—*Grants awarded under this subsection may be used for activities determined appropriate by the Secretary, including the following:*

(A) *Feasibility studies.*

(B) *Planning activities.*

(C) *Technical assistance.*

(D) *Developing or strengthening communication and collaboration between and among participants of a regional innovation cluster.*

(E) *Attracting additional participants to a regional innovation cluster.*

(F) *Facilitating market development of products and services developed by a regional innovation cluster, including through demonstration, deployment, technology transfer, and commercialization activities.*

(G) *Developing relationships between a regional innovation cluster and entities or clusters in other regions.*

(H) *Interacting with the public and State and local governments to meet the goals of the cluster.*

(3) *ELIGIBLE RECIPIENT DEFINED.*—*In this subsection, the term “eligible recipient” means—*

- (A) a State;
- (B) an Indian tribe;
- (C) a city or other political subdivision of a State;
- (D) an entity that—

- (i) 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
 - (ii) has an application that is supported by a State or a political subdivision of a State; or

- (E) a consortium of any of the entities described in subparagraphs (A) through (D).

(4) APPLICATION.—

(A) IN GENERAL.— An eligible recipient shall submit an application to the Secretary at such time, in such manner, and containing such information and assurances as the Secretary may require.

(B) COMPONENTS.— The application shall include, at a minimum, a description of the regional innovation cluster supported by the proposed activity, including a description of—

- (i) whether the regional innovation cluster is supported by the private sector, State and local governments, and other relevant stakeholders;

- (ii) how the existing participants in the regional innovation cluster will encourage and solicit participation by all types of entities that might benefit from participation, including newly formed entities and those rival existing participants;

- (iii) the extent to which the regional innovation cluster is likely to stimulate innovation and have a positive impact on regional economic growth and development;

- (iv) whether the participants in the regional innovation cluster have access to, or contribute to, a well-trained workforce;

- (v) whether the participants in the regional innovation cluster are capable of attracting additional funds from non-Federal sources; and

- (vi) the likelihood that the participants in the regional innovation cluster will be able to sustain activities once grant funds under this subsection have been expended.

(C) SPECIAL CONSIDERATION.— The Secretary shall give special consideration to applications from regions that contain communities negatively impacted by trade.

(5) SPECIAL CONSIDERATION.— The Secretary shall give special consideration to an eligible recipient who agrees to collaborate with local workforce investment area boards.

(6) COST SHARE.— The Secretary may not provide more than 50 percent of the total cost of any activity funded under this subsection.

(7) OUTREACH TO RURAL COMMUNITIES.— The Secretary shall conduct outreach to public and private sector entities in rural communities to encourage those entities to participate in regional innovation cluster activities under this subsection.

(8) *FUNDING.*— *The Secretary may accept funds from other Federal agencies to support grants and activities under this subsection.*

(c) *REGIONAL INNOVATION RESEARCH AND INFORMATION PROGRAM.*—

(1) *IN GENERAL.*— *As part of the program established under subsection (a), the Secretary shall establish a regional innovation research and information program—*

(A) *to gather, analyze, and disseminate information on best practices for regional innovation strategies (including regional innovation clusters), including information relating to how innovation, productivity, and economic development can be maximized through such strategies;*

(B) *to provide technical assistance, including through the development of technical assistance guides, for the development and implementation of regional innovation strategies (including regional innovation clusters);*

(C) *to support the development of relevant metrics and measurement standards to evaluate regional innovation strategies (including regional innovation clusters), including the extent to which such strategies stimulate innovation, productivity, and economic development; and*

(D) *to collect and make available data on regional innovation cluster activity in the United States, including data on—*

(i) *the size, specialization, and competitiveness of regional innovation clusters;*

(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 clusters; and*

(iii) *supply chain product and service flows within and between regional innovation clusters.*

(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 subsection.*

(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 under subsection (b) into the program established under this subsection.*

(d) *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 other Federal agencies.*

(2) *COLLABORATION.*—

(A) *IN GENERAL.*— *The Secretary shall explore and pursue collaboration with other Federal agencies, including*

through multiagency 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.*

(e) *EVALUATION.*—

(1) *IN GENERAL.*— *Not later than 3 years after the date of enactment of the Revitalize American Manufacturing and Innovation Act of 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.*— *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.*

* * * * *

**XXI. PROCEEDINGS OF THE FULL
COMMITTEE
MARKUP ON H.R. 2996,
THE REVITALIZE AMERICAN
MANUFACTURING
AND INNOVATION ACT OF 2013**

FRIDAY, JULY 25, 2014

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
WASHINGTON, D.C.

The Committee met, pursuant to call, at 10:05 a.m., in Room 2318 of the Rayburn House Office Building, Hon. Lamar Smith [Chairman of the Committee] presiding.

Chairman SMITH. The Committee on Science, Space, and Technology will come to order. Without objection, the Chair is authorized to declare recesses of the Committee at any time. Pursuant to Committee Rule 2(f) and House Rule XI(2)(h)(4), the Chair announces that he may postpone roll call votes.

Today we meet to consider H.R. 2996, the Revitalize American Manufacturing and Innovation Act of 2013, sponsored by Representative Tom Reed and Representative Joe Kennedy. And before I go on, let me explain to my colleagues that there is an ongoing Republican conference on a subject that will be familiar to everyone right now, which is why we have slim attendance on the Republican side, but this just gives me an opportunity to trust my friends and neighbors on the other side, and be able to go forth in a—go forward in a bipartisan way.

Pursuant to notice, I now call up H.R. 2996, the Revitalize American Manufacturing and Innovation Act of 2013, and the Clerk will report the bill.

The CLERK. H.R. 2996, to require the Secretary of Commerce to establish the network for manufacturing innovation, and for other purposes.

[H.R. 2996 appears in Appendix I]

Chairman SMITH. Without objection, the bill is considered as read, and I will recognize myself for an opening statement, then the Ranking Member.

H.R. 2996, the Revitalize American Manufacturing and Innovation Act of 2013, strengthens a critical sector of America's economy, manufacturing, and in particular advanced manufacturing. Thanks to Congressman Tom Reed from New York for his diligent work on

this legislation. And I also want to thank the gentleman from Massachusetts, Joe Kennedy, a Member of this Committee, for his initiative on this subject, and for offering today's amendment in the nature of a substitute.

A strong manufacturing base is fundamental to U.S. economic success and national security. Manufacturing supports over 17 million American jobs. This includes 12 million Americans, almost ten percent of the work force, who work for small, medium, or large manufacturing companies. Manufacturing accounts for over ten percent of our economic output, and its multiplier effect surpasses that of any other sector. Each dollar generated by manufacturing in the United States generates an additional \$1.35 in economic activity.

There are millions of Americans who are employed in manufacturing fields. What matters most is that manufacturing creates good paying, family supporting, community sustaining jobs. As an example, the Texas manufacturing industry employs nearly 875,000 people, who earn an average annual wage of over \$71,000. This includes more than 100,000 Texans who work in the energy industry, and earn an average of more than \$95,000 per year. And Texas is the top state for manufacturing exports, with over \$24 billion in transportation equipment exported in 2013.

The United States has one of the largest, strongest manufacturing industries in the world, and has demonstrated its ability to adapt and innovate time and time again. But China is projected to overtake the U.S. in global R&D spending in less than a decade, and China already has taken the lead in advanced manufacturing exports. To enhance our future economic prosperity and security, we need to take steps now to emphasize the strengths of American industry and shore up weaknesses.

Manufacturers invest heavily to redesign their products, streamline their production lines, and re-train their workers. This bill gives a targeted boost to America's manufacturers. It will help our advanced manufacturers accelerate the pace at which new technology is converted into better manufacturing processes, and improved products, and this legislation will help America remain globally competitive in manufacturing. It will ensure that new and innovative products come equipped with "Made in America" on their labels.

Again, I would like to thank the gentleman from Massachusetts, Mr. Kennedy, for his initiative and ideas on this particular subject, and congratulate him on a good bill.

[The prepared statement of Mr. Smith follows:]

PREPARED STATEMENT OF CHAIRMAN LAMAR S. SMITH

H.R. 2996, the "Revitalize American Manufacturing and Innovation Act of 2013," strengthens a critical sector of America's economy - manufacturing, and in particular, advanced manufacturing.

Thanks to Congressman Tom Reed from New York for his diligent work on this legislation. I also want to thank the gentleman from Massachusetts, Joe Kennedy, for his initiative on this subject and for offering today's Amendment in the Nature of a Substitute.

A strong manufacturing base is fundamental to U.S. economic success and national security. Manufacturing supports over 17 million American jobs. This in-

cludes 12 million Americans—almost 10 percent of the workforce—who work for small, medium or large manufacturing companies.

Manufacturing accounts for over 10 percent of our economic output, and its multiplier effect surpasses that of any other sector. Each dollar generated by manufacturing in the United States generates an additional \$1.35 in economic activity.

For the millions of Americans who are employed in manufacturing fields, what matters most is that manufacturing creates good-paying, family-supporting, community-sustaining jobs.

As an example, The Texas manufacturing industry employs nearly 875,000 people, who earn an average annual wage of over \$71,000. This includes more than 100,000 Texans who work in the energy industry and earn an average of more than \$95,000 per year. And Texas is the top state for manufacturing exports, with over \$24 billion in transportation equipment exported in 2013.

The United States has one of the largest, strongest manufacturing industries in the world and has demonstrated its ability to adapt and innovate time and time again. But China is projected to overtake the U.S. in global R&D spending in less than a decade, and China already has taken the lead in advanced manufacturing exports.

To enhance our future economic prosperity and security, we need to take steps now to emphasize the strengths of American industry and shore up weaknesses. Our manufacturers invest heavily to redesign their products, streamline their production lines, and re-train their workers.

This bill gives a targeted boost to America's manufacturers. It will help our advanced manufacturers accelerate the pace at which new technology is converted into better manufacturing processes and improved products.

And this legislation will help America remain globally competitive in manufacturing. It will ensure that new and innovative products come equipped with "Made in America" on their labels.

Chairman SMITH. And I will now recognize the Ranking Member, the gentlewoman from Texas, Ms. Johnson, for her opening statement.

Ms. JOHNSON. Thank you very much, Mr. Chairman. I am very pleased that we are considering this important piece of legislation this morning, and I would like to thank my colleagues, Mr. Kennedy and Mr. Reed, for their bipartisan work to develop this legislation. I would also like to thank you, Mr. Chairman, for your own contribution to the bipartisan efforts to advance this legislation. And, finally, I want to thank your staff, and especially Cliff Shannon, for working so closely and openly with the Democratic staff to help get this to this point.

The decline in U.S. manufacturing is a threat to middle class jobs, and to our entire economy. We have been losing lower skilled jobs for decades. More than two million manufacturing jobs, including high—higher skilled jobs, were lost during the recent recession.

The good news is we are experiencing a slight rebound in higher skilled jobs as our economy continues to recover. However, those gains are modest, and with the significant loss of infrastructure and talent in recent years, I am deeply concerned that we could reach a tipping point beyond which it would be nearly impossible to rebuild a vibrant manufacturing sector.

In the meantime, our key competitors are focusing their full attention on their own manufacturing capacity. They are implementing the policies and programs necessary to build the 21st century economies now. We too must take appropriate steps to ensure that American companies maintain their capacity to the most sophisticated—to be the most sophisticated in the world, using transformative technologies and manufacturing processes.

Revitalizing American Manufacturing Innovation Act, or RAMI, is one of the most critical steps Congress can take to help secure

the future of American manufacturing. This bill makes strategic investments in partnerships with the private sector in advanced manufacturing research, development, and education.

To some of my colleagues who are concerned about federal industrial policy, I remind them our entire history of innovation has been a partnership between the public and private sector. This bill does not displace, nor encroach, on the private sector's role. It fosters an important partnership for the benefit of all Americans.

I am also pleased that the bipartisan ANS includes a national strategic plan for advanced manufacturing, introduced by Ms. Lipinski, and the re-authorization of the Regional Innovation Program introduced by Mr. Hultgren and Mr. Kilmer. These two are important steps in the right direction.

In summary, I believe this is one of the most constructive and significant pieces of legislation considered by this committee, and all of Congress. It also a great example of how we can work together and compromise for the greater good, when we put our minds to it. I support this legislation, and I urge all of my colleagues to do the same. I thank you, Mr. Chairman, and yield back the balance of my time.

[The prepared statement of Ms. Johnson follows:]

PREPARED STATEMENT OF RANKING MEMBER EDDIE BERNICE JOHNSON

Thank you, Mr. Chairman. I am very pleased we are considering this important piece of legislation this morning. I'd like to thank my colleagues, Mr. Kennedy and Mr. Reed, for their bipartisan work to develop this legislation. I would also like to thank you, Mr. Chairman, for your own contribution to the bipartisan efforts to advance this legislation. Finally I want to thank your staff, and especially Cliff Shannon, for working so closely and openly with Democratic staff to help get us to this point.

The decline of U.S. manufacturing is a threat to middle class jobs and to our entire economy. We have been losing lower-skilled jobs for decades. More than 2 million manufacturing jobs, including higher-skilled jobs, were lost during the recent recession.

The good news is we are experiencing a slight rebound in higher-skilled jobs as our economy continues to recover. However, those gains are modest, and with the significant loss of infrastructure and talent in recent years, I am deeply concerned that we could reach a tipping point beyond which it will be nearly impossible to rebuild a vibrant manufacturing sector. In the meantime, our key competitors are focusing their full attention on their own manufacturing capacity. They are implementing the policies and programs necessary to build 21st century economies now.

We too must take appropriate steps to ensure that American companies maintain their capacity to be the most sophisticated in the world, using transformative technologies and manufacturing processes. The Revitalizing American Manufacturing Innovation Act—or RAMI—is one of the most critical steps Congress can take to help secure the future of American manufacturing. This bill makes strategic investments, in partnership with the private sector, in advanced manufacturing research, development, and education.

To some of my colleagues who are concerned about federal industrial policy, I remind them that our entire history of innovation has been a partnership between the public and private sector. This bill does not displace or encroach on the private sector's role. It fosters an important partnership for the benefit of all Americans. I am also pleased that the bipartisan ANS includes the National Strategic Plan for Advanced Manufacturing introduced by Mr. Lipinski and the reauthorization of the Regional Innovation Program introduced by Mr. Hultgren and Mr. Kilmer. These too are important steps in the right direction.

In summary, I believe this is one of the most constructive and significant pieces of legislation considered by this Committee all Congress. It is also a great example of how we can work together and compromise for the greater good when we put our minds to it. I support this legislation, and I urge all of my colleagues to do the same.

Thank you again, Mr. Chairman, and I yield back the balance of my time.

Chairman SMITH. Thank you, Ms. Johnson. If there is no further discussion on the bill, the bill will be considered at read, and open to amendment at any time, and we will proceed with amendments in the order listed on the roster.

And the first amendment on the roster is an amendment in the nature of a substitute, to be offered by Mr. Kennedy and me. The Clerk will report the amendment.

The CLERK. Amendment in the nature of a substitute to H.R. 2996, offered by Mr. Smith of Texas and Mr. Kennedy of Massachusetts.

[The amendment of Mr. Smith and Mr. Kennedy appears in Appendix I]

Chairman SMITH. Without objection, the amendment will be considered as read. I am going to recognize myself for a very brief statement, and then I am going to yield Mr. Kennedy the balance of my time, if that is all right with him.

On behalf of Mr. Kennedy and myself, I am pleased to offer this amendment in the nature of a substitute. Our amendment was made possible by bipartisan cooperation among the sponsors of H.R. 2996, Mr. Reed of New York, Mr. Kennedy of Massachusetts, and the Ranking Member, Ms. Johnson, and other Science Committee Members.

Our amendment preserves the concepts and goals of H.R. 2996. It funds new centers for manufacturing innovation that authorize no additional appropriations, and sets a sunset date for federal assistance. Our amendment also includes provisions for strategic planning for advance manufacturing brought forward by Mr. Lipinski. This was part of the first Act approved by our Committee earlier this year. And our amendment includes changes to the regional innovation program at the Department of Commerce from Mr. Hultgren and Mr. Kilmer, once again, with no authorization of appropriations.

And I thank Mr. Kennedy again for his diligent work on this amendment, and urge my colleagues to support it. And I will yield the balance of my time to the gentleman from Massachusetts, Mr. Kennedy.

Mr. KENNEDY. Thank you very much, Mr. Chairman. Thank you for yielding. Thank you for all your support for this bill, and this amendment, along the way. I am grateful to have your support, and your diligence, and the diligence of your staff, as we worked very hard to craft this bill going forward.

Mr. Chairman, I would also ask unanimous consent to submit three letters for the record in support of H.R. 2996, and the Smith-Kennedy amendment in the nature of a substitute. The letters are from the National Association of Manufacturers, Precision and Machined Parts—Products Association, and One Voice, the joint effort between the National Tooling and Machine Association and the Precision Metal Forming Association.

Mr. Chairman, the Smith-Kennedy amendment in the nature of a substitute is a strong compromise that keeps intact the underlying bill that I introduced last summer, along with my colleague from New York, Tom Reed. This bill creates a network of manufacturing innovation to improve our competitiveness, to stimulate research and development, spread the risk of investment, bring new

products and ideas to market, educate a next generation work force, and facilitate peer to peer exchange, and best practices.

Here is, essentially, how it works. Public/private centers of manufacturing innovation will leverage limited and targeted government funding, matched dollar for dollar by the private sector, with investment in expertise. Each center will be based on a new novel technology. Partnerships will include small businesses, large businesses, universities, community colleges, career and technical schools, federal labs, and not-for-profits. Centers will leverage the regional assets to overcome communal challenges.

Groups will end up applying for federal funding by putting the reins back where they belong, in the hands of industry and researchers facing the next big manufacturing challenge. Each application will go through an open, transparent, peer merit and review process, minimizing conflicts of interest, and ensuring that the best proposals move forward. Reporting requirements from the Secretary of Commerce and the Government Accountability Office will ensure proper Congressional oversight.

We have already seen this model work. In Youngstown, Ohio, the America Makes National Additive Manufacturing Innovation Institute is helping make 3D printing a reality. Four other institutes are in different stages of development, with a fifth already on the way. Each of these will be included in the network, so we already have a running start.

As part of this compromise, the Smith-Kennedy amendment in the nature of a substitute also includes two other important provisions. First, a new national strategic plan for advanced manufacturing that would require the National Science and Technology Council, in coordination with the National Economic Council, to develop a long term Federal Government strategic plan for the advanced manufacturing competitiveness. I want to thank my colleague, Congressman Lipinski, for his leadership on this, and the support for the underlying bill.

Second, we re-authorize the Regional Innovation Program, or RIP. Originally authorized in the 2010 Competes bill, this program can—supports regional innovation strategies such as scientific research parks. These are state and local level initiatives to promote entrepreneurship, commercialization of products by providing access to capital and a network. I want to thank Congressman Derek Kilmer and Representative Hultgren on the committee for their efforts on both re-authorizing, and for funding this program. I also want to give a special thanks to my New England colleagues, David Cicilline from Rhode Island, for his continued support of the RIP.

Mr. Chairman, before I finish, I want to give you and your staff, Cliff Shannon, former staff member Jamie Brown, a big thank you for making this bill possible. I want to thank Ranking Member Johnson and her staff, Mr. Oberman, Dalia Sokolov, Kim Montgomery, and Marcy Gallo as well for their strong support, Chairman Buschon, Ranking Member Lipinski for their guidance along the way. Of course, Tom Reed and his staff, Drew and Laura, for all that they did to have this bill—to work their way through the process over the course of the past year. Our partners in the Senate, Senator Sherrod Brown, and Roy Blunt, and their staffs. All of the outside supporters who have helped to raise awareness and

advocated for this bill along the way. And, finally, and probably most importantly, from my perspective, the tireless work of my staff, Eric Fins, who led the way on this, and is sitting very quietly in the corner, as he always does. Eric, thank you very, very much.

Again, Mr. Chairman, thank you. I want to thank my colleagues, and I ask all of them to support the amendment in the nature of a substitute. I yield back the balance of my time.

Chairman SMITH. Thank you, Mr. Kennedy. Without objection, the letters you referred to will be made a part of the record.

[The information appears in Appendix I]

Chairman SMITH. The gentleman from Illinois, Mr. Hultgren, is recognized.

Mr. HULTGREN. I move to strike the last word.

Chairman SMITH. Gentleman is recognized for five minutes.

Mr. HULTGREN. Thank you, Chairman, for bringing this bill for markup. As manufacturing is a vital component in my district's economy, in Illinois, I was pleased to become a co-sponsor of this legislation. The workers at my plants have felt the economic downturn disproportionately, as Illinois fails to change their policies to help my constituents regain full employment.

Much of this is because of burdensome and outdated regulation, but another reason is the barriers against working together in innovating that are still in place. This bill would help fix that, so I would like to thank my good friends Mr. Reed and Mr. Kennedy for introducing this bill.

I would also like to thank you, Chairman Smith, for working with me to reauthorize the regional innovation program in the amendment in the nature of the substitute. This is a smart, targeted program that allows local regions to pool their resources and work together.

Industry clusters are one of the most effective ways to compile and share best practices, and the fact that these programs give preference to bids involving local workforce investment boards is another reason to support this bill. These boards are hard at work helping my constituents to find work, and this is the cooperative federalism that will ensure our taxpayer dollars are not wasted.

Again, I want to thank you for bringing this bipartisan bill before the Committee, and I hope this is something we can move quickly to the floor. I yield back my time. Thank you, Chairman.

Chairman SMITH. Thank you, Mr. Hultgren. And the gentleman from Illinois, Mr. Lipinski, is recognized.

Mr. LIPINSKI. Move to strike the last word.

Chairman SMITH. The gentleman is recognized for five minutes.

Mr. LIPINSKI. Thank you, Mr. Chairman. I want to thank you, Subcommittee Chairman Buschon, Ranking Member Johnson, for helping to bring this bill up today for the markup. And I would also like to thank Mr. Kennedy and Mr. Reed for introducing the bill before us. I know it was not easy to revise this bill to gain broad bipartisan support, but the product we have before us today, I think, is a great accomplishment.

Everyone on this committee knows that I am one of the strongest advocates in Congress for American manufacturing, and I have continued to work on developing policies that will give manufacturers the best opportunity to succeed and to grow American jobs. For

every manufacturing job created in America, an additional five spin-off jobs are created.

Despite the economic advantages of supporting American manufacturing, the number of manufacturing jobs has been shrinking, from 20 million in 1979 to fewer than 12 million today, the latest recession has been especially devastating. While we are currently seeing a rebound in advanced manufacturing, we still have a long way to go before resuming a leadership position in manufacturing on the global stage.

As already discussed, this bill focuses on creating public/private innovation centers, an idea which I have strongly supported. These centers will bring innovators together from around the country to increase domestic production, make our products price competitive from those from abroad, spur the development in implementation of new technologies, and develop a work force that is trained with the necessary high tech skills desperately needed by U.S. companies in advanced manufacturing.

An NNMI center focusing on digital manufacturing was awarded earlier this year to a group led by University of Illinois, with a center located in Chicago. A federal investment of \$70 million has been leveraged so far to achieve a commitment of \$250 million from industry, academia, government, and community partners. The willingness of industry to commit such—so much capital to the center demonstrates the high value that the private sector places on these types of partnerships to develop advanced manufacturing in the United States.

I am also glad that the substitute amendment we are considering today contains language from my bill, the American Manufacturing Competitiveness Act. This provision would bring the public and private sectors together to develop a set of policy recommendations to revitalize this important sector of the economy. No policies are prescribed, but this provision would simply force a consideration of the state of manufacturing in America, and in the world, and it would require the production of recommendations for promoting American manufacturing. A similar bill passed the House in the past two Congresses with overwhelming bipartisan support. As one of the principals of a small family-owned manufacturing business told this committee, when testifying about the American Manufacturing Competitiveness Act, this bill will help develop a plan for success.

So I thank the Chairman, and I thank Mr. Kennedy for including this in the amendment in the nature of a substitute here, and thank everyone who has worked on this bill to—I think it is going to do a great job for American manufacturing. It is a good bipartisan bill that is going to put more Americans back to work. And I yield back the balance of my time.

Chairman SMITH. Thank you, Mr. Lipinski. There are six amendments to the amendment in the nature of a substitute to H.R. 2996 on the roster, all of which I am prepared to accept. And I appreciate Members on both sides of the aisle working with us to try to come up with good, acceptable amendments.

Given that, in the interest of efficiency, I would like to ask unanimous consent that we proceed with consideration of the amendments on the roster en bloc. Individual Members would still be recognized to speak on their amendments, but it might save time to

consider them together. Is there objection to considering the following amendments en bloc? Grayson #295, Grayson #297, Schweikert #59, Kelly #36, Wilson-Hall #49, Rohrabacher #55.

Hearing none, so ordered, and the Clerk will report the en bloc amendment, and I thank the Members for agreeing to that.

The CLERK. Amendments to the amendment in the nature of a substitute for H.R. 2996, offered by Mr. Grayson of Florida, #297, Mr. Grayson of Florida, #295, Mr. Schweikert of Arizona, #59, Ms. Kelly of Illinois, #36, Ms. Wilson of Florida, and Mr. Hall of Texas, #49, and Mr. Rohrabacher of California, #55.

[The amendments of Mr. Grayson, Mr. Schweikert, Ms. Kelly, Ms. Wilson, Mr. Hall, and Mr. Rohrabacher appears in Appendix I]

Chairman SMITH. Without objection, the amendment will be considered—the en bloc amendment will be considered as read, and the gentleman from Florida, Mr. Grayson, is recognized to speak on his two amendments.

Mr. GRAYSON. Thank you, Mr. Chairman. This bill is intended to help foster innovation in America by creating places where academics, businessmen, workers, and students, and entrepreneurs can come together and find new ways to build things in America. Most of us assume that if domestic manufacturing innovation increases, then employment will rise, but I want to make that assumption explicit, so that is what my first amendment does.

My amendment makes two specific changes to the bill. One is that it adds the term preserve or create jobs as a purpose of the program, and second it clarifies that one base upon which the Secretary should disperse funds, economic impact, includes the preservation and creation of jobs. I believe it is useful for Congress to be as explicit as possible in our intentions, and with this bill we want to make sure that we expand employment for Americans in domestic manufacturing, so let us make sure that we make it that way.

The second amendment—should I go on to the second amendment, Mr. Chairman?

Chairman SMITH. Yes, please, if the gentleman will proceed.

Mr. GRAYSON. Well, the second amendment is meant to clarify what represents a growing policy problem. Recently the United States Economic Classification Policy Committee recommended that goods designed in the United States, but manufactured abroad, should somehow be considered to be domestically manufactured goods. They call these “factory-less goods”, but what they really mean is goods manufactured in factories located abroad.

The—they said specifically that they recommended to the Office of Management Budget a classification of establishments that bear the overall responsibility and risk for bringing together all the processes necessary for the production of a good in the manufacturing sector, even though the actual transformation is 100 percent outsourced, meaning 100 percent performed overseas.

My amendment is a repudiation of that proposed classification. If goods are manufactured in the United States, then they need to be manufactured in the United States. If this amendment is accepted, then it will be an acknowledgement that this bill is proposing that this network of manufacturing innovation centers in the

United States is done for the purpose of improving domestic manufacturing capacity, not foreign manufacturing capacity.

A critical component of domestic manufacturing is that the physical, chemical, and mechanical transformation of inputs into outputs is predominantly done in the United States. That may seem obvious to all of us here today, but apparently not to some others in the government. I believe it is necessary and useful for Congress to be as explicit as possible with our intentions, especially when bureaucrats are trying to tell us that goods manufactured in China somehow count as goods manufactured in the United States.

This network of manufacturing centers will be organized within NIST, which is part of the Department of Commerce. The Department of Commerce needs to recognize that manufacturing means making physical goods, and that domestic manufacturing means making goods domestically. The so-called factory-less goods classification, which really means factories located in foreign companies—sorry, foreign countries by foreign companies is not what is operative for this program. In other words, when we say domestic manufacturing, we mean domestic manufacturing.

I appreciate the support of the Chairman for this amendment, and I reserve the balance of my time.

Chairman SMITH. Does the gentleman yield back the balance of his time?

Mr. GRAYSON. Yes, I yield back the balance of my time.

Chairman SMITH. Thank you, Mr. Grayson. And the gentleman from Arizona, Mr. Schweikert, is recognized to explain his amendment.

Mr. SCHWEIKERT. Thank you, Mr. Chairman. The amendment's goal is fairly simple. It is to sort of expand a category where the United States seems to be taking off quite a lead, and making sure that that sort of broad category is also woven within this bill. Thank you, Mr. Chairman.

Chairman SMITH. Thank you, Mr. Schweikert. And the gentleman from Illinois, Ms. Kelly, is recognized to explain her amendment.

Ms. KELLY. Thank you, Chairman Smith, and Ranking Member Johnson, for your leadership in bringing this important bill to full committee. I also want to commend Congressmen Reed and Kennedy on introducing the Revitalize American Manufacturing and Innovation Act.

My amendment requires, within the activities of the Centers for Manufacturing Innovation, that they will include minority and women-owned manufacturers among the small, medium, and large manufacturing enterprises that will be targeted for outreach and engagement. This language is a simple fix to ensure research and recommendations develop to advance manufacturing in the United States be as comprehensible as possible.

This bill has potential to increase American manufacturing, create good paying jobs, and strengthen the middle class, and I commend our committee's leadership and members for coming together in a bipartisan manner to advance American manufacturing and American workers.

I yield back.

Chairman SMITH. Okay. Thank you, Ms. Kelly. We will now go to the gentlewoman from Florida, Ms. Wilson, and the gentleman from Texas, Mr. Hall, for their amendment. And the gentlewoman from Florida is recognized.

Ms. WILSON. Thank you, Mr. Chairman. The amendment I am offering today helps identify peoples of interest who deserve and need quality jobs. If passed, H.R. 2996 would establish Centers for Manufacturing Innovation. These centers are designed to address challenges in advancing manufacturing, including an educated and qualified work force. My amendment makes sure we are not leaving out our veterans, the fearless people who have served our country with their lives, as well as people with disabilities. It is our duty to put in priority order those important groups of people, who need quality jobs.

My amendment directs the centers to educate and train veterans and people with disabilities. Taken together, veterans and people with disabilities would be more independent, and not only help themselves and their families, but also their communities, and truly aid in the advancement of manufacturing technologies.

We know that manufacturing drives innovation, creates high quality jobs, and fuels U.S. exports. We should do all that we can to support our veterans, and peoples with disabilities, and providing them with the opportunity for higher quality manufacturing jobs, now and in the future. I urge adoption of this amendment. I yield my remaining time to my colleague, Congressman Ralph Hall, for as long as he would like, and then I yield back the remaining time.

Mr. HALL. Thank you very much, and I guess I will only like whatever I have, so—I thank Ms. Wilson for the opportunity to offer this amendment with her, on behalf of the Nation's veterans, and those with disabilities. As a veteran of World War II, my dad was a veteran of World War I, my brother, both theaters of World War II, I know the veterans, and I know their needs. And American manufacturing competitiveness, including accelerating education and training programs, and workforce development, would create opportunities for companies to train new workers and retrain existing workers. It is very appropriate that our veterans and our disabled people be included in that training and outreach efforts.

I thank the Chairman, and Mr. Kennedy particularly, for his work, and for their work on this bill, and I do yield back.

Chairman SMITH. Thank you, Mr. Hall. And we will now go to the gentleman from California, Mr. Rohrabacher, to discuss his amendment. And this is the last amendment in the en bloc amendment.

Mr. ROHRABACHER. Yes. My amendment is relatively uncontroversial. It just simply adds a new list of—adds something to the list of things that we need to analyze to determine exactly what we are going to be doing to make sure our manufacturing is competitive. And that one little item that we list is—to analyze is the capability of manufacturing work forces in other countries, and so we will have something to compare ourselves to.

But, Mr. Chairman, just—and then I thought about the general bill, and the general concept. Mr. Chairman, if we are to be a man-

ufacturing nation, if we are to be a country that leads the way economically, certainly some of the things in this bill are important, but I would just like to draw attention to the fact that patent law is vitally important, has played a vital role to our country's ability to outcompete those—to be a manufacturing center, but also to outcompete those who compete with us around the world. I believe our patent system has been under attack for the last 20 years by major multinational corporations.

We also need to have an adequate depreciation schedule so that our businesses will have, you know, level playing field with other countries, like Japan, for example, that prevents its industrial tax policies as such that they have depreciation immediately when a piece of equipment is purchased for a manufacturing unit. We sometimes stretch that out over 10—7, to 10, to 15 years, and that depreciation schedule puts our people at a disadvantage, in terms of being technologically superior to our competitors.

We need to make sure that we have our R&D. And we had a hearing here in a Subcommittee just last week about how those companies with large R&D budgets are now finding that—in hostile takeovers, they—their R&D budget is being calculated as something that could be eliminated in order to—the—to give the hostile takeover team a means of getting a loan to take over that company, and eliminate the R&D, which is totally ridiculous.

We also know that without—with a taxing policy with the Federal Government, if you tax away too much of people's income, there will be no money for capital investment. And you can't have manufacturing in this country without capital investment.

And finally, Mr. Chairman, I think we have to make sure that we are paying attention to the regulatory burden. If we place a regulatory burden on our industries that gives industries in other countries the edge, we are not going to be a manufacturing country for so long. So just a few thoughts that I would like to put into the record. Thank you very much, Mr. Chairman.

Chairman SMITH. Thank you, Mr. Rohrabacher for those comments. And if there is no further discussion on the amendment, the vote occurs on the en bloc amendment to the amendment in the nature of a substitute.

All in favor say aye.

Those opposed, say nay.

Opinion of the Chair, the ayes have it, and the amendment is agreed to.

If there are no further amendments to the amendment in the nature of a substitute, the question is on agreeing to the amendment in the nature of a substitute offered by Mr. Kennedy and me.

All in favor say aye.

Those opposed, say no.

Opinion of the Chair, the ayes have it, and the amendment is agreed to.

Without objection, the Motion to Reconsider is laid upon the table, and I move that the bill H.R. 2996, as amended, be favorably reported to the House, and the staff be authorized to make any necessary technical and conforming changes. Without objection, so ordered.

And we are finished, and we will adjourn. Congratulations to Mr. Reed and Mr. Kennedy.

Ms. JOHNSON. Mr. Chairman—

Chairman SMITH. And what—before we leave, the Ranking Member has asked to be recognized, and she is recognized.

Ms. JOHNSON. Thank you very much, Mr. Chairman. I was just going to count to see how many we had on each side, to see if we could do more business.

Chairman SMITH. I am glad we have adjourned. By the way, I think it is 12–12. It would have been close.

Ms. JOHNSON. 13–12.

Chairman SMITH. I am corrected, 13–12. We can go forward.
[Whereupon, at 10:38 a.m., the Committee was adjourned.]

Appendix I

H.R. 2996, THE REVITALIZE AMERICAN MANUFACTURING
AND INNOVATION ACT OF 2013

AMENDMENT ROSTER, AMENDMENT IN THE NATURE OF A
SUBSTITUTE,

SECTION-BY-SECTION ANALYSIS, AMENDMENTS



113TH CONGRESS
1ST SESSION

H. R. 2996

To require the Secretary of Commerce to establish the Network for Manufacturing Innovation and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

AUGUST 2, 2013

Mr. REED (for himself and Mr. KENNEDY) introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committee on Appropriations, 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

A BILL

To require the Secretary of Commerce to establish the Network for Manufacturing Innovation and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Revitalize American
5 Manufacturing and Innovation Act of 2013”.

6 **SEC. 2. FINDINGS.**

7 Congress finds the following:

1 (1) In 2011, manufacturing contributed
2 \$1,800,000,000,000 to the Nation's economy and
3 accounted for 47 percent of all United States ex-
4 ports.

5 (2) If ranked as its own country, the United
6 States manufacturing sector would be the 10th larg-
7 est economy in the world.

8 (3) American manufacturers employ more than
9 11,000,000,000 Americans in jobs with wages and
10 benefits that are one-third higher than the wages
11 and benefits in other sectors.

12 (4) Manufacturing has the highest multiplier ef-
13 fect, with every dollar in final sales of manufactured
14 products resulting in \$1.34 in output from other sec-
15 tors.

16 (5) As the source of nearly one-third of the
17 United States investment in research and develop-
18 ment manufacturing, firms drive innovation in the
19 United States.

20 (6) Countries such as Korea, Japan, and Ger-
21 many have a larger share of the advanced manufac-
22 turing sector than the United States. Each of these
23 countries has a positive trade balance in advanced
24 manufacturing products. In contrast, the United

1 States had an \$81,000,000,000 trade deficit in
2 2010.

3 (7) The United States share of research and
4 development spending dropped from 43.1 percent in
5 1998 to 37.3 percent in 2008, while China's share
6 of research and development spending increased
7 from 3 percent to 11.4 percent during the same pe-
8 riod.

9 (8) According to a survey by the Council on
10 Competitiveness, chief executive officers view the
11 quality and availability of scientists, researchers, and
12 engineers and the quality and availability of skilled
13 production workers as the first and second most im-
14 portant drivers of competitiveness.

15 (9) According to the Organization for Economic
16 Co-Operation and Development, the United States
17 ranked 27th out of 29 developed countries in the
18 percentage of students who earned bachelor's de-
19 grees in science and engineering in 2009.

20 (10) Colleges in China and India award more 4-
21 year engineering bachelor's degrees than United
22 States colleges.

1 (1) In 2011, manufacturing contributed
2 \$1,800,000,000,000 to the Nation's economy and
3 accounted for 47 percent of all United States ex-
4 ports.

5 (2) If ranked as its own country, the United
6 States manufacturing sector would be the 10th larg-
7 est economy in the world.

8 (3) American manufacturers employ more than
9 11,000,000,000 Americans in jobs with wages and
10 benefits that are one-third higher than the wages
11 and benefits in other sectors.

12 (4) Manufacturing has the highest multiplier ef-
13 fect, with every dollar in final sales of manufactured
14 products resulting in \$1.34 in output from other sec-
15 tors.

16 (5) As the source of nearly one-third of the
17 United States investment in research and develop-
18 ment manufacturing, firms drive innovation in the
19 United States.

20 (6) Countries such as Korea, Japan, and Ger-
21 many have a larger share of the advanced manufac-
22 turing sector than the United States. Each of these
23 countries has a positive trade balance in advanced
24 manufacturing products. In contrast, the United

1 **SEC. 3. ESTABLISHMENT OF NETWORK FOR MANUFAC-**
2 **TURING INNOVATION.**

3 The National Institute of Standards and Technology
4 Act (15 U.S.C. 271 et seq.) is amended—

5 (1) by redesignating section 34 as section 35;

6 and

7 (2) by inserting after section 33 (15 U.S.C.
8 278r) the following:

9 **“SEC. 34. NETWORK FOR MANUFACTURING INNOVATION.**

10 **“(a) ESTABLISHMENT OF NETWORK FOR MANUFAC-**
11 **TURING INNOVATION PROGRAM.—**

12 **“(1) IN GENERAL.—**The Secretary of Com-
13 merce shall establish within the Institute a program
14 to be known as the ‘Network for Manufacturing In-
15 novation Program’ (referred to in this section as the
16 ‘Program’).

17 **“(2) PURPOSES OF PROGRAM.—**The purposes of
18 the Program are—

19 **“(A) to improve the competitiveness of**
20 **United States manufacturing and to increase**
21 **domestic production;**

22 **“(B) to stimulate United States leadership**
23 **in advanced manufacturing research, innova-**
24 **tion, and technology;**

25 **“(C) to facilitate the transition of innova-**
26 **tive technologies into scalable, cost-effective,**

1 and high-performing manufacturing capabili-
2 ties;

3 “(D) to facilitate access by manufacturing
4 enterprises to capital-intensive infrastructure,
5 including high-performance computing, in order
6 to improve the speed with which such enter-
7 prises commercialize new processes and tech-
8 nologies;

9 “(E) to accelerate the development of an
10 advanced manufacturing workforce;

11 “(F) to facilitate peer exchange of and the
12 documentation of best practices in addressing
13 advanced manufacturing challenges; and

14 “(G) to leverage non-Federal sources of
15 support to promote a stable and sustainable
16 business model without the need for long-term
17 Federal funding.

18 “(3) SUPPORT.—The Secretary, acting through
19 the Director, shall carry out the purposes set forth
20 in paragraph (2) by supporting—

21 “(A) the Network for Manufacturing Inno-
22 vation established under subsection (b); and

23 “(B) the establishment of centers for man-
24 ufacturing innovation.

1 “(4) DIRECTOR.—The Secretary shall carry out
2 the Program through the Director.

3 “(b) ESTABLISHMENT OF NETWORK FOR MANUFAC-
4 TURING INNOVATION.—

5 “(1) IN GENERAL.—As part of the Program,
6 the Secretary of Commerce shall establish a network
7 of centers for manufacturing innovation.

8 “(2) DESIGNATION.—The network established
9 under paragraph (1) shall be known as the ‘Network
10 for Manufacturing Innovation’ (referred to in this
11 section as the ‘Network’).

12 “(c) CENTERS FOR MANUFACTURING INNOVATION.—

13 “(1) IN GENERAL.—For purposes of this sec-
14 tion, a ‘center for manufacturing innovation’ is a
15 center that—

16 “(A) has been established by a person to
17 address challenges in advanced manufacturing
18 and to assist manufacturers in retaining or ex-
19 panding industrial production and jobs in the
20 United States;

21 “(B) has a predominant focus on a manu-
22 facturing process, novel material, enabling tech-
23 nology, supply chain integration methodology,
24 or another relevant aspect of advanced manu-

1 facturing, as determined by the Secretary, with
2 the potential—

3 “(i) to improve the competitiveness of
4 United States manufacturing;

5 “(ii) to accelerate investment in ad-
6 vanced manufacturing production capacity
7 in the United States; and

8 “(iii) to enable the commercial appli-
9 cation of new technologies or industry-wide
10 manufacturing processes; and

11 “(C) includes active participation among
12 representatives from multiple industrial entities,
13 research universities, community colleges, and
14 such other entities as the Secretary considers
15 appropriate, which may include career and tech-
16 nical education schools, Federal laboratories,
17 State, local, and tribal governments, businesses,
18 educational institutions, and nonprofit organiza-
19 tions.

20 “(2) ACTIVITIES.—Activities of a center for
21 manufacturing innovation may include the following:

22 “(A) Research, development, and dem-
23 onstration projects, including proof-of-concept
24 development and prototyping, to reduce the
25 cost, time, and risk of commercializing new

1 technologies and improvements in existing tech-
2 nologies, processes, products, and research and
3 development of materials to solve pre-competi-
4 tive industrial problems with economic or na-
5 tional security implications.

6 “(B) Development and implementation of
7 education and training courses, materials, and
8 programs.

9 “(C) Development of innovative methodolo-
10 gies and practices for supply chain integration
11 and introduction of new technologies into sup-
12 ply chains.

13 “(D) Outreach and engagement with
14 small- and medium-sized manufacturing enter-
15 prises, in addition to large manufacturing en-
16 terprises.

17 “(E) Such other activities as the Sec-
18 retary, in consultation with Federal depart-
19 ments and agencies whose missions contribute
20 to or are affected by advanced manufacturing,
21 considers consistent with the purposes described
22 in subsection (a)(2).

23 “(3) ADDITIONAL CENTERS FOR MANUFAC-
24 TURING INNOVATION.—The National Additive Man-
25 ufacturing Innovation Institute and pending manu-

1 facturing centers under interagency review shall be
2 considered centers for manufacturing innovation.

3 “(d) FINANCIAL ASSISTANCE TO ESTABLISH AND
4 SUPPORT CENTERS FOR MANUFACTURING INNOVA-
5 TION.—

6 “(1) IN GENERAL.—In carrying out the Pro-
7 gram, the Secretary of Commerce shall award finan-
8 cial assistance to a person to assist the person in
9 planning, establishing, or supporting a center for
10 manufacturing innovation.

11 “(2) APPLICATION.—A person seeking financial
12 assistance under paragraph (1) shall submit to the
13 Secretary an application therefor at such time, in
14 such manner, and containing such information as
15 the Secretary may require.

16 “(3) OPEN PROCESS.—In soliciting applications
17 for financial assistance under paragraph (1), the
18 Secretary shall ensure an open process that will
19 allow for the consideration of all applications rel-
20 evant to advanced manufacturing regardless of tech-
21 nology area.

22 “(4) SELECTION.—

23 “(A) COMPETITIVE, MERIT REVIEW.—In
24 awarding financial assistance under paragraph

1 (1), the Secretary shall use a competitive, merit
2 review process.

3 “(B) COLLABORATION.—In awarding fi-
4 nancial assistance under paragraph (1), the
5 Secretary shall, acting through the National
6 Program Office established under subsection
7 (e)(1), collaborate with Federal departments
8 and agencies whose missions contribute to or
9 are affected by advanced manufacturing.

10 “(C) CONSIDERATIONS.—In selecting a
11 person who submitted an application under
12 paragraph (2) for an award of financial assist-
13 ance under paragraph (1) the Secretary shall
14 consider, at a minimum, the following:

15 “(i) The potential of the center for
16 manufacturing innovation to advance do-
17 mestic manufacturing and the likelihood of
18 economic impact in the predominant focus
19 areas of the center for manufacturing in-
20 novation.

21 “(ii) The commitment of continued fi-
22 nancial support, advice, participation, and
23 other contributions from non-Federal
24 sources, to provide leverage and resources
25 to promote a stable and sustainable busi-

1 ness model without the need for long-term
2 Federal funding.

3 “(iii) How the center for manufac-
4 turing innovation will engage with small-
5 and medium-sized manufacturing enter-
6 prises, to improve the capacity of such en-
7 terprises to commercialize new processes
8 and technologies.

9 “(iv) How the center for manufac-
10 turing innovation will carry out educational
11 and workforce activities that meet indus-
12 trial needs related to the predominant
13 focus areas of the center for manufac-
14 turing innovation.

15 “(v) How the center for manufac-
16 turing innovation will advance economic
17 competitiveness.

18 “(vi) How the center for manufac-
19 turing innovation will strengthen and lever-
20 age the assets of a region.

21 “(5) LIMITATION ON PERIOD FOR AWARDS.—
22 No award of financial assistance may be made under
23 paragraph (1) to a center of manufacturing innova-
24 tion after the 7-year period beginning on the date on

1 which the Secretary first awards financial assistance
2 to a center under such paragraph.

3 “(c) NATIONAL PROGRAM OFFICE.—

4 “(1) ESTABLISHMENT.—The Secretary of Com-
5 merce shall establish, within the Institute, the Na-
6 tional Office of the Network for Manufacturing In-
7 novation Program (referred to in this section as the
8 ‘National Program Office’), which shall oversee and
9 carry out the Program.

10 “(2) FUNCTIONS.—The functions of the Na-
11 tional Program Office are—

12 “(A) to oversee the planning, management,
13 and coordination of the Program;

14 “(B) to enter into memorandums of under-
15 standing with Federal departments and agen-
16 cies, whose missions contribute to or are af-
17 fected by advanced manufacturing, to carry out
18 the purposes described in subsection (a)(2);

19 “(C) to develop, not later than 1 year after
20 the date of the enactment of the Revitalize
21 American Manufacturing and Innovation Act of
22 2013, and update not less frequently than once
23 every 3 years thereafter, a strategic plan to
24 guide the Program;

1 “(D) to establish such procedures, proce-
2 esses, and criteria as may be necessary and ap-
3 propriate to maximize cooperation and coordi-
4 nate of the activities of the Program with pro-
5 grams and activities of other Federal depart-
6 ments and agencies whose missions contribute
7 to or are affected by advanced manufacturing;

8 “(E) to establish a clearinghouse of public
9 information related to the activities of the Pro-
10 gram; and

11 “(F) to act as a convener of the Network.

12 “(3) RECOMMENDATIONS.—In developing and
13 updating the strategic plan under paragraph (2)(C),
14 the Secretary shall solicit recommendations and ad-
15 vice from a wide range of stakeholders, including in-
16 dustry, small- and medium-sized manufacturing en-
17 terprises, research universities, community colleges,
18 and other relevant organizations and institutions.

19 “(4) REPORT TO CONGRESS.—The Secretary
20 shall transmit the strategic plan required under
21 paragraph (2)(C) to the Committee on Commerce,
22 Science, and Transportation of the Senate and the
23 Committee on Science, Space, and Technology of the
24 House of Representatives.

1 “(5) HOLLINGS MANUFACTURING EXTENSION
2 PARTNERSHIP.—The Secretary shall ensure that the
3 National Program Office incorporates the Hollings
4 Manufacturing Extension Partnership into Program
5 planning to ensure that the results of the Program
6 reach small- and medium-sized entities.

7 “(6) DETAILEES.—Any Federal Government
8 employee may be detailed to the National Program
9 Office without reimbursement. Such detail shall be
10 without interruption or loss of civil service status or
11 privilege.

12 “(f) REPORTING AND AUDITING.—

13 “(1) ANNUAL REPORTS TO THE SECRETARY.—

14 “(A) IN GENERAL.—The Secretary of
15 Commerce shall require recipients of financial
16 assistance under subsection (d)(1) to annually
17 submit a report to the Secretary that describes
18 the finances and performance of the center for
19 manufacturing innovation for which such assist-
20 ance was awarded.

21 “(B) ELEMENTS.—Each report submitted
22 under subparagraph (A) shall include—

23 “(i) an accounting of expenditures of
24 amounts awarded to the recipient under
25 subsection (d)(1); and

1 “(ii) a description of the performance
2 of the center for manufacturing innovation
3 with respect to—

4 “(I) its goals, plans, financial
5 support, and accomplishments; and

6 “(II) how the center for manu-
7 facturing innovation has furthered the
8 purposes described in subsection
9 (a)(2).

10 “(2) ANNUAL REPORTS TO CONGRESS.—

11 “(A) IN GENERAL.—Not less frequently
12 than once each year, the Secretary shall submit
13 a report to Congress that describes the per-
14 formance of the Program during the most re-
15 cent 1-year period.

16 “(B) ELEMENTS.—Each report submitted
17 under subparagraph (A) shall include, for the
18 period covered by the report—

19 “(i) a summary and assessment of the
20 reports received by the Secretary under
21 paragraph (1);

22 “(ii) an accounting of the funds ex-
23 pended by the Secretary under the Pro-
24 gram; and

1 “(iii) an assessment of the Program
2 with respect to the purposes described in
3 subsection (a)(2).

4 “(3) TRIENNIAL ASSESSMENT BY GAO.—

5 “(A) IN GENERAL.—Not less frequently
6 than once every 3 years, the Comptroller Gen-
7 eral of the United States shall submit to Con-
8 gress an assessment of the operation of the
9 Program during the most recent 3-year period.

10 “(B) ELEMENTS.—Each assessment sub-
11 mitted under subparagraph (A) shall include,
12 for the period covered by the report—

13 “(i) a review of the management, co-
14 ordination, and industry utility of the Pro-
15 gram;

16 “(ii) an assessment of the extent to
17 which the Program has furthered the pur-
18 poses described in subsection (a)(2); and

19 “(iii) such recommendations for legis-
20 lative and administrative action as the
21 Comptroller General considers appropriate
22 to improve the Program.

23 “(g) ADDITIONAL AUTHORITIES.—

24 “(1) APPOINTMENT OF PERSONNEL AND CON-
25 TRACTS.—The Secretary of Commerce may appoint

1 such personnel and enter into such contracts, finan-
2 cial assistance agreements, and other agreements as
3 the Secretary considers necessary or appropriate to
4 carry out the Program including support for re-
5 search and development activities involving a center
6 for manufacturing innovation.

7 “(2) TRANSFER OF FUNDS.—The Secretary
8 may transfer to other Federal agencies such sums as
9 the Secretary considers necessary or appropriate to
10 carry out the Program.

11 “(3) AUTHORITY OF OTHER AGENCIES.—In the
12 event that the Secretary exercises the authority to
13 transfer funds to another agency under paragraph
14 (2), such agency may award and administer all as-
15 pects of financial assistance awards under this sec-
16 tion.

17 “(4) USE OF RESOURCES.—In furtherance of
18 the purposes of the Program, the Secretary may use,
19 with the consent of a covered entity and with or
20 without reimbursement, the land, services, equip-
21 ment, personnel, and facilities of such covered entity.

22 “(5) ACCEPTANCE OF RESOURCES.—In addition
23 to amounts appropriated to carry out the Program,
24 the Secretary may accept funds, services, equipment,

1 personnel, and facilities from any covered entity to
2 carry out the Program.

3 “(6) COVERED ENTITY.—For purposes of this
4 subsection, a covered entity is any Federal depart-
5 ment, Federal agency, instrumentality of the United
6 States, State, local government, tribal government,
7 Territory or possession of the United States, or of
8 any political subdivision thereof, or international or-
9 ganization, or any public or private entity or indi-
10 vidual.

11 “(h) PATENTS.—Chapter 18 of title 35, United
12 States Code, shall not apply if financial assistance is
13 awarded under this section solely for the purpose of plan-
14 ning, establishing, or supporting new or existing centers
15 for manufacturing innovation.

16 “(i) FUNDING.—

17 “(1) NETWORK FOR MANUFACTURING INNOVA-
18 TION FUND.—

19 “(A) ESTABLISHMENT.—There is estab-
20 lished in the Treasury of the United States a
21 fund to be known as the ‘Network for Manufac-
22 turing Innovation Fund’ (referred to in this
23 paragraph as the ‘Fund’).

24 “(B) ELEMENTS.—There shall be depos-
25 ited in the Fund, which shall constitute the as-

1 sets of the Fund, amounts appropriated or oth-
2 erwise made available to carry out the Program.

3 “(C) AVAILABILITY.—Amounts deposited
4 in the Fund shall be available to the Secretary
5 of Commerce, at the discretion of the Secretary,
6 or the Secretary’s delegee, to carry out the Pro-
7 gram without further appropriation and without
8 fiscal year limitation.

9 “(2) AUTHORIZATION OF APPROPRIATIONS.—
10 There is authorized to be appropriated
11 \$600,000,000 to the Secretary of Commerce to carry
12 out this section.

13 “(3) ADMINISTRATIVE EXPENSES.—The Sec-
14 retary of Commerce may use not more than 5 per-
15 cent of the amounts appropriated pursuant to para-
16 graph (2) to pay the salaries, expenses, and other
17 administrative costs incurred by the Secretary under
18 this section.

19 “(4) RESCISSION.—There is hereby rescinded,
20 from appropriated discretionary funds that remain
21 available for obligation as of the date of the enact-
22 ment of this Act, \$600,000,000.”.

○

AMENDMENT ROSTER

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
July 25, 2014

AMENDMENT ROSTER**H.R. 2996, the “Revitalize American Manufacturing and Innovation Act of 2014”**

No.	Amendment	Summary	
1	Amendment in the Nature of a Substitute Offered by Mr. Smith (TX) and Mr. Kennedy (MA) #002	The ANS makes several changes in H.R. 2996 to strengthen certain policy aspects of the measure and assure that it would not increase the federal deficit. The ANS also includes two related sections: strategic planning to coordinate government policies and programs for advanced manufacturing, and changes to the Regional Innovation Program. The ANS includes the Network for Manufacturing Innovation at NIST and authorizes NIST to carry out competitive, merit-based selection of manufacturing innovation centers. Maximum funding for this program is up to \$300 million over 10 years. There is no authorization of appropriations. The Secretary of Commerce is authorized to use up to \$5 million per fiscal year in NIST appropriations for fiscal years 2015 – 2024 to carry out the program and the Secretary of Energy is authorized to transfer up to an aggregate of \$250 million over fiscal years 2015 – 2024 from funds appropriated for advanced manufacturing research and development.	Agreed to by Voice Vote
2	Amendment to the ANS Offered by Mr. Grayson (FL) #297	In Section 3, adds to the requirements of a center for manufacturing innovation that it increase “the production of goods manufactured predominantly within the United States.”	En Bloc Amendment (1 of 6) Agreed to by Voice Vote
3	Amendment to the ANS Offered by Mr. Grayson (FL) #295	In Section 3, adds “to create and preserve jobs” to the purposes of the Network for Manufacturing Innovation Program; adds “including the creation or preservation of jobs” after “economic impact” as part of the considerations for selection of a Center.	En Bloc Amendment (2 of 6) Agreed to by Voice Vote
4	Amendment to the ANS Offered by Mr. Schweikert (AZ) #059	In Section 3, adds “flexible hybrid technologies” to the list of possible advanced manufacturing items that a center for manufacturing innovation could focus on; adds “flexible hybrid technologies” to the list of possible areas for improving competitiveness in key manufacturing technologies.	En Bloc Amendment (3 of 6) Agreed to by Voice Vote
5	Amendment to the ANS Offered by Ms. Kelly (IL) #036	In Section3, adds “including women and minority owned manufacturing enterprises” to those receiving outreach from the Centers.	En Bloc Amendment (4 of 6) Agreed to by Voice Vote
6	Amendment to the ANS Offered by Ms. Wilson (FL) and Mr. Hall (TX) #049	In Section 3, adds “How the center for manufacturing will encourage the education and training of veterans and individuals with disabilities to the criteria for selection of a Center.	En Bloc Amendment (5 of 6) Agreed to by Voice Vote
7	Amendment to the ANS Offered by Mr. Rohrabacher (CA) #055	In Section 4, adds “the capabilities of the manufacturing workforce of competing nations” to the subsection requiring an analysis in the strategic plan of factors that impact US innovation and competitiveness.	En Bloc Amendment (6 of 6) Agreed to by Voice Vote

AMENDMENT IN THE NATURE OF A SUBSTITUTE

FATBSCMANINN14_002.XML

2

1 (4) In 2012, the average manufacturing worker
2 in the United States earned \$77,505 annually, in-
3 cluding pay and benefits. The average worker in all
4 industries earned \$62,063.

5 (5) Taken alone, manufacturing in the United
6 States would be the 8th largest economy in the
7 world.

8 (6) Manufacturers in the United States perform
9 two-thirds of all private-sector research and develop-
10 ment in the United States, driving more innovation
11 than any other sector.

12 **SEC. 3. ESTABLISHMENT OF NETWORK FOR MANUFAC-**
13 **TURING INNOVATION.**

14 (a) IN GENERAL.—The National Institute of Stand-
15 ards and Technology Act (15 U.S.C. 271 et seq.) is
16 amended—

17 (1) by redesignating section 34 as section 35;
18 and

19 (2) by inserting after section 33 (15 U.S.C.
20 278r) the following:

21 **“SEC. 34. NETWORK FOR MANUFACTURING INNOVATION.**

22 **“(a) ESTABLISHMENT OF NETWORK FOR MANUFAC-**
23 **TURING INNOVATION PROGRAM.—**

24 **“(1) IN GENERAL.—**The Secretary shall estab-
25 lish within the Institute a program to be known as

1 the 'Network for Manufacturing Innovation Pro-
2 gram' (referred to in this section as the 'Program').

3 "(2) PURPOSES OF PROGRAM.—The purposes of
4 the Program are—

5 "(A) to improve the competitiveness of
6 United States manufacturing and to increase
7 domestic production;

8 "(B) to stimulate United States leadership
9 in advanced manufacturing research, innova-
10 tion, and technology;

11 "(C) to facilitate the transition of innova-
12 tive technologies into scalable, cost-effective,
13 and high-performing manufacturing capabili-
14 ties;

15 "(D) to facilitate access by manufacturing
16 enterprises to capital-intensive infrastructure,
17 including high-performance electronics and
18 computing, and the supply chains that enable
19 these technologies;

20 "(E) to accelerate the development of an
21 advanced manufacturing workforce;

22 "(F) to facilitate peer exchange of and the
23 documentation of best practices in addressing
24 advanced manufacturing challenges; and

1 “(G) to leverage non-Federal sources of
2 support to promote a stable and sustainable
3 business model without the need for long-term
4 Federal funding.

5 “(3) SUPPORT.—The Secretary, acting through
6 the Director, shall carry out the purposes set forth
7 in paragraph (2) by supporting—

8 “(A) the Network for Manufacturing Inno-
9 vation established under subsection (b); and

10 “(B) the establishment of centers for man-
11 ufacturing innovation.

12 “(4) DIRECTOR.—The Secretary shall carry out
13 the Program through the Director.

14 “(b) ESTABLISHMENT OF NETWORK FOR MANUFAC-
15 TURING INNOVATION.—

16 “(1) IN GENERAL.—As part of the Program,
17 the Secretary shall establish a network of centers for
18 manufacturing innovation.

19 “(2) DESIGNATION.—The network established
20 under paragraph (1) shall be known as the ‘Network
21 for Manufacturing Innovation’ (referred to in this
22 section as the ‘Network’).

23 “(c) CENTERS FOR MANUFACTURING INNOVATION.—

1 “(1) IN GENERAL.—For purposes of this sec-
2 tion, a ‘center for manufacturing innovation’ is a
3 center that—

4 “(A) has been established by a person or
5 group of persons to address challenges in ad-
6 vanced manufacturing and to assist manufac-
7 turers in retaining or expanding industrial pro-
8 duction and jobs in the United States;

9 “(B) has a predominant focus on a man-
10 ufacturing process, novel material, enabling tech-
11 nology, supply chain integration methodology,
12 or another relevant aspect of advanced manu-
13 facturing, such as nanotechnology applications,
14 advanced ceramics, photonics and optics, com-
15 posites, biobased and advanced materials, and
16 tool development for microelectronics;

17 “(C) as determined by the Secretary, has
18 the potential—

19 “(i) to improve the competitiveness of
20 United States manufacturing, including
21 key advanced manufacturing technologies
22 such as nanotechnology, advanced ceram-
23 ics, photonics and optics, composites,
24 biobased and advanced materials, and tool
25 development for microelectronics;

1 “(ii) to accelerate non-Federal invest-
2 ment in advanced manufacturing produc-
3 tion capacity in the United States; or

4 “(iii) to enable the commercial appli-
5 cation of new technologies or industry-wide
6 manufacturing processes; and

7 “(D) includes active participation among
8 representatives from multiple industrial entities,
9 research universities, community colleges, and
10 such other entities as the Secretary considers
11 appropriate, which may include industry-led
12 consortia, career and technical education
13 schools, Federal laboratories, State, local, and
14 tribal governments, businesses, educational in-
15 stitutions, and nonprofit organizations.

16 “(2) ACTIVITIES.—Activities of a center for
17 manufacturing innovation may include the following:

18 “(A) Research, development, and dem-
19 onstration projects, including proof-of-concept
20 development and prototyping, to reduce the
21 cost, time, and risk of commercializing new
22 technologies and improvements in existing tech-
23 nologies, processes, products, and research and
24 development of materials to solve precompetitive

1 industrial problems with economic or national
2 security implications.

3 “(B) Development and implementation of
4 education, training, and workforce recruitment
5 courses, materials, and programs.

6 “(C) Development of innovative methodolo-
7 gies and practices for supply chain integration
8 and introduction of new technologies into sup-
9 ply chains.

10 “(D) Outreach and engagement with small
11 and medium-sized manufacturing enterprises, in
12 addition to large manufacturing enterprises.

13 “(E) Such other activities as the Sec-
14 retary, in consultation with Federal depart-
15 ments and agencies whose missions contribute
16 to or are affected by advanced manufacturing,
17 considers consistent with the purposes described
18 in subsection (a)(2).

19 “(3) ADDITIONAL CENTERS FOR MANUFAC-
20 TURING INNOVATION.—

21 “(A) IN GENERAL.—The National Additive
22 Manufacturing Innovation Institute and other
23 manufacturing centers formally recognized as
24 manufacturing innovation centers pursuant to
25 Federal law or executive actions, or under pend-

1 (1) shall submit to the Secretary an application
2 therefor at such time, in such manner, and con-
3 taining such information as the Secretary may re-
4 quire. The application shall, at a minimum, describe
5 the specific sources and amounts of non-Federal fi-
6 nancial support for the center on the date financial
7 assistance is sought, as well as the anticipated
8 sources and amounts of non-Federal financial sup-
9 port during the period for which the center could be
10 eligible for continued Federal financial assistance
11 under this section.

12 “(3) OPEN PROCESS.—In soliciting applications
13 for financial assistance under paragraph (1), the
14 Secretary shall ensure an open process that will
15 allow for the consideration of all applications rel-
16 evant to advanced manufacturing regardless of tech-
17 nology area.

18 “(4) SELECTION.—

19 “(A) COMPETITIVE, MERIT REVIEW.—In
20 awarding financial assistance under paragraph
21 (1), the Secretary shall use a competitive, merit
22 review process that includes peer review by a di-
23 verse group of individuals with relevant exper-
24 tise from both the private and public sectors.

25 “(B) PARTICIPATION IN PROCESS.—

1 (1) shall submit to the Secretary an application
2 therefor at such time, in such manner, and con-
3 taining such information as the Secretary may re-
4 quire. The application shall, at a minimum, describe
5 the specific sources and amounts of non-Federal fi-
6 nancial support for the center on the date financial
7 assistance is sought, as well as the anticipated
8 sources and amounts of non-Federal financial sup-
9 port during the period for which the center could be
10 eligible for continued Federal financial assistance
11 under this section.

12 “(3) OPEN PROCESS.—In soliciting applications
13 for financial assistance under paragraph (1), the
14 Secretary shall ensure an open process that will
15 allow for the consideration of all applications rel-
16 evant to advanced manufacturing regardless of tech-
17 nology area.

18 “(4) SELECTION.—

19 “(A) COMPETITIVE, MERIT REVIEW.—In
20 awarding financial assistance under paragraph
21 (1), the Secretary shall use a competitive, merit
22 review process that includes peer review by a di-
23 verse group of individuals with relevant exper-
24 tise from both the private and public sectors.

25 “(B) PARTICIPATION IN PROCESS.—

1 “(j) IN GENERAL.—No political ap-
2 pointee may participate on a peer review
3 panel. The Secretary shall implement a
4 conflict of interest policy that ensures pub-
5 lic transparency and accountability, and re-
6 quires full disclosure of any real or poten-
7 tial conflicts of interest on the parts of in-
8 dividuals that participate in the merit se-
9 lection process.

10 “(ii) DEFINITION.—For purposes of
11 this subparagraph, the term ‘political ap-
12 pointee’ means any individual who—

13 “(I) is employed in a position de-
14 scribed under sections 5312 through
15 5316 of title 5, United States Code,
16 (relating to the Executive Schedule);

17 “(II) is a limited term appointee,
18 limited emergency appointee, or non-
19 career appointee in the Senior Execu-
20 tive Service, as defined under para-
21 graphs (5), (6), and (7), respectively,
22 of section 3132(a) of title 5, United
23 States Code; or

24 “(III) is employed in a position
25 in the executive branch of the Govern-

1 ment of a confidential or policy-deter-
2 mining character under schedule C of
3 subpart C of part 213 of title 5 of the
4 Code of Federal Regulations.

5 “(C) PERFORMANCE MEASUREMENT,
6 TRANSPARENCY, AND ACCOUNTABILITY.—For
7 each award of financial assistance under para-
8 graph (1), the Secretary shall—

9 “(i) make publicly available at the
10 time of the award a description of the
11 bases for the award, including an expla-
12 nation of the relative merits of the winning
13 applicant as compared to other applica-
14 tions received, if applicable; and

15 “(ii) develop and implement metrics-
16 based performance measures to assess the
17 effectiveness of the activities funded.

18 “(D) COLLABORATION.—In awarding fi-
19 nancial assistance under paragraph (1), the
20 Secretary shall, acting through the National
21 Program Office established under subsection
22 (f)(1), collaborate with Federal departments
23 and agencies whose missions contribute to or
24 are affected by advanced manufacturing.

1 “(E) CONSIDERATIONS.—In selecting a
2 person who submitted an application under
3 paragraph (2) for an award of financial assist-
4 ance under paragraph (1), the Secretary shall
5 consider, at a minimum, the following:

6 “(i) The potential of the center for
7 manufacturing innovation to advance do-
8 mestic manufacturing and the likelihood of
9 economic impact in the predominant focus
10 areas of the center for manufacturing in-
11 novation.

12 “(ii) The commitment of continued fi-
13 nancial support, advice, participation, and
14 other contributions from non-Federal
15 sources, to provide leverage and resources
16 to promote a stable and sustainable busi-
17 ness model without the need for long-term
18 Federal funding.

19 “(iii) Whether the financial support
20 provided to the center for manufacturing
21 innovation from non-Federal sources sig-
22 nificantly exceeds the requested Federal fi-
23 nancial assistance.

24 “(iv) How the center for manufac-
25 turing innovation will increase the non-

1 Federal investment in advanced manufac-
2 turing research in the United States.

3 “(v) How the center for manufac-
4 turing innovation will engage with small
5 and medium-sized manufacturing enter-
6 prises, to improve the capacity of such en-
7 terprises to commercialize new processes
8 and technologies.

9 “(vi) How the center for manufac-
10 turing innovation will carry out educational
11 and workforce activities that meet indus-
12 trial needs related to the predominant
13 focus areas of the center.

14 “(vii) How the center for manufac-
15 turing innovation will advance economic
16 competitiveness and generate substantial
17 benefits to the Nation that extend beyond
18 the direct return to participants in the
19 Program.

20 “(viii) Whether the predominant focus
21 of the center for manufacturing innovation
22 is a manufacturing process, novel material,
23 enabling technology, supply chain integra-
24 tion methodology, or other relevant aspect
25 of advanced manufacturing that has not

1 “(C) FUNDING DECREASE.—The amount
2 of financial assistance provided to a center of
3 manufacturing innovation under paragraph (1)
4 shall decrease after the second year of funding
5 for the center, and shall continue to decrease
6 thereafter in each year in which financial assist-
7 ance is provided, unless the Secretary deter-
8 mines that—

9 “(i) the center is otherwise meeting
10 its stated goals and metrics under this sec-
11 tion;

12 “(ii) unforeseen circumstances have
13 altered the center’s anticipated funding;
14 and

15 “(iii) the center can identify future
16 non-Federal funding sources that would
17 warrant a temporary exemption from the
18 limitations established in this subpara-
19 graph.

20 “(c) FUNDING.—

21 “(1) GENERAL RULE.—Except as provided in
22 paragraph (2), no funds are authorized to be appro-
23 priated by the Revitalize American Manufacturing
24 and Innovation Act of 2014 for carrying out this
25 section.

1 “(C) FUNDING DECREASE.—The amount
2 of financial assistance provided to a center of
3 manufacturing innovation under paragraph (1)
4 shall decrease after the second year of funding
5 for the center, and shall continue to decrease
6 thereafter in each year in which financial assist-
7 ance is provided, unless the Secretary deter-
8 mines that—

9 “(i) the center is otherwise meeting
10 its stated goals and metrics under this sec-
11 tion;

12 “(ii) unforeseen circumstances have
13 altered the center’s anticipated funding;
14 and

15 “(iii) the center can identify future
16 non-Federal funding sources that would
17 warrant a temporary exemption from the
18 limitations established in this subpara-
19 graph.

20 “(c) FUNDING.—

21 “(1) GENERAL RULE.—Except as provided in
22 paragraph (2), no funds are authorized to be appro-
23 priated by the Revitalize American Manufacturing
24 and Innovation Act of 2014 for carrying out this
25 section.

1 “(2) AUTHORITY.—

2 “(A) NIST INDUSTRIAL TECHNICAL SERV-
3 ICES ACCOUNT.—The Secretary may use not to
4 exceed \$5,000,000 for each of the fiscal years
5 2015 through 2024 to carry out this section
6 from amounts appropriated to the Institute for
7 Industrial Technical Services.

8 “(B) ENERGY EFFICIENCY AND RENEW-
9 ABLE ENERGY ACCOUNT.—The Secretary of
10 Energy may transfer to the Institute not to ex-
11 ceed \$250,000,000 for the period encompassing
12 fiscal years 2015 through 2024 for the Sec-
13 retary to carry out this section from amounts
14 appropriated for advanced manufacturing re-
15 search and development within the Energy Effi-
16 ciency and Renewable Energy account for the
17 Department of Energy.

18 “(f) NATIONAL PROGRAM OFFICE.—

19 “(1) ESTABLISHMENT.—The Secretary shall es-
20 tablish, within the Institute, the National Office of
21 the Network for Manufacturing Innovation Program
22 (referred to in this section as the ‘National Program
23 Office’), which shall oversee and carry out the Pro-
24 gram.

1 “(2) FUNCTIONS.—The functions of the Na-
2 tional Program Office are—

3 “(A) to oversee the planning, management,
4 and coordination of the Program;

5 “(B) to enter into memorandums of under-
6 standing with Federal departments and agen-
7 cies whose missions contribute to or are af-
8 fected by advanced manufacturing, to carry out
9 the purposes described in subsection (a)(2);

10 “(C) to develop, not later than 1 year after
11 the date of enactment of the Revitalize Amer-
12 ican Manufacturing and Innovation Act of
13 2014, and update not less frequently than once
14 every 3 years thereafter, a strategic plan to
15 guide the Program;

16 “(D) to establish such procedures, proce-
17 dures, and criteria as may be necessary and ap-
18 propriate to maximize cooperation and coordi-
19 nate the activities of the Program with pro-
20 grams and activities of other Federal depart-
21 ments and agencies whose missions contribute
22 to or are affected by advanced manufacturing;

23 “(E) to establish a clearinghouse of public
24 information related to the activities of the Pro-
25 gram; and

1 “(P) to act as a convener of the Network.

2 “(3) RECOMMENDATIONS.—In developing and
3 updating the strategic plan under paragraph (2)(C),
4 the Secretary shall solicit recommendations and ad-
5 vice from a wide range of stakeholders, including in-
6 dustry, small and medium-sized manufacturing en-
7 terprises, research universities, community colleges,
8 and other relevant organizations and institutions on
9 an ongoing basis.

10 “(4) REPORT TO CONGRESS.—Upon completion,
11 the Secretary shall transmit the strategic plan re-
12 quired under paragraph (2)(C) to the Committee on
13 Commerce, Science, and Transportation of the Sen-
14 ate and the Committee on Science, Space, and Tech-
15 nology of the House of Representatives.

16 “(5) HOLLINGS MANUFACTURING EXTENSION
17 PARTNERSHIP.—The Secretary shall ensure that the
18 National Program Office incorporates the Hollings
19 Manufacturing Extension Partnership into Program
20 planning to ensure that the results of the Program
21 reach small and medium-sized entities.

22 “(6) DETAILEES.—Any Federal Government
23 employee may be detailed to the National Program
24 Office without reimbursement. Such detail shall be

1 without interruption or loss of civil service status or
2 privilege.

3 “(g) REPORTING AND AUDITING.—

4 “(1) ANNUAL REPORTS TO THE SECRETARY.—

5 “(A) IN GENERAL.—The Secretary shall
6 require each recipient of financial assistance
7 under subsection (d)(1) to annually submit a
8 report to the Secretary that describes the fi-
9 nances and performance of the center for man-
10 ufacturing innovation for which such assistance
11 was awarded.

12 “(B) ELEMENTS.—Each report submitted
13 under subparagraph (A) shall include—

14 “(i) an accounting of expenditures of
15 amounts awarded to the recipient under
16 subsection (d)(1); and

17 “(ii) consistent with the metrics-based
18 performance measures developed and im-
19 plemented by the Secretary under this sec-
20 tion, a description of the performance of
21 the center for manufacturing innovation
22 with respect to—

23 “(I) its goals, plans, financial
24 support, and accomplishments; and

FATBSCUMANINN14_002.XML

20

1 “(II) how the center for manu-
2 facturing innovation has furthered the
3 purposes described in subsection
4 (a)(2).

5 “(2) ANNUAL REPORTS TO CONGRESS.—

6 “(A) IN GENERAL.—Not less frequently
7 than once each year until December 31, 2024,
8 the Secretary shall submit a report to Congress
9 that describes the performance of the Program
10 during the most recent 1-year period.

11 “(B) ELEMENTS.—Each report submitted
12 under subparagraph (A) shall include, for the
13 period covered by the report—

14 “(i) a summary and assessment of the
15 reports received by the Secretary under
16 paragraph (1);

17 “(ii) an accounting of the funds ex-
18 pended by the Secretary under the Pro-
19 gram, including any temporary exemptions
20 granted from the requirements of sub-
21 section (d)(5)(C);

22 “(iii) an assessment of the participa-
23 tion in, and contributions to, the Network
24 by any centers for manufacturing innova-

1 tion not receiving financial assistance
2 under subsection (d)(1); and

3 “(iv) an assessment of the Program
4 with respect to meeting the purposes de-
5 scribed in subsection (a)(2).

6 “(3) ASSESSMENTS BY GAO.—

7 “(A) ASSESSMENTS.—Not less frequently
8 than once every 2 years, the Comptroller Gen-
9 eral shall submit to Congress an assessment of
10 the operation of the Program during the most
11 recent 2-year period.

12 “(B) FINAL ASSESSMENT.—Not later than
13 December 31, 2024, the Comptroller General
14 shall submit to Congress a final report regard-
15 ing the overall success of the Program.

16 “(C) ELEMENTS.—Each assessment sub-
17 mitted under subparagraph (A) or (B) shall in-
18 clude, for the period covered by the report—

19 “(i) a review of the management, co-
20 ordination, and industry utility of the Pro-
21 gram;

22 “(ii) an assessment of the extent to
23 which the Program has furthered the pur-
24 poses described in subsection (a)(2);

1 “(iii) such recommendations for legis-
2 lative and administrative action as the
3 Comptroller General considers appropriate
4 to improve the Program; and

5 “(iv) an assessment as to whether any
6 prior recommendations for improvement
7 made by the Comptroller General have
8 been implemented or adopted.

9 “(h) ADDITIONAL AUTHORITIES.—

10 “(1) APPOINTMENT OF PERSONNEL AND CON-
11 TRACTS.—The Secretary may appoint such per-
12 sonnel and enter into such contracts, financial as-
13 sistance agreements, and other agreements as the
14 Secretary considers necessary or appropriate to
15 carry out the Program, including support for re-
16 search and development activities involving a center
17 for manufacturing innovation.

18 “(2) TRANSFER OF FUNDS.—The Secretary
19 may transfer to other Federal agencies such sums as
20 the Secretary considers necessary or appropriate to
21 carry out the Program. No funds so transferred may
22 be used to reimburse or otherwise pay for the costs
23 of financial assistance incurred or commitments of
24 financial assistance made prior to the date of enact-

1 ment of the Revitalize American Manufacturing and
2 Innovation Act of 2014.

3 “(3) AUTHORITY OF OTHER AGENCIES.—In the
4 event that the Secretary exercises the authority to
5 transfer funds to another agency under paragraph
6 (2), such agency may accept such funds to award
7 and administer, under the same conditions and con-
8 straints applicable to the Secretary, all aspects of fi-
9 nancial assistance awards under this section.

10 “(4) USE OF RESOURCES.—In furtherance of
11 the purposes of the Program, the Secretary may use,
12 with the consent of a covered entity and with or
13 without reimbursement, the land, services, equip-
14 ment, personnel, and facilities of such covered entity.

15 “(5) ACCEPTANCE OF RESOURCES.—In addition
16 to amounts appropriated to carry out the Program,
17 the Secretary may accept funds, services, equipment,
18 personnel, and facilities from any covered entity to
19 carry out the Program, subject to the same condi-
20 tions and constraints otherwise applicable to the
21 Secretary under this section.

22 “(6) COVERED ENTITY.—For purposes of this
23 subsection, a covered entity is any Federal depart-
24 ment, Federal agency, instrumentality of the United
25 States, State, local government, tribal government,

FATBSCUMANINN14_002.XML

24

1 territory, or possession of the United States, or of
2 any political subdivision thereof, or international or-
3 ganization, or any public or private entity or indi-
4 vidual.

5 “(i) PATENTS.—Chapter 18 of title 35, United States
6 Code, shall apply to any funding agreement (as defined
7 in section 201 of that title) awarded to new or existing
8 centers for manufacturing innovation.”.

9 **SEC. 4. NATIONAL STRATEGIC PLAN FOR ADVANCED MANU-
10 FACTURING.**

11 Section 102 of the America COMPETES Reauthor-
12 ization Act of 2010 (42 U.S.C. 6622) is amended—

13 (1) in subsection (a), by adding at the end the
14 following: “In furtherance of the Committee’s work,
15 the Committee shall consult with the National Eco-
16 nomic Council.”;

17 (2) in subsection (b), by striking paragraph (7)
18 and inserting the following:

19 “(7) develop and update a national strategic
20 plan for advanced manufacturing in accordance with
21 subsection (e).”; and

22 (3) by striking subsection (e) and inserting the
23 following:

24 “(e) NATIONAL STRATEGIC PLAN FOR ADVANCED
25 MANUFACTURING.—

1 agency in meeting the objectives of the strategic
2 plan;

3 “(D) describe how the Federal agencies
4 and Federally funded research and development
5 centers supporting advanced manufacturing re-
6 search and development will foster the transfer
7 of research and development results into new
8 manufacturing technologies and United States-
9 based manufacturing of new products and pro-
10 cesses for the benefit of society to ensure na-
11 tional, energy, and economic security;

12 “(E) describe how such Federal agencies
13 and centers will strengthen all levels of manu-
14 facturing education and training programs to
15 ensure an adequate, well-trained workforce;

16 “(F) describe how such Federal agencies
17 and centers will assist small and medium-sized
18 manufacturers in developing and implementing
19 new products and processes;

20 “(G) analyze factors that impact innova-
21 tion and competitiveness for United States ad-
22 vanced manufacturing, including—

23 “(i) technology transfer and commer-
24 cialization activities;

1 agency in meeting the objectives of the strategic
2 plan;

3 “(D) describe how the Federal agencies
4 and Federally funded research and development
5 centers supporting advanced manufacturing re-
6 search and development will foster the transfer
7 of research and development results into new
8 manufacturing technologies and United States-
9 based manufacturing of new products and pro-
10 cesses for the benefit of society to ensure na-
11 tional, energy, and economic security;

12 “(E) describe how such Federal agencies
13 and centers will strengthen all levels of manu-
14 facturing education and training programs to
15 ensure an adequate, well-trained workforce;

16 “(F) describe how such Federal agencies
17 and centers will assist small and medium-sized
18 manufacturers in developing and implementing
19 new products and processes;

20 “(G) analyze factors that impact innova-
21 tion and competitiveness for United States ad-
22 vanced manufacturing, including—

23 “(i) technology transfer and commer-
24 cialization activities;

1 “(ii) the adequacy of the national se-
2 curity industrial base;
3 “(iii) the capabilities of the domestic
4 manufacturing workforce;
5 “(iv) export opportunities and trade
6 policies;
7 “(v) financing, investment, and tax-
8 ation policies and practices;
9 “(vi) emerging technologies and mar-
10 kets; and
11 “(vii) advanced manufacturing re-
12 search and development undertaken by
13 competing nations; and
14 “(H) elicit and consider the recommenda-
15 tions of a wide range of stakeholders, including
16 representatives from diverse manufacturing
17 companies, academia, and other relevant orga-
18 nizations and institutions.
19 “(4) UPDATES.—Not later than May 1, 2018,
20 and not less frequently than once every 4 years
21 thereafter, the President shall submit to Congress,
22 and publish on an Internet website that is accessible
23 to the public, an update of the strategic plan sub-
24 mitted under paragraph (1). Such updates shall be

1 developed in accordance with the procedures set
2 forth under this subsection.

3 “(5) REQUIREMENT TO CONSIDER STRATEGY IN
4 THE BUDGET.—In preparing the budget for a fiscal
5 year under section 1105(a) of title 31, United States
6 Code, the President shall include information re-
7 garding the consistency of the budget with the goals
8 and recommendations included in the strategic plan
9 developed under this subsection applying to that fis-
10 cal year.

11 “(6) AMP STEERING COMMITTEE INPUT.—The
12 Advanced Manufacturing Partnership Steering Com-
13 mittee of the President’s Council of Advisors on
14 Science and Technology shall provide input, perspec-
15 tive, and recommendations to assist in the develop-
16 ment and updates of the strategic plan under this
17 subsection.”.

18 **SEC. 5. REGIONAL INNOVATION PROGRAM.**

19 Section 27 of the Stevenson-Wydler Technology Inno-
20 vation Act of 1980 (15 U.S.C. 3722) is amended to read
21 as follows:

22 **“SEC. 27. REGIONAL INNOVATION PROGRAM.**

23 “(a) ESTABLISHMENT.—The Secretary shall estab-
24 lish a regional innovation program to encourage and sup-

1 port the development of regional innovation strategies, in-
2 cluding regional innovation clusters.

3 “(b) CLUSTER GRANTS.—

4 “(1) IN GENERAL.—As part of the program es-
5 tablished under subsection (a), the Secretary may
6 award grants on a competitive basis to eligible re-
7 cipients for activities relating to the formation and
8 development of regional innovation clusters.

9 “(2) PERMISSIBLE ACTIVITIES.—Grants award-
10 ed under this subsection may be used for activities
11 determined appropriate by the Secretary, including
12 the following:

13 “(A) Feasibility studies.

14 “(B) Planning activities.

15 “(C) Technical assistance.

16 “(D) Developing or strengthening commu-
17 nication and collaboration between and among
18 participants of a regional innovation cluster.

19 “(E) Attracting additional participants to
20 a regional innovation cluster.

21 “(F) Facilitating market development of
22 products and services developed by a regional
23 innovation cluster, including through dem-
24 onstration, deployment, technology transfer,
25 and commercialization activities.

1 “(G) Developing relationships between a
2 regional innovation cluster and entities or clus-
3 ters in other regions.

4 “(H) Interacting with the public and State
5 and local governments to meet the goals of the
6 cluster.

7 “(3) ELIGIBLE RECIPIENT DEFINED.—In this
8 subsection, the term ‘eligible recipient’ means—

9 “(A) a State;

10 “(B) an Indian tribe;

11 “(C) a city or other political subdivision of
12 a State;

13 “(D) an entity that—

14 “(i) is a nonprofit organization, an in-
15 stitution of higher education, a public-pri-
16 vate partnership, a science or research
17 park, a Federal laboratory, or an economic
18 development organization or similar entity;
19 and

20 “(ii) has an application that is sup-
21 ported by a State or a political subdivision
22 of a State; or

23 “(E) a consortium of any of the entities
24 described in subparagraphs (A) through (D).

25 “(4) APPLICATION.—

FATBSCUMANINN14_002.XML

32

1 “(iv) whether the participants in the
2 regional innovation cluster have access to,
3 or contribute to, a well-trained workforce;

4 “(v) whether the participants in the
5 regional innovation cluster are capable of
6 attracting additional funds from non-Fed-
7 eral sources; and

8 “(vi) the likelihood that the partici-
9 pants in the regional innovation cluster will
10 be able to sustain activities once grant
11 funds under this subsection have been ex-
12 pended.

13 “(C) SPECIAL CONSIDERATION.—The Sec-
14 retary shall give special consideration to appli-
15 cations from regions that contain communities
16 negatively impacted by trade.

17 “(5) SPECIAL CONSIDERATION.—The Secretary
18 shall give special consideration to an eligible recipi-
19 ent who agrees to collaborate with local workforce
20 investment area boards.

21 “(6) COST SHARE.—The Secretary may not
22 provide more than 50 percent of the total cost of
23 any activity funded under this subsection.

24 “(7) OUTREACH TO RURAL COMMUNITIES.—
25 The Secretary shall conduct outreach to public and

FATBSCMANINN14_002.XML

32

1 “(iv) whether the participants in the
2 regional innovation cluster have access to,
3 or contribute to, a well-trained workforce;

4 “(v) whether the participants in the
5 regional innovation cluster are capable of
6 attracting additional funds from non-Fed-
7 eral sources; and

8 “(vi) the likelihood that the partici-
9 pants in the regional innovation cluster will
10 be able to sustain activities once grant
11 funds under this subsection have been ex-
12 pended.

13 “(C) SPECIAL CONSIDERATION.—The Sec-
14 retary shall give special consideration to appli-
15 cations from regions that contain communities
16 negatively impacted by trade.

17 “(5) SPECIAL CONSIDERATION.—The Secretary
18 shall give special consideration to an eligible recipi-
19 ent who agrees to collaborate with local workforce
20 investment area boards.

21 “(6) COST SHARE.—The Secretary may not
22 provide more than 50 percent of the total cost of
23 any activity funded under this subsection.

24 “(7) OUTREACH TO RURAL COMMUNITIES.—
25 The Secretary shall conduct outreach to public and

1 private sector entities in rural communities to en-
2 courage those entities to participate in regional inno-
3 vation cluster activities under this subsection.

4 “(8) FUNDING.—The Secretary may accept
5 funds from other Federal agencies to support grants
6 and activities under this subsection.

7 “(c) REGIONAL INNOVATION RESEARCH AND INFOR-
8 MATION PROGRAM.—

9 “(1) IN GENERAL.—As part of the program es-
10 tablished under subsection (a), the Secretary shall
11 establish a regional innovation research and infor-
12 mation program—

13 “(A) to gather, analyze, and disseminate
14 information on best practices for regional inno-
15 vation strategies (including regional innovation
16 clusters), including information relating to how
17 innovation, productivity, and economic develop-
18 ment can be maximized through such strategies;

19 “(B) to provide technical assistance, in-
20 cluding through the development of technical
21 assistance guides, for the development and im-
22 plementation of regional innovation strategies
23 (including regional innovation clusters);

24 “(C) to support the development of rel-
25 evant metrics and measurement standards to

1 evaluate regional innovation strategies (includ-
2 ing regional innovation clusters), including the
3 extent to which such strategies stimulate inno-
4 vation, productivity, and economic development;
5 and

6 “(D) to collect and make available data on
7 regional innovation cluster activity in the
8 United States, including data on—

9 “(i) the size, specialization, and com-
10 petitiveness of regional innovation clusters;

11 “(ii) the regional domestic product
12 contribution, total jobs and earnings by
13 key occupations, establishment size, nature
14 of specialization, patents, Federal research
15 and development spending, and other rel-
16 evant information for regional innovation
17 clusters; and

18 “(iii) supply chain product and service
19 flows within and between regional innova-
20 tion clusters.

21 “(2) RESEARCH GRANTS.—The Secretary may
22 award research grants on a competitive basis to sup-
23 port and further the goals of the program estab-
24 lished under this subsection.

1 “(3) DISSEMINATION OF INFORMATION.—Data
2 and analysis compiled by the Secretary under the
3 program established in this subsection shall be made
4 available to other Federal agencies, State and local
5 governments, and nonprofit and for-profit entities.

6 “(4) REGIONAL INNOVATION GRANT PRO-
7 GRAM.—The Secretary shall incorporate data and
8 analysis relating to any grant under subsection (b)
9 into the program established under this subsection.

10 “(d) INTERAGENCY COORDINATION.—

11 “(1) IN GENERAL.—To the maximum extent
12 practicable, the Secretary shall ensure that the ac-
13 tivities carried out under this section are coordinated
14 with, and do not duplicate the efforts of, other pro-
15 grams at the Department of Commerce or other
16 Federal agencies.

17 “(2) COLLABORATION.—

18 “(A) IN GENERAL.—The Secretary shall
19 explore and pursue collaboration with other
20 Federal agencies, including through multi-
21 agency funding opportunities, on regional inno-
22 vation strategies.

23 “(B) SMALL BUSINESSES.—The Secretary
24 shall ensure that such collaboration with Fed-

1 eral agencies prioritizes the needs and chal-
2 lenges of small businesses.

3 “(e) EVALUATION.—

4 “(1) IN GENERAL.—Not later than 3 years
5 after the date of enactment of the Revitalize Amer-
6 ican Manufacturing and Innovation Act of 2014, the
7 Secretary shall enter into a contract with an inde-
8 pendent entity, such as the National Academy of
9 Sciences, to conduct an evaluation of the program
10 established under subsection (a).

11 “(2) REQUIREMENTS.—The evaluation shall in-
12 clude—

13 “(A) whether the program is achieving its
14 goals;

15 “(B) any recommendations for how the
16 program may be improved; and

17 “(C) a recommendation as to whether the
18 program should be continued or terminated.

19 “(f) DEFINITIONS.—In this section:

20 “(1) REGIONAL INNOVATION CLUSTER.—The
21 term ‘regional innovation cluster’ means a geo-
22 graphically bounded network of similar, synergistic,
23 or complementary entities that—

24 “(A) are engaged in or with a particular
25 industry sector and its related sectors;

1 “(B) have active channels for business
2 transactions and communication;

3 “(C) share specialized infrastructure, labor
4 markets, and services; and

5 “(D) leverage the region’s unique competi-
6 tive strengths to stimulate innovation and cre-
7 ate jobs.

8 “(2) STATE.—The term ‘State’ means one of
9 the several States, the District of Columbia, the
10 Commonwealth of Puerto Rico, the Virgin Islands,
11 Guam, American Samoa, the Commonwealth of the
12 Northern Mariana Islands, or any other territory or
13 possession of the United States.

14 “(g) FUNDING.—

15 “(1) GENERAL RULE.—Except as provided in
16 paragraph (2), no funds are authorized to be appro-
17 priated by the Revitalize American Manufacturing
18 and Innovation Act of 2014 for carrying out this
19 section.

20 “(2) AUTHORITY.—The Secretary may use not
21 to exceed \$10,000,000 for each of the fiscal years
22 2015 through 2019 to carry out this section from
23 amounts appropriated for economic development as-
24 sistance programs.”.



SECTION-BY-SECTION ANALYSIS OF

AMENDMENT IN THE NATURE OF A SUBSTITUTE TO H.R. 2996, THE
REVITALIZE AMERICAN MANUFACTURING AND INNOVATION ACT OF 2013**Section by Section—Amendment in the Nature of a Substitute to H.R. 2996****Section 1. Short Title.**

This act may be cited as the “Revitalize American Manufacturing and Innovation Act of 2014.”

Sec. 2. Findings.

This section contains findings regarding the economic impact of manufacturing in the United States. This section states that manufacturers in the United States perform two-thirds of all private-sector research and development in the United States, driving more innovation than any other sector.

Sec. 3. Establishment of Network for Manufacturing Innovation.

This section revises the National Institute of Standards and Technology Act to include a new section to support a Network for Manufacturing Innovation Program. The purpose of the Program is: to improve competitiveness of United States Manufacturing and to increase domestic production; to stimulate United States leadership in advance manufacturing research; to facilitate the transition of innovative technologies into manufacturing capabilities; to facilitate access by manufacturing enterprises to capital-intensive infrastructure; to accelerate the development of an advanced manufacturing workforce; to facilitate peer exchange and documentation of best practices; and to leverage non-federal sources of support to promote a stable and sustainable business model.

This section authorizes support for a network of centers for manufacturing innovation. Centers to: address challenges in advanced manufacturing; have potential to improve the competitiveness of United States manufacturing; accelerate non-federal investment in advanced manufacturing production capacity or enable the commercial application of new technologies or manufacturing processes; and elicit participation among representatives of specified entities. This section specifies the activities that may be undertaken by the centers.

This section stipulates that other existing or planned manufacturing centers formally recognized as manufacturing innovation centers under federal law or executive action shall be considered centers for manufacturing innovation under this act and may, upon request, be recognized as a center for participation in the Network. This section also states that such centers may not receive funds authorized by this act.

This section states that in carrying out the Program, the Secretary of Commerce shall award financial assistance to a person or group of persons to assist in planning, establishing, or supporting a center for manufacturing innovation. This section provides guidelines for applications for assistance and for competitive, merit awards of financial assistance. This section provides guidelines for publicizing information regarding the awards.

This section does not authorize appropriations for the Program. It states that the Secretary may use not to exceed \$5 million for each of the fiscal years 2015 to 2024 to carry out this section from the amounts appropriated to the National Institute of Standards and Technology (NIST) for Industrial Technical Services. The section also authorizes the Secretary of Energy to transfer not to exceed \$250 million for the period encompassing fiscal years 2015 to 2024 to carry out this section from amounts appropriated for advanced manufacturing research and development within the Energy Efficiency and Renewable Energy account for the Department of Energy. This section specifies certain limitations on funding to centers.

This section directs the Secretary to support, within NIST, the National Office of the Network for Manufacturing Innovation Program, to oversee and carry out the Program. This section specifies the functions of the National Program Office, including the development and submission to Congress of a regularly updated strategic plan to guide the Program. This section requires the Secretary to solicit recommendations from a wide range of stakeholders in developing and updating the strategic plan. This section requires the Comptroller General to submit to Congress a biennial assessment of the Program’s operation. This section requires the Sec-

retary to ensure that the National Program Office incorporates the Hollings Manufacturing Extension Partnership into Program planning.

Sec. 4. National Strategic Plan for Advanced Manufacturing.

This section amends the America COMPETES Reauthorization Act of 2010 to require the Committee under the National Science and Technology Council, in consultation with the National Economic Council and various public and private stakeholders, to develop and update a strategic plan to provide guidance for federal programs and activities in support of United States advanced manufacturing competitiveness. This section adds describing the progress made in achieving the objectives from prior strategic plans and analyzing factors that impact innovation and competitiveness for United States advanced manufacturing to the criteria for the strategic plan. This section specifies a schedule for updating the strategic plan. This section requires the President to include information regarding the consistency of the budget with the goals and recommendations included in the strategic plan developed under this section. This section requires the Advanced Manufacturing Partnership Steering Committee of the President's Council of Advisors on Science and Technology to provide input, perspective, and recommendations to assist in the development and updates of the strategic plan under this section.

Sec. 5. Regional Innovation Program.

This section amends the Stevenson-Wydler Act. The Secretary may award funds to Regional Innovation Centers from appropriations for economic development assistance programs, not to exceed \$10,000,000 per fiscal year for fiscal years 2015–2024. No funds are authorized to be appropriated for the Program. This section provides that the Secretary shall conduct outreach in rural communities regarding program participation.

AMENDMENTS

FAM13GRAYSOGRAYSO_297.XML

**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE FOR H.R. 2996
OFFERED BY MR. GRAYSON OF FLORIDA**

Page 3, line 7, strike “domestic production” and insert “the production of goods manufactured predominantly within the United States”.



F:\M13\GRAYSON\GRAYSON_295.XML

**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE FOR H.R. 2996
OFFERED BY MR. GRAYSON OF FLORIDA**

Page 3, line 24, strike “and”.

Page 4, line 4, strike the period and insert “; and”.

Page 4, after line 4, insert the following new sub-
paragraph:

1 “(H) to create and preserve jobs.

Page 12, line 9, insert “, including the creation or
preservation of jobs,” after “economic impact”.

☒

FAM13SCHWEISCHWEL_059.XML

**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE FOR H.R. 2996
OFFERED BY MR. SCHWEIKERT OF ARIZONA**

Page 5, line 15, insert “flexible hybrid technologies,”
after “advanced materials,”.

Page 5, line 24, insert “flexible hybrid technologies,”
after “advanced materials,”.



FAM13KELLILAKELLIL_036.XML

**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE FOR H.R. 2996
OFFERED BY MS. KELLY OF ILLINOIS**

Page 7, line 11, insert “including women and minority owned manufacturing enterprises,” after “medium-sized manufacturing enterprises.”



F:\M13\WILSFL\WILSFL_049.XML

**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE FOR H.R. 2996
OFFERED BY MS. WILSON OF FLORIDA AND MR.
HALL OF TEXAS**

Page 14, after line 5, insert the following new
clause:

1 “(x) How the center for manufac-
2 turing will encourage the education and
3 training of veterans and individuals with
4 disabilities.

F:\M13\ROHRAB\ROHRAB_055.XML

**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE FOR H.R. 2996
OFFERED BY MR. ROHRBACHER OF CALIFORNIA**

Page 27, line 10, strike "and".

Page 27, after line 13, insert the following new
clause:

1 “(viii) the capabilities of the manufac-
2 turing workforce of competing nations;
3 and”.

