

**STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT
OF 1980**

[Public Law 96-480; Approved October 21, 1980]

[As Amended Through P.L. 117-286, Enacted December 27, 2022]

【Currency: This publication is a compilation of the text of Public Law 96-480. It was last amended by the public law listed in the As Amended Through note above and below at the bottom of each page of the pdf version and reflects current law through the date of the enactment of the public law listed at <https://www.govinfo.gov/app/collection/comps/>】

【Note: While this publication does not represent an official version of any Federal statute, substantial efforts have been made to ensure the accuracy of its contents. The official version of Federal law is found in the United States Statutes at Large and in the United States Code. The legal effect to be given to the Statutes at Large and the United States Code is established by statute (1 U.S.C. 112, 204).】

AN ACT To promote United States technological innovation for the achievement of national economic, environmental, and social goals, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the “Stevenson-Wydler Technology Innovation Act of 1980”. 【15 U.S.C. 3701 note】

SEC. 2. 【15 U.S.C. 3701】 FINDINGS.

The Congress finds and declares that:

(1) Technology and industrial innovation are central to the economic, environmental, and social well-being of citizens of the United States.

(2) Technology and industrial innovation offer an improved standard of living, increased public and private sector productivity, creation of new industries and employment opportunities, improved public services and enhanced competitiveness of United States products in world markets.

(3) Many new discoveries and advances in science occur in universities and Federal laboratories, while the application of this new knowledge to commercial and useful public purposes depends largely upon actions by business and labor. Cooperation among academia, Federal laboratories, labor, and industry, in such forms as technology transfer, personnel exchange, joint research projects, and others, should be renewed, expanded, and strengthened.

(4) Small businesses have performed an important role in advancing industrial and technological innovation.

(5) Industrial and technological innovation in the United States may be lagging when compared to historical patterns and other industrialized nations.

(6) Increased industrial and technological innovation would reduce trade deficits, stabilize the dollar, increase productivity gains, increase employment, and stabilize prices.

(7) Government antitrust, economic, trade, patent, procurement, regulatory, research and development, and tax policies have significant impacts upon industrial innovation and development of technology, but there is insufficient knowledge of their effects in particular sectors of the economy.

(8) No comprehensive national policy exists to enhance technological innovation for commercial and public purposes. There is a need for such a policy, including a strong national policy supporting domestic technology transfer and utilization of the science and technology resources of the Federal Government.

(9) It is in the national interest to promote the adaptation of technological innovations to State and local government uses. Technological innovations can improve services, reduce their costs, and increase productivity in State and local governments.

(10) The Federal laboratories and other performers of federally funded research and development frequently provide scientific and technological developments of potential use to State and local governments and private industry. These developments, which include inventions, computer software, and training technologies, should be made accessible to those governments and industry. There is a need to provide means of access and to give adequate personnel and funding support to these means.

(11) The Nation should give fuller recognition to individuals and companies which have made outstanding contributions to the promotion of technology or technological manpower for the improvement of the economic, environmental, or social wellbeing of the United States.

SEC. 3. [15 U.S.C. 3702] PURPOSE.

It is the purpose of this Act to improve the economic, environmental, and social well-being of the United States by—

(1) establishing organizations in the executive branch to study and stimulate technology;

(2) promoting technology development through the establishment of cooperative research centers;

(3) stimulating improved utilization of federally funded technology developments, including inventions, software, and training technologies, by State and local governments and the private sector;

(4) providing encouragement for the development of technology through the recognition of individuals and companies which have made outstanding contributions in technology; and

(5) encouraging the exchange of scientific and technical personnel among academia, industry, and Federal laboratories.

SEC. 4. [15 U.S.C. 3703] DEFINITIONS.

As used in this Act, unless the context otherwise requires, the term—

(1) “Secretary” means the Secretary of Commerce.

(2) “Centers” means Cooperative Research Centers established under section 7 or 9 of this Act.

(3) “Nonprofit institution” means an organization owned and operated exclusively for scientific or educational purposes, no part of the net earnings of which inures to the benefit of any private shareholder or individual.

(4) “Federal laboratory” means any laboratory, any federally funded research and development center, or any center established under section 7 or 9 of this Act that is owned, leased, or otherwise used by a Federal agency and funded by the Federal Government, whether operated by the Government or by a contractor.

(5) “Supporting agency” means either the Department of Commerce or the National Science Foundation, as appropriate.

(6) “Federal agency” means any executive agency as defined in section 105 of title 5, United States Code, and the military departments as defined in section 102 of such title, as well as any agency of the legislative branch of the Federal Government.

(7) “Invention” means any invention or discovery which is or may be patentable or otherwise protected under title 35, United States Code, or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).

(8) “Made” when used in conjunction with any invention means the conception or first actual reduction to practice of such invention.

(9) “Small business firm” means a small business concern as defined in section 2 of Public Law 85–536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration.

(10) “Training technology” means computer software and related materials which are developed by a Federal agency to train employees of such agency, including but not limited to software for computer-based instructional systems and for interactive video disc systems.

(11) “Clearinghouse” means the Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation established by section 6.

SEC. 5. [15 U.S.C. 3704] EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE TECHNOLOGY.

(a) PROGRAM ESTABLISHMENT.—

(1) IN GENERAL.—Beginning in fiscal year 1999, the Secretary shall establish a program to be known as the Experimental Program to Stimulate Competitive Technology (referred to in this subsection as the “program”). The purpose of the program shall be to strengthen the technological competitiveness of those States that have historically received less Federal research and development funds than those received by a majority of the States.

(2) ARRANGEMENTS.—In carrying out the program, the Secretary shall—

(A) enter into such arrangements as may be necessary to provide for the coordination of the program through the

- State committees established under the Experimental Program to Stimulate Competitive Research of the National Science Foundation; and
- (B) cooperate with—
- (i) any State science and technology council established under the program under subparagraph (A); and
- (ii) representatives of small business firms and other appropriate technology-based businesses.
- (3) GRANTS AND COOPERATIVE AGREEMENTS.—In carrying out the program, the Secretary may make grants or enter into cooperative agreements to provide for—
- (A) technology research and development;
- (B) technology transfer from university research;
- (C) technology deployment and diffusion; and
- (D) the strengthening of technological capabilities through consortia comprised of—
- (i) technology-based small business firms;
- (ii) industries and emerging companies;
- (iii) universities; and
- (iv) State and local development agencies and entities.
- (4) REQUIREMENTS FOR MAKING AWARDS.—
- (A) IN GENERAL.—In making awards under this subsection, the Secretary shall ensure that the awards are awarded on a competitive basis that includes a review of the merits of the activities that are the subject of the award.
- (B) MATCHING REQUIREMENT.—The non-Federal share of the activities (other than planning activities) carried out under an award under this subsection shall be not less than 25 percent of the cost of those activities.
- (5) CRITERIA FOR STATES.—The Secretary shall establish criteria for achievement by each State that participates in the program. Upon the achievement of all such criteria, a State shall cease to be eligible to participate in the program.
- (b)¹ COORDINATION.—To the extent practicable, in carrying out subsection (a), the Secretary shall coordinate the program with other programs of the Department of Commerce.
- (c) MINORITY SERVING INSTITUTION DIGITAL AND WIRELESS TECHNOLOGY OPPORTUNITY PROGRAM.—
- (1) IN GENERAL.—The Secretary shall establish a Minority Serving Institution Digital and Wireless Technology Opportunity Program that awards grants, cooperative agreements, and contracts to eligible institutions to enable the eligible institutions in acquiring, and augmenting the institutions' use of, digital and wireless networking technologies to improve the quality and delivery of educational services at eligible institutions.
- (2) APPLICATION AND REVIEW PROCEDURES.—
- (A) IN GENERAL.—To be eligible to receive a grant, cooperative agreement, or contract under this subsection, an

¹Margin so in law.

eligible institution shall submit an application to the Secretary at such time, in such manner, and containing such information as the Secretary may require. Such application, at a minimum, shall include a description of how the funds will be used, including a description of any digital and wireless networking technology to be acquired, and a description of how the institution will ensure that digital and wireless networking technology will be made accessible to, and employed by, students, faculty, and administrators. The Secretary, consistent with subparagraph (C) and in consultation with the advisory council established under subparagraph (B), shall establish procedures to review such applications. The Secretary shall publish the application requirements and review criteria in the Federal Register, along with a statement describing the availability of funds.

(B) **ADVISORY COUNCIL.**—The Secretary shall establish an advisory council to advise the Secretary on the best approaches to encourage maximum participation by eligible institutions in the program established under paragraph (1), and on the procedures to review applications submitted to the program. In selecting the members of the advisory council, the Secretary shall consult with representatives of appropriate organizations, including representatives of eligible institutions, to ensure that the membership of the advisory council includes representatives of minority businesses and eligible institution communities. The Secretary shall also consult with experts in digital and wireless networking technology to ensure that such expertise is represented on the advisory council.

(C) **REVIEW PANELS.**—Each application submitted under this subsection by an eligible institution shall be reviewed by a panel of individuals selected by the Secretary to judge the quality and merit of the proposal, including the extent to which the eligible institution can effectively and successfully utilize the proposed grant, cooperative agreement, or contract to carry out the program described in paragraph (1). The Secretary shall ensure that the review panels include representatives of minority serving institutions and others who are knowledgeable about eligible institutions and technology issues. The Secretary shall ensure that no individual assigned under this subsection to review any application has a conflict of interest with regard to that application. The Secretary shall take into consideration the recommendations of the review panel in determining whether to award a grant, cooperative agreement, or contract to an eligible institution.

(3) **AWARDS.**—

(A) **LIMITATION.**—An eligible institution that receives a grant, cooperative agreement, or contract under this subsection that exceeds \$2,500,000 shall not be eligible to receive another grant, cooperative agreement, or contract under this subsection.

(B) CONSORTIA.—Grants, cooperative agreements, and contracts may only be awarded to eligible institutions. Eligible institutions may seek funding under this subsection for consortia, which may include other eligible institutions, a State or a State educational agency, local educational agencies, institutions of higher education, community-based organizations, national nonprofit organizations, or businesses, including minority businesses.

(C) PLANNING GRANTS.—The Secretary may provide funds to develop strategic plans to implement grants, cooperative agreements, or contracts awarded under this subsection.

(D) INSTITUTIONAL DIVERSITY.—In awarding grants, cooperative agreements, and contracts to eligible institutions, the Secretary shall ensure, to the extent practicable, that awards are made to all types of institutions eligible for assistance under this subsection.

(E) NEED.—In awarding funds under this subsection, the Secretary shall give priority to the eligible institution with the greatest demonstrated need for assistance.

(4) AUTHORIZED ACTIVITIES.—An eligible institution may use a grant, cooperative agreement, or contract awarded under this subsection—

(A) to acquire equipment, instrumentation, networking capability, hardware and software, digital network technology, wireless technology, and infrastructure to further the objective of the program described in paragraph (1);

(B) to develop and provide training, education, and professional development programs, including faculty development, to increase the use of, and usefulness of, digital and wireless networking technology;

(C) to provide teacher education, including the provision of preservice teacher training and in-service professional development at eligible institutions, library and media specialist training, and preschool and teacher aid certification to individuals who seek to acquire or enhance technology skills in order to use digital and wireless networking technology in the classroom or instructional process, including instruction in science, mathematics, engineering, and technology subjects;

(D) to obtain capacity-building technical assistance, including through remote technical support, technical assistance workshops, and distance learning services; or

(E) to foster the use of digital and wireless networking technology to improve research and education, including scientific, mathematics, engineering, and technology instruction.

(5) INFORMATION DISSEMINATION.—The Secretary shall convene an annual meeting of eligible institutions receiving grants, cooperative agreements, or contracts under this subsection to foster collaboration and capacity-building activities among eligible institutions.

(6) MATCHING REQUIREMENT.—The Secretary may not award a grant, cooperative agreement, or contract to an eligi-

ble institution under this subsection unless such institution agrees that, with respect to the costs incurred by the institution in carrying out the program for which the grant, cooperative agreement, or contract was awarded, such institution shall make available, directly, or through donations from public or private entities, non-Federal contributions in an amount equal to 25 percent of the grant, cooperative agreement, or contract awarded by the Secretary, or \$500,000, whichever is the lesser amount. The Secretary shall waive the matching requirement for any institution or consortium with no endowment, or an endowment that has a current dollar value lower than \$50,000,000.

(7) ANNUAL REPORT AND ASSESSMENTS.—

(A) ANNUAL REPORT REQUIRED FROM RECIPIENTS.—

Each eligible institution that receives a grant, cooperative agreement, or contract awarded under this subsection shall provide an annual report to the Secretary on its use of the grant, cooperative agreement, or contract.

(B) INDEPENDENT ASSESSMENTS.—

(i) CONTRACT TO CONDUCT ASSESSMENTS.—Not later than 6 months after the date of enactment of this subsection, the Secretary shall enter into a contract with the National Academy of Public Administration to conduct periodic assessments of the program established under paragraph (1). The assessments shall be conducted once every 3 years during the 10-year period following the date of enactment of this subsection.

(ii) EVALUATIONS AND RECOMMENDATIONS.—The assessments described in clause (i) shall include—

(I) an evaluation of the effectiveness of the program established under paragraph (1) in improving the education and training of students, faculty, and staff at eligible institutions that have been awarded grants, cooperative agreements, or contracts under the program;

(II) an evaluation of the effectiveness of the program in improving access to, and familiarity with, digital and wireless networking technology for students, faculty, and staff at all eligible institutions;

(III) an evaluation of the procedures established under paragraph (2)(A); and

(IV) recommendations for improving the program, including recommendations concerning the continuing need for Federal support.

(iii) REVIEW OF REPORTS.—In carrying out the assessments under this subparagraph, the National Academy of Public Administration shall review the reports submitted to the Secretary under subparagraph (A).

(iv) REPORT TO CONGRESS.—Upon completion of each assessment under this subparagraph, the Secretary shall transmit the assessment to Congress along with a summary of the Secretary's plans, if any,

to implement the recommendations of the National Academy of Public Administration.

(8) DEFINITIONS.—In this subsection:

(A) DIGITAL AND WIRELESS NETWORKING TECHNOLOGY.—The term “digital and wireless networking technology” means computer and communications equipment and software that facilitates the transmission of information in a digital format.

(B) ELIGIBLE INSTITUTION.—The term “eligible institution” means an institution that is—

(i) a part B institution, as defined in section 322(2) of the Higher Education Act of 1965 (20 U.S.C. 1061(2)), an institution identified in subparagraph (A), (B), or (C) of section 326(e)(1) of such Act (20 U.S.C. 1063b(e)(1)(A), (B), or (C)), or a consortium of institutions described in this clause;

(ii) a Hispanic-serving institution, as defined in section 502(a)(5) of the Higher Education Act of 1965 (20 U.S.C. 1101a(a)(5));

(iii) a Tribal College or University, as defined in section 316(b)(3) of the Higher Education Act of 1965 (20 U.S.C. 1059c(b)(3));

(iv) an Alaska Native-serving institution, as defined in section 317(b) of the Higher Education Act of 1965 (20 U.S.C. 1059d(b));

(v) a Native Hawaiian-serving institution, as defined in section 317(b) of the Higher Education Act of 1965 (20 U.S.C. 1059d(b));

(vi) a Predominately Black Institution, as defined in section 318 of the Higher Education Act of 1965 (20 U.S.C. 1059e);

(vii) a Native American-serving, nontribal institution, as defined in section 319 of the Higher Education Act of 1965 (20 U.S.C. 1059f);

(viii) an Asian American and Native American Pacific Islander-serving institution, as defined in section 320 of the Higher Education Act of 1965 (20 U.S.C. 1059g); or

(ix) a minority institution, as defined in section 365 of the Higher Education Act of 1965 (20 U.S.C. 1067k), with an enrollment of needy students, as defined in section 312(d) of the Higher Education Act of 1965 (20 U.S.C. 1058(d)).

(C) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” has the meaning given the term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

(D) LOCAL EDUCATIONAL AGENCY.—The term “local educational agency” has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965.

(E) MINORITY BUSINESS.—The term “minority business” includes HUBZone small business concerns (as de-

fined in section 3(p) of the Small Business Act (15 U.S.C. 632(p)).

(F) **MINORITY INDIVIDUAL.**—The term “minority individual” means an American Indian, Alaskan Native, Black (not of Hispanic origin), Hispanic (including persons of Mexican, Puerto Rican, Cuban, and Central or South American origin), or Pacific Islander individual.

(G) **STATE.**—The term “State” has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965.

(H) **STATE EDUCATIONAL AGENCY.**—The term “State educational agency” has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965.

SEC. 6. [15 U.S.C. 3704a] CLEARINGHOUSE FOR STATE AND LOCAL INITIATIVES ON PRODUCTIVITY, TECHNOLOGY, AND INNOVATION.

(a) **ESTABLISHMENT.**—There is established within the Office of Productivity, Technology, and Innovation a Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation. The Clearinghouse shall serve as a central repository of information on initiatives by State and local governments to enhance the competitiveness of American business through the stimulation of productivity, technology, and innovation and Federal efforts to assist State and local governments to enhance competitiveness.

(b) **RESPONSIBILITIES.**—The Clearinghouse may—

(1) establish relationships with State and local governments, and regional and multistate organizations of such governments, which carry out such initiatives;

(2) collect information on the nature, extent, and effects of such initiatives, particularly information useful to the Congress, Federal agencies, State and local governments, regional and multistate organizations of such governments, businesses, and the public throughout the United States;

(3) disseminate information collected under paragraph (2) through reports, directories, handbooks, conferences, and seminars;

(4) provide technical assistance and advice to such governments with respect to such initiatives, including assistance in determining sources of assistance from Federal agencies which may be available to support such initiatives;

(5) study ways in which Federal agencies, including Federal laboratories, are able to use their existing policies and programs to assist State and local governments, and regional and multistate organizations of such governments, to enhance the competitiveness of American business;

(6) make periodic recommendations to the Secretary, and to other Federal agencies upon their request, concerning modifications in Federal policies and programs which would improve Federal assistance to State and local technology and business assistance programs;

(7) develop methodologies to evaluate State and local programs, and, when requested, advise State and local governments, and regional and multistate organizations of such gov-

ernments, as to which programs are most effective in enhancing the competitiveness of American business through the stimulation of productivity, technology, and innovation; and

(8) make use of, and disseminate, the nationwide study of State industrial extension programs conducted by the Secretary.

(c) **CONTRACTS.**—In carrying out subsection (b), the Secretary may enter into contracts for the purpose of collecting information on the nature, extent, and effects of initiatives.

(d) **TRIENNIAL REPORT.**—The Secretary shall prepare and transmit to the Congress once each 3 years a report on initiatives by State and local governments to enhance the competitiveness of American businesses through the stimulation of productivity, technology, and innovation. The report shall include recommendations to the President, the Congress, and to Federal agencies on the appropriate Federal role in stimulating State and local efforts in this area. The first of these reports shall be transmitted to the Congress before January 1, 1989.

SEC. 7. [15 U.S.C. 3705] COOPERATIVE RESEARCH CENTERS.

(a) **ESTABLISHMENT.**—The Secretary shall provide assistance for the establishment of Cooperative Research Centers. Such Centers shall be affiliated with any university, or other nonprofit institution, or group thereof, that applies for and is awarded a grant or enters into a cooperative agreement under this section. The objective of the Centers is to enhance technological innovation through—

(1) the participation of individuals from industry and universities in cooperative technological innovation activities;

(2) the development of the generic research base, important for technological advance and innovative activity, in which individual firms have little incentive to invest, but which may have significant economic or strategic importance, such as manufacturing technology;

(3) the education and training of individuals in the technological innovation process;

(4) the improvement of mechanisms for the dissemination of scientific, engineering, and technical information among universities and industry;

(5) the utilization of the capability and expertise, where appropriate, that exists in Federal laboratories; and

(6) the development of continuing financial support from other mission agencies, from State and local government, and from industry and universities through, among other means, fees, licenses, and royalties.

(b) **ACTIVITIES.**—The activities of the Centers shall include, but need not be limited to—

(1) research supportive of technological and industrial innovation including cooperative industry-university research;

(2) assistance to individuals and small business in the generation, evaluation and development of technological ideas supportive of industrial innovation and new business ventures;

(3) technical assistance and advisory services to industry, particularly small businesses; and

(4) curriculum development, training, and instruction in invention, entrepreneurship, and industrial innovation. Each Center need not undertake all of the activities under this subsection.

(c) REQUIREMENTS.—Prior to establishing a Center, the Secretary shall find that—

(1) consideration has been given to the potential contribution of the activities proposed under the Center to productivity, employment, and economic competitiveness of the United States;

(2) a high likelihood exists of continuing participation, advice, financial support, and other contributions from the private sector;

(3) the host university or other nonprofit institution has a plan for the management and evaluation of the activities proposed within the particular Center, including:

(A) the agreement between the parties as to the allocation of patent rights on a nonexclusive, partially exclusive, or exclusive license basis to and inventions conceived or made under the auspices of the Center; and

(B) the consideration of means to place the Center, to the maximum extent feasible, on a self-sustaining basis;

(4) suitable consideration has been given to the university's or other nonprofit institution's capabilities and geographical location; and

(5) consideration has been given to any effects upon competition of the activities proposed under the Center.

(d) PLANNING GRANTS.—The Secretary is authorized to make available nonrenewable planning grants to universities or nonprofit institutions for the purpose of developing a plan required under subsection (c)(3).

(e) RESEARCH AND DEVELOPMENT UTILIZATION.—In the promotion of technology from research and development efforts by Centers under this section, chapter 18 of title 35, United States Code, shall apply to the extent not inconsistent with this section.

SEC. 8. [15 U.S.C. 3706] GRANTS AND COOPERATIVE AGREEMENTS.

(a) IN GENERAL.—The Secretary may make grants and enter into cooperative agreements according to the provisions of this section in order to assist any activity consistent with this Act, including activities performed by individuals.

(b) ELIGIBILITY AND PROCEDURE.—Any person or institution may apply to the Secretary for a grant or cooperative agreement available under this section. Application shall be made in such form and manner, and with such content and other submissions, as the Assistant Secretary shall prescribe. The Secretary shall act upon each such application within 90 days after the date on which all required information is received.

(c) TERMS AND CONDITIONS.—

(1) Any grant made, or cooperative agreement entered into, under this section shall be subject to the limitations and provisions set forth in paragraph (2) of this subsection, and to such other terms, conditions, and requirements as the Secretary deems necessary or appropriate.

(2) Any person who receives or utilizes any proceeds of any grant made or cooperative agreement entered into under this section shall keep such records as the Secretary shall by regulation prescribe as being necessary and appropriate to facilitate effective audit and evaluation, including records which fully disclose the amount and disposition by such recipient of such proceeds, the total cost of the program or project in connection with which such proceeds were used, and the amount, if any, of such costs which was provided through other sources.

SEC. 9. [15 U.S.C. 3707] NATIONAL SCIENCE FOUNDATION COOPERATIVE RESEARCH CENTERS.

(a) **ESTABLISHMENT AND PROVISIONS.**—The National Science Foundation shall provide assistance for the establishment of Cooperative Research Centers. Such Centers shall be affiliated with a university or other nonprofit institution, or a group thereof. The objective of the Centers is to enhance technological innovation as provided in section 7(a) through the conduct of activities as provided in section 7(b).

(b) **PLANNING GRANTS.**—The National Science Foundation is authorized to make available nonrenewable planning grants to universities or nonprofit institutions for the purpose of developing the plan as described under section 7(c)(3).

(c) **TERMS AND CONDITIONS.**—Grants, contracts, and cooperative agreements entered into by the National Science Foundation in execution of the powers and duties of the National Science Foundation under this Act shall be governed by the National Science Foundation Act of 1950 and other pertinent Acts.

SEC. 10. [15 U.S.C. 3708] ADMINISTRATIVE ARRANGEMENTS.

(a) **COORDINATION.**—The Secretary and the National Science Foundation shall, on a continuing basis, obtain the advice and cooperation of departments and agencies whose missions contribute to or are affected by the programs established under this Act, including the development of an agenda for research and policy experimentation. These departments and agencies shall include but not be limited to the Departments of Defense, Energy, Education, Health and Human Services, Housing and Urban Development and Space Administration, Small Business Administration, Council of Economic Advisers, Council on Environmental Quality, and Office of Science and Technology Policy.

(b) **COOPERATION.**—It is the sense of the Congress that departments and agencies, including the Federal laboratories, whose missions are affected by, or could contribute to, the programs established under this Act, should, within the limits of budgetary authorizations and appropriations, support or participate in activities or projects authorized by this Act.

(c) **ADMINISTRATIVE AUTHORIZATION.**—

(1) Departments and agencies described in subsection (b) are authorized to participate in, contribute to, and serve as resources for the Centers and for any other activities authorized under this Act.

(2) The Secretary and the National Science Foundation are authorized to receive moneys and to receive other forms of assistance from other departments or agencies to support activi-

ties of the Centers and any other activities authorized under this Act.

(d) COOPERATIVE EFFORTS.—The Secretary and the National Science Foundation shall, on a continuing basis, provide each other the opportunity to comment on any proposed program of activity under section 7, 9, 11, 15, 17, or 20 of this Act before funds are committed to such program in order to mount complementary efforts and avoid duplication.

SEC. 11. [15 U.S.C. 3710] UTILIZATION OF FEDERAL TECHNOLOGY.

(a) POLICY.—(1) It is the continuing responsibility of the Federal Government to ensure the full use of the results of the Nation's Federal investment in research and development. To this end the Federal Government shall strive where appropriate to transfer federally owned or originated technology to State and local governments and to the private sector.

(2) Technology transfer, consistent with mission responsibilities, is a responsibility of each laboratory science and engineering professional.

(3) Each laboratory director shall ensure that efforts to transfer technology are considered positively in laboratory job descriptions, employee promotion policies, and evaluation of the job performance of scientists and engineers in the laboratory.

(b) ESTABLISHMENT OF RESEARCH AND TECHNOLOGY APPLICATIONS OFFICES.—Each Federal laboratory shall establish an Office of Research and Technology Applications. Laboratories having existing organizational structures which perform the functions of this section may elect to combine the Office of Research and Technology Applications within the existing organization. The staffing and funding levels for these offices shall be determined between each Federal laboratory and the Federal agency operating or directing the laboratory, except that (1) each laboratory having 200 or more full-time equivalent scientific, engineering, and related technical positions shall provide one or more full-time equivalent positions as staff for its Office of Research and Technology Applications, and (2) each Federal agency which operates or directs one or more Federal laboratories shall make available sufficient funding, either as a separate line item or from the agency's research and development budget, to support the technology transfer function at the agency and at its laboratories, including support of the Offices of Research and Technology Applications. Furthermore, individuals filling positions in an Office of Research and Technology Applications shall be included in the overall laboratory/agency management development program so as to ensure that highly competent technical managers are full participants in the technology transfer process.

(c) FUNCTIONS OF RESEARCH AND TECHNOLOGY APPLICATIONS OFFICE.—It shall be the function of each Office of Research and Technology Applications—

(1) to prepare application assessments for selected research and development projects in which that laboratory is engaged and which in the opinion of the laboratory may have potential commercial applications.

(2) to provide and disseminate information on federally owned or originated products, processes, and services having

potential application to State and local governments and to private industry;

(3) to cooperate with and assist the National Technical Information Service, the Federal Laboratory Consortium for Technology Transfer, and other organizations which link the research and development resources of that laboratory and the Federal Government as a whole to potential users in State and local government and private industry;

(4) to provide technical assistance to State and local government officials; and

(5) to participate, where feasible, in regional, State, and local programs designed to facilitate or stimulate the transfer of technology for the benefit of the region, State, or local jurisdiction in which the Federal laboratory is located.

Agencies which have established organizational structures outside their Federal laboratories which have as their principal purpose the transfer of federally owned or originated technology to State and local government and to the private sector may elect to perform the functions of this subsection in such organizational structures. No Office of Research and Technology Applications or other organizational structures performing the functions of this subsection shall substantially compete with similar services available in the private sector.

(d) DISSEMINATION OF TECHNICAL INFORMATION.—The National Technical Information Service shall—

(1) serve as a central clearinghouse for the collection, dissemination and transfer of information on federally owned or originated technologies having potential application to State and local governments and to private industry;

(2) utilize the expertise and services of the National Science Foundation and the Federal Laboratory Consortium for Technology Transfer; particularly in dealing with State and local governments;

(3) receive requests for technical assistance from State and local governments, respond to such requests with published information available to the Service, and refer such requests to the Federal Laboratory Consortium for Technology Transfer to the extent that such requests require a response involving more than the published information available to the Service;

(4) provide funding, at the discretion of the Secretary, for Federal laboratories to provide the assistance specified in subsection (c)(3);

(5) use appropriate technology transfer mechanisms such as personnel exchanges and computer-based systems; and

(6) maintain a permanent archival repository and clearinghouse for the collection and dissemination of nonclassified scientific, technical, and engineering information.

(e) ESTABLISHMENT OF FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER.—(1) There is hereby established the Federal Laboratory Consortium for Technology Transfer (hereinafter referred to as the “Consortium”) which, in cooperation with Federal laboratories and the private sector, shall—

(A) develop and (with the consent of the Federal laboratory concerned) administer techniques, training courses, and mate-

rials concerning technology transfer to increase the awareness of Federal laboratory employees regarding the commercial potential of laboratory technology and innovations;

(B) furnish advice and assistance requested by Federal agencies and laboratories for use in their technology transfer programs (including the planning of seminars for small business and other industry);

(C) provide a clearinghouse for requests, received at the laboratory level, for technical assistance from States and units of local governments, businesses, industrial development organizations, not-for-profit organizations including universities, Federal agencies and laboratories, and other persons, and—

(i) to the extent that such requests can be responded to with published information available to the National Technical Information Service, refer such requests to that Service, and

(ii) otherwise refer these requests to the appropriate Federal laboratories and agencies;

(D) facilitate communication and coordination between Offices of Research and Technology Applications of Federal laboratories;

(E) utilize (with the consent of the agency involved) the expertise and services of the National Science Foundation, the Department of Commerce, the National Aeronautics and Space Administration, and other Federal agencies, as necessary;

(F) with the consent of any Federal laboratory, facilitate the use by such laboratory of appropriate technology transfer mechanisms such as personnel exchanges and computer-based systems;

(G) with the consent of any Federal laboratory, assist such laboratory to establish programs using technical volunteers to provide technical assistance to communities related to such laboratory;

(H) facilitate communication and cooperation between Offices of Research and Technology Applications of Federal laboratories and regional, State, and local technology transfer organizations;

(I) when requested, assist colleges or universities, businesses, nonprofit organizations, State or local governments, or regional organizations to establish programs to stimulate research and to encourage technology transfer in such areas as technology program development, curriculum design, long-term research planning, personnel needs projections, and productivity assessments;

(J) seek advice in each Federal laboratory consortium region from representatives of State and local governments, large and small business, universities, and other appropriate persons on the effectiveness of the program (and any such advice shall be provided at no expense to the Government); and

(K) work with the Director of the National Institute on Disability and Rehabilitation Research to compile a compendium of current and projected Federal Laboratory technologies and projects that have or will have an intended or recognized impact on the available range of assistive technology for indi-

viduals with disabilities (as defined in section 3 of the Assistive Technology Act of 1998), including technologies and projects that incorporate the principles of universal design (as defined in section 3 of such Act), as appropriate.

(2) The membership of the Consortium shall consist of the Federal laboratories described in clause (1) of subsection (b) and such other laboratories as may choose to join the Consortium. The representatives to the Consortium shall include a senior staff member of each Federal laboratory which is a member of the Consortium and a senior representative appointed from each Federal agency with one or more member laboratories.

(3) The representatives to the Consortium shall elect a Chairman of the Consortium.

(4) The Director of the National Institute of Standards and Technology shall provide the Consortium, on a reimbursable basis, with administrative services, such as office space, personnel, and support services of the Institute, as requested by the Consortium and approved by such Director.

(5) Each Federal laboratory or agency shall transfer technology directly to users or representatives of users, and shall not transfer technology directly to the Consortium. Each Federal laboratory shall conduct and transfer technology only in accordance with the practices and policies of the Federal agency which owns, leases, or otherwise uses such Federal laboratory.

(6) Not later than one year after the date of the enactment of this subsection, and every year thereafter, the Chairman of the Consortium shall submit a report to the President, to the appropriate authorization and appropriation committees of both Houses of the Congress, and to each agency with respect to which a transfer of funding is made (for the fiscal year or years involved) under paragraph (7), concerning the activities of the Consortium and the expenditures made by it under this subsection during the year for which the report is made. Such report shall include an annual independent audit of the financial statements of the Consortium, conducted in accordance with generally accepted accounting principles.

(7)(A) Subject to subparagraph (B), an amount equal to 0.008 percent of the budget of each Federal agency from any Federal source, including related overhead, that is to be utilized by or on behalf of the laboratories of such agency for a fiscal year referred to in subparagraph (B)(ii) shall be transferred by such agency to the National Institute of Standards at the beginning of the fiscal year involved. Amounts so transferred shall be provided by the Institute to the Consortium for the purpose of carrying out activities of the Consortium under this subsection.

(B) A transfer shall be made by any Federal agency under subparagraph (A), for any fiscal year, only if the amount so transferred by that agency (as determined under such subparagraph) would exceed \$10,000.

(C) The heads of Federal agencies and their designees, and the directors of Federal laboratories, may provide such additional support for operations of the Consortium as they deem appropriate.

(f) AGENCY REPORTS ON UTILIZATION.—

(1) IN GENERAL.—Each Federal agency which operates or directs one or more Federal laboratories or which conducts activities under sections 207 and 209 of title 35, United States Code, shall report annually to the Office of Management and Budget, as part of the agency's annual budget submission, on the activities performed by that agency and its Federal laboratories under the provisions of this section and of sections 207 and 209 of title 35, United States Code.

(2) CONTENTS.—The report shall include—

(A) an explanation of the agency's technology transfer program for the preceding fiscal year and the agency's plans for conducting its technology transfer function, including its plans for securing intellectual property rights in laboratory innovations with commercial promise and plans for managing its intellectual property so as to advance the agency's mission and benefit the competitiveness of United States industry; and

(B) information on technology transfer activities for the preceding fiscal year, including—

(i) the number of patent applications filed;

(ii) the number of patents received;

(iii) the number of fully-executed licenses which received royalty income in the preceding fiscal year, categorized by whether they are exclusive, partially-exclusive, or non-exclusive, and the time elapsed from the date on which the license was requested by the licensee in writing to the date the license was executed;

(iv) the total earned royalty income including such statistical information as the total earned royalty income, of the top 1 percent, 5 percent, and 20 percent of the licenses, the range of royalty income, and the median, except where disclosure of such information would reveal the amount of royalty income associated with an individual license or licensee;

(v) what disposition was made of the income described in clause (iv);

(vi) the number of licenses terminated for cause; and

(vii) any other parameters or discussion that the agency deems relevant or unique to its practice of technology transfer.

(3) COPY TO SECRETARY; ATTORNEY GENERAL; CONGRESS.—The agency shall transmit a copy of the report to the Secretary of Commerce and the Attorney General for inclusion in the annual report to Congress and the President required by subsection (g)(2).

(4) PUBLIC AVAILABILITY.—Each Federal agency reporting under this subsection is also strongly encouraged to make the information contained in such report available to the public through Internet sites or other electronic means.

(g) FUNCTIONS OF THE SECRETARY.—(1) The Secretary, in consultation with other Federal agencies, may—

(A) make available to interested agencies the expertise of the Department of Commerce regarding the commercial poten-

tial of inventions and methods and options for commercialization which are available to the Federal laboratories, including research and development limited partnerships;

(B) develop and disseminate to appropriate agency and laboratory personnel model provisions for use on a voluntary basis in cooperative research and development arrangements; and

(C) furnish advice and assistance, upon request, to Federal agencies concerning their cooperative research and development programs and projects.

(2) REPORTS.—

(A) ANNUAL REPORT REQUIRED.—The Secretary, in consultation with the Attorney General and the Commissioner of Patents and Trademarks, shall submit each fiscal year, beginning 1 year after the enactment of the Technology Transfer Commercialization Act of 2000, a summary report to the President, the United States Trade Representative, and the Congress on the use by Federal agencies and the Secretary of the technology transfer authorities specified in this Act and in sections 207 and 209 of title 35, United States Code.

(B) CONTENT.—The report shall—

(i) draw upon the reports prepared by the agencies under subsection (f);

(ii) discuss technology transfer best practices and effective approaches in the licensing and transfer of technology in the context of the agencies' missions; and

(iii) discuss the progress made toward development of additional useful measures of the outcomes of technology transfer programs of Federal agencies.

(C) PUBLIC AVAILABILITY.—The Secretary shall make the report available to the public through Internet sites or other electronic means.

(3) Not later than one year after the date of the enactment of the Federal Technology Transfer Act of 1986, the Secretary shall submit to the President and the Congress a report regarding—

(A) any copyright provisions or other types of barriers which tend to restrict or limit the transfer of federally funded computer software to the private sector and to State and local governments, and agencies of such State and local governments; and

(B) the feasibility and cost of compiling and maintaining a current and comprehensive inventory of all federally funded training software.

(h) DUPLICATION OF REPORTING.—The reporting obligations imposed by this section—

(1) are not intended to impose requirements that duplicate requirements imposed by the Government Performance and Results Act of 1993 (31 U.S.C. 1101 note);

(2) are to be implemented in coordination with the implementation of that Act; and

(3) are satisfied if an agency provided the information concerning technology transfer activities described in this section

in its annual submission under the Government Performance and Results Act of 1993 (31 U.S.C. 1101 note).

(i) RESEARCH EQUIPMENT.—The Director of a laboratory, or the head of any Federal agency or department, may loan, lease, or give research equipment that is excess to the needs of the laboratory, agency, or department to an educational institution or nonprofit organization for the conduct of technical and scientific education and research activities. Title of ownership shall transfer with a gift under this section.

SEC. 12. [15 U.S.C. 3710a] COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

(a) GENERAL AUTHORITY.—Each Federal agency may permit the director of any of its Government-operated Federal laboratories, and, to the extent provided in an agency-approved joint work statement or, if permitted by the agency, in an agency-approved annual strategic plan, contractor-operated laboratories—

(1) to enter into cooperative research and development agreements on behalf of such agency (subject to subsection (c) of this section) with other Federal agencies; units of State or local government; industrial organizations (including corporations, partnerships, and limited partnerships, and industrial development organizations); public and private foundations; nonprofit organizations (including universities); or other persons (including licensees of inventions owned by the Federal agency); and

(2) to negotiate licensing agreements under section 207 of title 35, United States Code, or under other authorities (in the case of a Government-owned, contractor-operated laboratory, subject to subsection (c) of this section) for inventions made or other intellectual property developed at the laboratory and other inventions or other intellectual property that may be voluntarily assigned to the Government.

(b) ENUMERATED AUTHORITY.—(1) Under an agreement entered into pursuant to subsection (a)(1), the laboratory may grant, or agree to grant in advance, to a collaborating party patent licenses or assignments, or options thereto, in any invention made in whole or in part by a laboratory employee under the agreement, or, subject to section 209 of title 35, United States Code, may grant a license to an invention which is federally owned, for which a patent application was filed before the signing of the agreement, and directly within the scope of the work under the agreement, for reasonable compensation when appropriate. The laboratory shall ensure, through such agreement, that the collaborating party has the option to choose an exclusive license for a pre-negotiated field of use for any such invention under the agreement or, if there is more than one collaborating party, that the collaborating parties are offered the option to hold licensing rights that collectively encompass the rights that would be held under such an exclusive license by one party. In consideration for the Government's contribution under the agreement, grants under this paragraph shall be subject to the following explicit conditions:

(A) A nonexclusive, nontransferable, irrevocable, paid-up license from the collaborating party to the laboratory to practice the invention or have the invention practiced throughout

the world by or on behalf of the Government. In the exercise of such license, the Government shall not publicly disclose trade secrets or commercial or financial information that is privileged or confidential within the meaning of section 552(b)(4) of title 5, United States Code, or which would be considered as such if it had been obtained from a non-Federal party.

(B) If a laboratory assigns title or grants an exclusive license to such an invention, the Government shall retain the right—

(i) to require the collaborating party to grant to a responsible applicant a nonexclusive, partially exclusive, or exclusive license to use the invention in the applicant's licensed field of use, on terms that are reasonable under the circumstances; or

(ii) if the collaborating party fails to grant such a license, to grant the license itself.

(C) The Government may exercise its right retained under subparagraph (B) only in exceptional circumstances and only if the Government determines that—

(i) the action is necessary to meet health or safety needs that are not reasonably satisfied by the collaborating party;

(ii) the action is necessary to meet requirements for public use specified by Federal regulations, and such requirements are not reasonably satisfied by the collaborating party; or

(iii) the collaborating party has failed to comply with an agreement containing provisions described in subsection (c)(4)(B).

This determination is subject to administrative appeal and judicial review under section 203(2) of title 35, United States Code.

(2) Under agreements entered into pursuant to subsection (a)(1), the laboratory shall ensure that a collaborating party may retain title to any invention made solely by its employee in exchange for normally granting the Government a nonexclusive, non-transferable, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government for research or other Government purposes.

(3) Under an agreement entered into pursuant to subsection (a)(1), a laboratory may—

(A) accept, retain, and use funds, personnel, services, and property from a collaborating party and provide personnel, services, and property to a collaborating party;

(B) use funds received from a collaborating party in accordance with subparagraph (A) to hire personnel to carry out the agreement who will not be subject to full-time-equivalent restrictions of the agency;

(C) to the extent consistent with any applicable agency requirements or standards of conduct, permit an employee or former employee of the laboratory to participate in an effort to commercialize an invention made by the employee or former

employee while in the employment or service of the Government; and

(D) waive, subject to reservation by the Government of a nonexclusive, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government, in advance, in whole or in part, any right of ownership which the Federal Government may have to any subject invention made under the agreement by a collaborating party or employee of a collaborating party.

(4) A collaborating party in an exclusive license in any invention made under an agreement entered into pursuant to subsection (a)(1) shall have the right of enforcement under chapter 29 of title 35, United States Code.

(5) A Government-owned, contractor-operated laboratory that enters into a cooperative research and development agreement pursuant to subsection (a)(1) may use or obligate royalties or other income accruing to the laboratory under such agreement with respect to any invention only—

(A) for payments to inventors;

(B) for purposes described in clauses (i), (ii), (iii), and (iv) of section 14(a)(1)(B); and

(C) for scientific research and development consistent with the research and development missions and objectives of the laboratory.

(6)(A) In the case of a laboratory that is part of the National Nuclear Security Administration, a designated official of that Administration may waive any license retained by the Government under paragraph (1)(A), (2), or (3)(D), in whole or in part and according to negotiated terms and conditions, if the designated official finds that the retention of the license by the Government would substantially inhibit the commercialization of an invention that would otherwise serve an important national security mission.

(B) The authority to grant a waiver under subparagraph (A) shall expire on the date that is five years after the date of the enactment of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001. The expiration under the preceding sentence of authority to grant a waiver under subparagraph (A) shall not affect any waiver granted under that subparagraph before the expiration of such authority.

(C) Not later than February 15 of each year, the Administrator for Nuclear Security shall submit to Congress a report on any waivers granted under this paragraph during the preceding year.

(c) CONTRACT CONSIDERATIONS.—(1) A Federal agency may issue regulations on suitable procedures for implementing the provisions of this section; however, implementation of this section shall not be delayed until issuance of such regulations.

(2) The agency in permitting a Federal laboratory to enter into agreements under this section shall be guided by the purposes of this Act.

(3)(A) Any agency using the authority given it under subsection (a) shall review standards of conduct for its employees for resolving potential conflicts of interest to make sure they adequately establish guidelines for situations likely to arise through the use of this authority, including but not limited to cases where

present or former employees or their partners negotiate licenses or assignments of titles to inventions or negotiate cooperative research and development agreements with federal agencies (including the agency with which the employee involved is or was formerly employed).

(B) If, in implementing subparagraph (A), an agency is unable to resolve potential conflicts of interest within its current statutory framework, it shall propose necessary statutory changes to be forwarded to its authorizing committees in Congress.

(4) The laboratory director in deciding what cooperative research and development agreements to enter into shall—

(A) give special consideration to small business firms, and consortia involving small business firms; and

(B) give preference to business units located in the United States which agree that products embodying inventions made under the cooperative research and development agreement or produced through the use of such inventions will be manufactured substantially in the United States and, in the case of any industrial organization or other person subject to the control of a foreign company or government, as appropriate, take into consideration whether or not such foreign government permits United States agencies, organizations, or other persons to enter into cooperative research and development agreements and licensing agreements.

(5)(A) If the head of the agency or his designee desires an opportunity to disapprove or require the modification of any such agreement presented by the director of a Government-operated laboratory, the agreement shall provide a 30-day period within which such action must be taken beginning on the date the agreement is presented to him or her by the head of the laboratory concerned.

(B) In any case in which the head of an agency or his designee disapproves or requires the modification of an agreement presented by the director of a Government-operated laboratory under this section, the head of the agency or such designee shall transmit a written explanation of such disapproval or modification to the head of the laboratory concerned.

(C)(i) Any non-Federal entity that operates a laboratory pursuant to a contract with a Federal agency shall submit to the agency any cooperative research and development agreement that the entity proposes to enter into and the joint work statement if required with respect to that agreement.

(ii) A Federal agency that receives a proposed agreement and joint work statement under clause (i) shall review and approve, request specific modifications to, or disapprove the proposed agreement and joint work statement within 30 days after such submission. No agreement may be entered into by a Government-owned, contractor-operated laboratory under this section before both approval of the agreement and approval of a joint work statement under this clause.

(iii) In any case in which an agency which has contracted with an entity referred to in clause (i) disapproves or requests the modification of a cooperative research and development agreement or joint work statement submitted under that clause, the agency shall

transmit a written explanation of such disapproval or modification to the head of the laboratory concerned.

(iv) Any agency that has contracted with a non-Federal entity to operate a laboratory may develop and provide to such laboratory one or more model cooperative research and development agreements for purposes of standardizing practices and procedures, resolving common legal issues, and enabling review of cooperative research and development agreements to be carried out in a routine and prompt manner.

(v) A Federal agency may waive the requirements of clause (i) or (ii) under such circumstances as the agency considers appropriate.

(6) Each agency shall maintain a record of all agreements entered into under this section.

(7)(A) No trade secrets or commercial or financial information that is privileged or confidential, under the meaning of section 552(b)(4) of title 5, United States Code, which is obtained in the conduct of research or as a result of activities under this Act from a non-Federal party participating in a cooperative research and development agreement shall be disclosed.

(B) The director, or in the case of a contractor-operated laboratory, the agency, for a period of up to 5 years after development of information that results from research and development activities conducted under this Act and that would be a trade secret or commercial or financial information that is privileged or confidential if the information had been obtained from a non-Federal party participating in a cooperative research and development agreement, may provide appropriate protections against the dissemination of such information, including exemption from subchapter II of chapter 5 of title 5, United States Code.

(d) DEFINITION.—As used in this section—

(1) the term “cooperative research and development agreement” means any agreement between one or more Federal laboratories and one or more non-Federal parties under which the Government, through its laboratories, provides personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the laboratory; except that such term does not include a procurement contract or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of title 31, United States Code;

(2) the term “laboratory” means—

(A) a facility or group of facilities owned, leased, or otherwise used by a Federal agency, a substantial purpose of which is the performance of research, development, or engineering by employees of the Federal Government;

(B) a group of Government-owned, contractor-operated facilities (including a weapon production facility of the Department of Energy) under a common contract, when a substantial purpose of the contract is the performance of

research and development, or the production, maintenance, testing, or dismantlement of a nuclear weapon or its components, for the Federal Government; and

(C) a Government-owned, contractor-operated facility (including a weapon production facility of the Department of Energy) that is not under a common contract described in subparagraph (B), and the primary purpose of which is the performance of research and development, or the production, maintenance, testing, or dismantlement of a nuclear weapon or its components, for the Federal Government,

but such term does not include any facility covered by Executive Order No. 12344, dated February 1, 1982, pertaining to the naval nuclear propulsion program;

(3) the term “joint work statement” means a proposal prepared for a Federal agency by the director of a Government-owned, contractor-operated laboratory describing the purpose and scope of a proposed cooperative research and development agreement, and assigning rights and responsibilities among the agency, the laboratory, and any other party or parties to the proposed agreement; and

(4) the term “weapon production facility of the Department of Energy” means a facility under the control or jurisdiction of the Secretary of Energy that is operated for national security purposes and is engaged in the production, maintenance, testing, or dismantlement of a nuclear weapon or its components.

(e) DETERMINATION OF LABORATORY MISSIONS.—For purposes of this section, an agency shall make separate determinations of the mission or missions of each of its laboratories.

(f) RELATIONSHIP TO OTHER LAWS.—Nothing in this section is intended to limit or diminish existing authorities of any agency.

(g) PRINCIPLES.—In implementing this section, each agency which has contracted with a non-Federal entity to operate a laboratory shall be guided by the following principles:

(1) The implementation shall advance program missions at the laboratory, including any national security mission.

(2) Classified information and unclassified sensitive information protected by law, regulation, or Executive order shall be appropriately safeguarded.

SEC. 13. [15 U.S.C. 3710b] REWARDS FOR SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL OF FEDERAL AGENCIES.

The head of each Federal agency that is making expenditures at a rate of more than \$50,000,000 per fiscal year for research and development in its Government-operated laboratories shall use the appropriate statutory authority to develop and implement a cash awards program to reward its scientific, engineering, and technical personnel for—

(1) inventions, innovations computer software, or other outstanding scientific or technological contributions of value to the United States due to commercial application or due to contributions to missions of the Federal agency or the Federal government, or

(2) exemplary activities that promote the domestic transfer of science and technology development within the Federal Gov-

ernment and result in utilization of such science and technology by American industry or business, universities, State or local governments, or other non-Federal parties.

SEC. 14. [15 U.S.C. 3710c] DISTRIBUTION OF ROYALTIES RECEIVED BY FEDERAL AGENCIES.

(a) IN GENERAL.—(1) Except as provided in paragraphs (2) and (4), any royalties or other payments received by a Federal agency from the licensing and assignment of inventions under agreements entered into by Federal laboratories under section 12, and from the licensing of inventions of Federal laboratories under section 207 of title 35, United States Code, or under any other provision of law, shall be retained by the laboratory which produced the invention and shall be disposed of as follows:

(A)(i) The head of the agency or laboratory, or such individual's designee, shall pay each year the first \$2,000, and thereafter at least 15 percent, of the royalties or other payments, other than payments of patent costs as delineated by a license or assignment agreement, to the inventor or coinventors, if the inventor's or coinventor's rights are assigned to the United States.

(ii) An agency or laboratory may provide appropriate incentives, from royalties, or other payments, to laboratory employees who are not an inventor of such inventions but who substantially increased the technical value of such inventions.

(iii) The agency or laboratory shall retain the royalties and other payments received from an invention until the agency or laboratory makes payments to employees of a laboratory under clause (i) or (ii).

(B) The balance of the royalties or other payments shall be transferred by the agency to its laboratories, with the majority share of the royalties or other payments from any invention going to the laboratory where the invention occurred. The royalties or other payments so transferred to any laboratory may be used or obligated by that laboratory during the fiscal year in which they are received or during the 2 succeeding fiscal years—

(i) to reward scientific, engineering, and technical employees of the laboratory, including developers of sensitive or classified technology, regardless of whether the technology has commercial applications;

(ii) to further scientific exchange among the laboratories of the agency;

(iii) for education and training of employees consistent with the research and development missions and objectives of the agency or laboratory, and for other activities that increase the potential for transfer of the technology of the laboratories of the agency;

(iv) for payment of expenses incidental to the administration and licensing of intellectual property by the agency or laboratory with respect to inventions made at that laboratory, including the fees or other costs for the services of other agencies, persons, or organizations for intellectual property management and licensing services; or

(v) for scientific research and development consistent with the research and development missions and objectives of the laboratory.

(C) All royalties or other payments retained by the agency or laboratory after payments have been made pursuant to subparagraphs (A) and (B) that is unobligated and unexpended at the end of the second fiscal year succeeding the fiscal year in which the royalties and other payments were received shall be paid into the Treasury.

(2) If, after payments to inventors under paragraph (1), the royalties or other payments received by an agency in any fiscal year exceed 5 percent of the budget of the agency for that year, 75 percent of such excess shall be paid to the Treasury of the United States and the remaining 25 percent may be used or obligated under paragraph (1)(B). Any funds not so used or obligated shall be paid into the Treasury of the United States.

(3) Any payment made to an employee under this section shall be in addition to the regular pay of the employee and to any other awards made to the employee, and shall not affect the entitlement of the employee to any regular pay, annuity, or award to which he is otherwise entitled or for which he is otherwise eligible or limit the amount thereof. Any payment made to an inventor as such shall continue after the inventor leaves the laboratory or agency. Payments made under this section shall not exceed \$150,000 per year to any one person, unless the President approves a larger award (with the excess over \$150,000 being treated as a Presidential award under section 4504 of title 5, United States Code).

(4) A Federal agency receiving royalties or other payments as a result of invention management services performed for another Federal agency or laboratory under section 207 of title 35, United States Code, may retain such royalties or payments to the extent required to offset payments to inventors under clause (i) of paragraph (1)(A), costs and expenses incurred under clause (iv) of paragraph (1)(B), and the cost of foreign patenting and maintenance for any invention of the other agency. All royalties and other payments remaining after offsetting the payments to inventors, costs, and expenses described in the preceding sentence shall be transferred to the agency for which the services were performed, for distribution in accordance with paragraph (1)(B).

(b) CERTAIN ASSIGNMENTS.—If the invention involved was one assigned to the Federal agency—

(1) by a contractor, grantee, or participant, or an employee of a contractor, grantee, or participant, in an agreement or other arrangement with the agency, or

(2) by an employee of the agency who was not working in the laboratory at the time the invention was made, the agency unit that was involved in such assignment shall be considered to be a laboratory for purposes of this section.

(c) REPORTS.—The Comptroller General shall transmit a report to the appropriate committees of the Senate and House of Representatives on the effectiveness of Federal technology transfer programs, including findings, conclusions, and recommendations for improvements in such programs. The report shall be integrated

with, and submitted at the same time as, the report required by section 202(b)(3) of title 35, United States Code.

SEC. 15. [15 U.S.C. 3710d] EMPLOYEE ACTIVITIES.

(a) **IN GENERAL.**—If a Federal agency which has ownership of or the right of ownership to an invention made by a Federal employee does not intend to file for a patent application or otherwise to promote commercialization of such invention, the agency shall allow the inventor, if the inventor is a Government employee or former employee who made the invention during the course of employment with the Government, to obtain or retain title to the invention (subject to reservation by the Government of a nonexclusive, nontransferrable, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government). In addition, the agency may condition the inventor's right to title on the timely filing of a patent application in cases when the Government determines that it has or may have a need to practice the invention.

(b) **DEFINITION.**—For purposes of this section, Federal employees include “special Government employees” as defined in section 202 of title 18, United States Code.

(c) **RELATIONSHIP TO OTHER LAWS.**—Nothing in this section is intended to limit or diminish existing authorities of any agency.

SEC. 16. [15 U.S.C. 3711] NATIONAL TECHNOLOGY AND INNOVATION MEDAL.

(a) **ESTABLISHMENT.**—There is hereby established a National Technology and Innovation Medal, which shall be of such design and materials and bear such inscriptions as the President, on the basis of recommendations submitted by the Office of Science and Technology Policy, may prescribe.

(b) **AWARD.**—The President shall periodically award the medal, on the basis of recommendations received from the Secretary or on the basis of such other information and evidence as he deems appropriate, to individuals or companies, which in his judgment are deserving of special recognition by reason of their outstanding contributions to the promotion of technology or technological manpower for the improvement of the economic, environmental, or social well-being of the United States.

(c) **PRESENTATION.**—The presentation of the award shall be made by the President with such ceremonies as he may deem proper.

SEC. 17. [15 U.S.C. 3711a] MALCOLM BALDRIGE NATIONAL QUALITY AWARD.

(a) **ESTABLISHMENT.**—There is hereby established the Malcolm Baldrige National Quality Award, which shall be evidenced by a medal bearing the inscriptions “Malcolm Baldrige National Quality Award” and “The Quest for Excellence”. The medal shall be of such design and materials and bear such additional inscriptions as the Secretary may prescribe.

(b) **MAKING AND PRESENTATION OF AWARD.**—(1) The President (on the basis of recommendations received from the Secretary), or the Secretary, shall periodically make the award to companies and other organizations which in the judgment of the President or the Secretary have substantially benefited the economic or social well-

being of the United States through improvements in the quality of their goods or services resulting from the effective practice of quality management, and which as a consequence are deserving of special recognition.

(2) The presentation of the award shall be made by the President or the Secretary with such ceremonies as the President or the Secretary may deem proper.

(3) An organization to which an award is made under this section, and which agrees to help other American organizations improve their quality management, may publicize its receipt of such award and use the award in its advertising, but it shall be ineligible to receive another such award in the same category for a period of 5 years.

(c) CATEGORIES IN WHICH AWARD MAY BE GIVEN.—(1) Subject to paragraph (2), separate awards shall be made to qualifying organizations in each of the following categories—

- (A) Small businesses.
- (B) Companies or their subsidiaries.
- (C) Companies which primarily provide services.
- (D) Health care providers.
- (E) Education providers.
- (F) Nonprofit organizations.
- (G) Community.²

(2) The Secretary may at any time expand, subdivide, or otherwise modify the list of categories within which awards may be made as initially in effect under paragraph (1), and may establish separate awards for other organizations including units of government, upon a determination that the objectives of this section would be better served thereby; except that any such expansion, subdivision, modification, or establishment shall not be effective unless and until the Secretary has submitted a detailed description thereof to the Congress and a period of 30 days has elapsed since that submission.

(3) In any year, not more than 18 awards may be made under this section to recipients who have not previously received an award under this section, and no award shall be made within any category described in paragraph (1) if there are no qualifying enterprises in that category.

(d) CRITERIA FOR QUALIFICATION.—(1) An organization may qualify for an award under this section only if it—

(A) applies to the Director of the National Institute of Standards and Technology in writing, for the award,

(B) permits a rigorous evaluation of the way in which its business and other operations have contributed to improvements in the quality of goods and services, and

(C) meets such requirements and specifications as the Secretary, after receiving recommendations from the Board of Overseers established under paragraph (2)(B) and the Director of the National Institute of Standards and Technology, determines to be appropriate to achieve the objectives of this section.

²Margin so in law.

In applying the provisions of subparagraph (C) with respect to any organization, the Director of the National Institute of Standards and Technology shall rely upon an intensive evaluation by a competent board of examiners which shall review the evidence submitted by the organization and, through a site visit, verify the accuracy of the quality improvements claimed. The examination should encompass all aspects of the organization's current practice of quality management, as well as the organization's provision for quality management in its future goals. The award shall be given only to organizations which have made outstanding improvements in the quality of their goods or services (or both) and which demonstrate effective quality management through the training and involvement of all levels of personnel in quality improvement.

(2)(A) The Director of the National Institute of Standards and Technology shall, under appropriate contractual arrangements, carry out the Director's responsibilities under subparagraphs (A) and (B) of paragraph (1) through one or more broad-based non-profit entities which are leaders in the field of quality management and which have a history of service to society.

(B) The Secretary shall appoint a board of overseers for the award, consisting of at least five persons selected for their pre-eminence in the field of quality management. This board shall meet annually to review the work of the contractor or contractors and make such suggestions for the improvement of the award process as they deem necessary. The board shall report the results of the award activities to the Director of the National Institute of Standards and Technology each year, along with its recommendations for improvement of the process.

(e) INFORMATION AND TECHNOLOGY TRANSFER PROGRAM.—The Director of the National Institute of Standards and Technology shall ensure that all program participants receive the complete results of their audits as well as detailed explanations of all suggestions for improvements. The Director shall also provide information about the awards and the successful quality improvement strategies and programs of the award-winning participants to all participants and other appropriate groups.

(f) FUNDING.—The Secretary is authorized to seek and accept gifts from public and private sources to carry out the program under this section. If additional sums are needed to cover the full cost of the program, the Secretary shall impose fees upon the organizations applying for the award in amounts sufficient to provide such additional sums. The Director is authorized to use appropriated funds to carry out responsibilities under this Act.

(g) REPORT.—The Secretary shall prepare and submit to the President and the Congress, within 3 years after the date of the enactment of this section, a report on the progress, findings, and conclusions of activities conducted pursuant to this section along with recommendations for possible modifications thereof.

SEC. 18. [15 U.S.C. 3711b] CONFERENCE ON ADVANCED AUTOMOTIVE TECHNOLOGIES.

Not later than 180 days after the date of the enactment of this section, the Secretary of Commerce, through the Under Secretary of Commerce for Technology, in consultation with other appropriate officials, shall convene a conference of domestic motor vehicle man-

ufacturers, parts suppliers, Federal laboratories, and motor vehicle users to explore ways in which cooperatively they can improve the competitiveness of the United States motor vehicle industry by developing new technologies which will enhance the safety and energy savings, and lessen the environmental impact of domestic motor vehicles, and the results of such conference shall be published and then submitted to the President and to the Committees on Science, Space, and Technology and Public Works and Transportation of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.

SEC. 19. [15 U.S.C. 3711c] ADVANCED MOTOR VEHICLE RESEARCH AWARD.

(a) **ESTABLISHMENT.**—There is established a National Award for the Advancement of Motor Vehicle Research and Development. The award shall consist of a medal, and a cash prize if funding is available for the prize under subsection (c). The medal shall be of such design and materials and bear inscriptions as is determined by the Secretary of Transportation.

(b) **MAKING AND PRESENTING AWARD.**—The Secretary of Transportation shall periodically make and present the award to domestic motor vehicle manufacturers, suppliers, or Federal laboratory personnel who, in the opinion of the Secretary of Transportation, have substantially improved domestic motor vehicle research and development in safety, energy savings, or environmental impact. No person may receive the award more than once every 5 years.

(c) **FUNDING FOR AWARD.**—The Secretary of Transportation may seek and accept gifts of money from private sources for the purpose of making cash prize awards under this section. Such money may be used only for that purpose, and only such money may be used for that purpose.

SEC. 20. [15 U.S.C. 3712] PERSONNEL EXCHANGES.

The Secretary, the Secretary of Energy, and the Director of the National Science Foundation, jointly, shall establish a program to foster the exchange of scientific and technical personnel among academia, industry, and Federal laboratories. Such program shall include both (1) federally supported exchanges and (2) efforts to stimulate exchanges without Federal funding.

SEC. 21. [15 U.S.C. 3713] AUTHORIZATION APPROPRIATIONS.

(a)(1) There is authorized to be appropriated to the Secretary for the purposes of carrying out sections 11(g) and 16 of this Act not to exceed \$3,400,000 for the fiscal year ending September 30, 1988.

(2) Of the amount authorized under paragraph (1) of this subsection, \$2,400,000 is authorized only for the Office of Productivity, Technology, and Innovation; and \$500,000 is authorized only for the patent licensing activities of the National Technical Information Service.

(b) In addition to the authorization of appropriations provided under subsection (a) of this section, there is authorized to be appropriated to the Secretary for the purposes of carrying out section 6 of this Act not to exceed \$500,000 for the fiscal year ending September 30, 1988, \$1,000,000 for the fiscal year ending September

30, 1989, and \$1,500,000 for the fiscal year ending September 30, 1990.

(c) Such sums as may be appropriated under subsections (a) and (b) shall remain available until expended.

(d) To enable the National Science Foundation to carry out its powers and duties under this Act only such sums may be appropriated as the Congress may authorize by law.

SEC. 22. [15 U.S.C. 3714] SPENDING AUTHORITY.

No payments shall be made or contracts shall be entered into pursuant to the provisions of this Act (other than sections 12, 13, and 14) except to such extent or in such amounts as are provided in advance in appropriation Acts.

SEC. 23. [15 U.S.C. 3715] USE OF PARTNERSHIP INTERMEDIARIES.

(a) **AUTHORITY.**—Subject to the approval of the Secretary or head of the affected department or agency, the Director of a Federal laboratory, or in the case of a federally funded research and development center, the Federal employee who is the contract officer, may—

(1) enter into a contract or memorandum of understanding with a partnership intermediary that provides for the partnership intermediary to perform services for the Federal laboratory that increase the likelihood of success in the conduct of cooperative or joint activities of such Federal laboratory with small business firms, institutions of higher education as defined in section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)), or educational institutions within the meaning of section 2194 of title 10, United States Code; and

(2) pay the Federal costs of such contract or memorandum of understanding out of funds available for the support of the technology transfer function pursuant to section 11(b) of this Act.

(b) **PARTNERSHIP PROGRESS REPORTS.**—The Secretary shall include in each triennial report required under section 6(d) of this Act a discussion and evaluation of the activities carried out pursuant to this section during the period covered by the report.

(c) **DEFINITION.**—For purposes of this section, the term “partnership intermediary” means an agency of a State or local government, or a nonprofit entity owned in whole or in part by, chartered by, funded in whole or in part by, or operated in whole or in part by or on behalf of a State or local government, that assists, counsels, advises, evaluates, or otherwise cooperates with small business firms, institutions of higher education as defined in section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)), or educational institutions within the meaning of section 2194 of title 10, United States Code, that need or can make demonstrably productive use of technology-related assistance from a Federal laboratory, including State programs receiving funds under cooperative agreements entered into under section 5121(b) of the Omnibus Trade and Competitiveness Act of 1988 (15 U.S.C. 2781 note).

SEC. 24. [15 U.S.C. 3719] PRIZE COMPETITIONS.

(a) **DEFINITIONS.**—In this section:

(1) **AGENCY.**—The term “agency” means a Federal agency.

(2) DIRECTOR.—The term “Director” means the Director of the Office of Science and Technology Policy.

(3) FEDERAL AGENCY.—The term “Federal agency” has the meaning given under section 4, except that term shall not include any agency of the legislative branch of the Federal Government.

(4) HEAD OF AN AGENCY.—The term “head of an agency” means the head of a Federal agency.

(b) IN GENERAL.—Each head of an agency, or the heads of multiple agencies in cooperation, may carry out a program to award prizes competitively to stimulate innovation that has the potential to advance the mission of the respective agency.

(c) PRIZE COMPETITIONS.—For purposes of this section, a prize competition may be 1 or more of the following types of activities:

(1) A point solution prize that rewards and spurs the development of solutions for a particular, well-defined problem.

(2) An exposition prize competition that helps identify and promote a broad range of ideas and practices that may not otherwise attract attention, facilitating further development of the idea or practice by third parties.

(3) Participation prize competitions that create value during and after the competition by encouraging contestants to change their behavior or develop new skills that may have beneficial effects during and after the competition.

(4) Such other types of prize competitions as each head of an agency considers appropriate to stimulate innovation that has the potential to advance the mission of the respective agency.

(d) TOPICS.—In selecting topics for prize competitions, the head of an agency shall consult widely both within and outside the Federal Government, and may empanel advisory committees.

(e) ADVERTISING.—The head of an agency shall widely advertise each prize competition to encourage broad participation.

(f) REQUIREMENTS AND REGISTRATION.—For each prize competition, the head of an agency shall publish a notice on a publicly accessible Government website, such as www.challenge.gov, announcing—

- (1) the subject of the prize competition;
- (2) the rules for being eligible to participate in the prize competition;
- (3) the process for participants to register for the prize competition;
- (4) the amount of the cash prize purse or non-cash prize award; and
- (5) the basis on which a winner will be selected.

(g) ELIGIBILITY.—To be eligible to win a cash prize purse under this section, an individual or entity—

(1) shall have registered to participate in the prize competition under any rules promulgated by the head of an agency under subsection (f);

(2) shall have complied with all the requirements under this section;

(3) in the case of a private entity, shall be incorporated in and maintain a primary place of business in the United States,

and in the case of an individual, whether participating singly or in a group, shall be a citizen or permanent resident of the United States; and

(4) may not be a Federal entity or Federal employee acting within the scope of their employment.

(h) CONSULTATION WITH FEDERAL EMPLOYEES.—An individual or entity shall not be deemed ineligible under subsection (g) because the individual or entity used Federal facilities or consulted with Federal employees during a prize competition if the facilities and employees are made available to all individuals and entities participating in the prize competition on an equitable basis.

(i) LIABILITY.—

(1) IN GENERAL.—

(A) DEFINITION.—In this paragraph, the term “related entity” means a contractor or subcontractor at any tier, and a supplier, user, customer, cooperating party, grantee, investigator, or detailee.

(B) LIABILITY.—Registered participants shall be required to agree to assume any and all risks and waive claims against the Federal Government and its related entities, except in the case of willful misconduct, for any injury, death, damage, or loss of property, revenue, or profits, whether direct, indirect, or consequential, arising from their participation in a prize competition, whether the injury, death, damage, or loss arises through negligence or otherwise.

(2) INSURANCE.—Participants shall be required to obtain liability insurance or demonstrate financial responsibility, in amounts determined by the head of an agency, for claims by—

(A) a third party for death, bodily injury, or property damage, or loss resulting from an activity carried out in connection with participation in a prize competition, with the Federal Government named as an additional insured under the registered participant’s insurance policy and registered participants agreeing to indemnify the Federal Government against third party claims for damages arising from or related to prize competition activities; and

(B) the Federal Government for damage or loss to Government property resulting from such an activity.

(3) WAIVERS.—

(A) IN GENERAL.—An agency may waive the requirement under paragraph (2).

(B) LIST.—The Director shall include a list of all of the waivers granted under this paragraph during the preceding fiscal year, including a detailed explanation of the reason for granting the waiver.

(4) EXCEPTION.—The head of an agency may not require a participant to waive claims against the administering entity arising out of the unauthorized use or disclosure by the agency of the intellectual property, trade secrets, or confidential business information of the participant.

(j) INTELLECTUAL PROPERTY.—

(1) PROHIBITION ON THE GOVERNMENT ACQUIRING INTELLECTUAL PROPERTY RIGHTS.—The Federal Government may not

gain an interest in intellectual property developed by a participant in a prize competition without the written consent of the participant.

(2) LICENSES.—As appropriate and to further the goals of a prize competition, the Federal Government may negotiate a license for the use of intellectual property developed by a registered participant in a prize competition.

(k) JUDGES.—

(1) IN GENERAL.—For each prize competition, the head of an agency, either directly or through an agreement under subsection (l), shall appoint one or more qualified judges to select the winner or winners of the prize competition on the basis described under subsection (f). Judges for each prize competition may include individuals from outside the agency, including from the private sector.

(2) RESTRICTIONS.—A judge may not—

(A) have personal or financial interests in, or be an employee, officer, director, or agent of any entity that is a registered participant in a prize competition; or

(B) have a familial or financial relationship with an individual who is a registered participant.

(3) GUIDELINES.—The heads of agencies who carry out prize competitions under this section shall develop guidelines to ensure that the judges appointed for such prize competitions are fairly balanced and operate in a transparent manner.

(4) EXEMPTION FROM CHAPTER 10 OF TITLE 5, UNITED STATES CODE.—Chapter 10 of title 5, United States Code, shall not apply to any committee, board, commission, panel, task force, or similar entity, created solely for the purpose of judging prize competitions under this section.

(l) ADMINISTERING THE COMPETITION.—The head of an agency may enter into a grant, contract, cooperative agreement, or other agreement with a private sector for-profit or nonprofit entity or State or local government agency to administer the prize competition, subject to the provisions of this section.

(m) FUNDING.—

(1) IN GENERAL.—Support for a prize competition under this section, including financial support for the design and administration of a prize competition or funds for a cash prize purse, may consist of Federal appropriated funds and funds provided by private sector for-profit and nonprofit entities. The head of an agency may request and accept funds from other Federal agencies, State, United States territory, local, or tribal government agencies, private sector for-profit entities, and nonprofit entities, to be available to the extent provided by appropriations Acts, to support such prize competitions. The head of an agency may not give any special consideration to any agency or entity in return for a donation.

(2) AVAILABILITY OF FUNDS.—Notwithstanding any other provision of law, funds appropriated for cash prize purses or non-cash prize awards under this section shall remain available until expended. No provision in this section permits obligation or payment of funds in violation of section 1341 of title 31, United States Code.

(3) AMOUNT OF PRIZE.—

(A) ANNOUNCEMENT.—No prize competition may be announced under subsection (f) until all the funds needed to pay out the announced amount of the cash prize purse have been appropriated or committed in writing by a private or State, United States territory, local, or tribal government source.

(B) INCREASE IN AMOUNT.—The head of an agency may increase the amount of a cash prize purse or non-cash prize award after an initial announcement is made under subsection (f) only if—

(i) notice of the increase is provided in the same manner as the initial notice of the prize competition; and

(ii) the funds needed to pay out the announced amount of the increase have been appropriated or committed in writing by a private or State, United States territory, local, or tribal government source.

(4) LIMITATION ON AMOUNT.—

(A) NOTICE TO CONGRESS.—No prize competition under this section may offer a cash prize purse or a non-cash prize award in an amount greater than \$50,000,000 unless 30 days have elapsed after written notice has been transmitted to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.

(B) APPROVAL OF HEAD OF AGENCY.—No prize competition under this section may result in the award of more than \$1,000,000 in cash prize purses or non-cash awards without the approval of the head of an agency.

(n) GENERAL SERVICES ADMINISTRATION ASSISTANCE.—Not later than 180 days after the date of enactment of the American Innovation and Competitiveness Act, the General Services Administration shall provide government wide services to share best practices and assist agencies in developing guidelines for issuing prize competitions. The General Services Administration shall develop a contract vehicle for both for-profit and nonprofit entities and State, United States territory, local, and tribal government entities, to provide agencies access to relevant products and services, including technical assistance in structuring and conducting prize competitions to take maximum benefit of the marketplace as they identify and pursue prize competitions to further the policy objectives of the Federal Government.

(o) COMPLIANCE WITH EXISTING LAW.—

(1) IN GENERAL.—The Federal Government shall not, by virtue of offering a prize competition or providing a cash prize purse or non-cash prize award under this section, be responsible for compliance by registered participants in a prize competition with Federal law, including licensing, export control, and nonproliferation laws, and related regulations.

(2) OTHER PRIZE AUTHORITY.—Nothing in this section affects the prize authority authorized by any other provision of law.

(p) BIENNIAL REPORT.—

(1) IN GENERAL.—Not later than March 1 of every other year, the Director shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report on the activities carried out during the preceding 2 fiscal years under the authority in subsection (b).

(2) INFORMATION INCLUDED.—A report under this subsection shall include, for each prize competition under subsection (b), the following:

(A) PROPOSED GOALS.—A description of the proposed goals of each prize competition.

(B) PREFERABLE METHOD.—An analysis of why the utilization of the authority in subsection (b) was the preferable method of achieving the goals described in subparagraph (A) as opposed to other authorities available to the agency, such as contracts, grants, and cooperative agreements.

(C) AMOUNT OF CASH PRIZE PURSES OR NON-CASH PRIZE AWARDS.—The total amount of cash prize purses or non-cash prize awards awarded for each prize competition, including a description of amount of private funds contributed to the program, the sources of such funds, and the manner in which the amounts of cash prize purses or non-cash prize awards awarded and claimed were allocated among the accounts of the agency for recording as obligations and expenditures.

(D) SOLICITATIONS AND EVALUATION OF SUBMISSIONS.—The methods used for the solicitation and evaluation of submissions under each prize competition, together with an assessment of the effectiveness of such methods and lessons learned for future prize competitions.

(E) RESOURCES.—A description of the resources, including personnel and funding, used in the execution of each prize competition together with a detailed description of the activities for which such resources were used and an accounting of how funding for execution was allocated among the accounts of the agency for recording as obligations and expenditures.

(F) RESULTS.—A description of how each prize competition advanced the mission of the agency concerned.

(G) PLAN.—A description of crosscutting topical areas and agency-specific mission needs that may be the strongest opportunities for prize competitions during the upcoming 2 fiscal years.

SEC. 25. [15 U.S.C. 3720] OFFICE OF INNOVATION AND ENTREPRENEURSHIP.

(a) IN GENERAL.—The Secretary shall establish an Office of Innovation and Entrepreneurship to foster innovation and the commercialization of new technologies, products, processes, and services with the goal of promoting productivity and economic growth in the United States.

(b) DUTIES.—The Office of Innovation and Entrepreneurship shall be responsible for—

(1) developing policies to accelerate innovation and advance the commercialization of research and development, including federally funded research and development;

(2) identifying existing barriers to innovation and commercialization, including access to capital and other resources, and ways to overcome those barriers, particularly in States participating in the Experimental Program to Stimulate Competitive Research;

(3) providing access to relevant data, research, and technical assistance on innovation and commercialization;

(4) strengthening collaboration on and coordination of policies relating to innovation and commercialization, including those focused on the needs of small businesses and rural communities, within the Department of Commerce, between the Department of Commerce and other Federal agencies, and between the Department of Commerce and appropriate State government agencies and institutions, as appropriate; and

(5) any other duties as determined by the Secretary.

(c) **ADVISORY COMMITTEE.**—The Secretary shall establish an Advisory Council on Innovation and Entrepreneurship to provide advice to the Secretary on carrying out subsection (b).

SEC. 26. [15 U.S.C. 3721] FEDERAL LOAN GUARANTEES FOR INNOVATIVE TECHNOLOGIES IN MANUFACTURING.

(a) **ESTABLISHMENT.**—The Secretary shall establish a program to provide loan guarantees for obligations to small- or medium-sized manufacturers for the use or production of innovative technologies.

(b) **ELIGIBLE PROJECTS.**—A loan guarantee may be made under the program only for a project that re-equips, expands, or establishes a manufacturing facility in the United States—

(1) to use an innovative technology or an innovative process in manufacturing;

(2) to manufacture an innovative technology product or an integral component of such a product; or

(3) to commercialize an innovative product, process, or idea that was developed by research funded in whole or in part by a grant from the Federal government.

(c) **ELIGIBLE BORROWER.**—A loan guarantee may be made under the program only for a borrower who is a small- or medium-sized manufacturer, as determined by the Secretary under the criteria established pursuant to subsection (1).

(d) **LIMITATION ON AMOUNT.**—A loan guarantee shall not exceed an amount equal to 80 percent of the obligation, as estimated at the time at which the loan guarantee is issued.

(e) **LIMITATIONS ON LOAN GUARANTEE.**—No loan guarantee shall be made unless the Secretary determines that—

(1) there is a reasonable prospect of repayment of the principal and interest on the obligation by the borrower;

(2) the amount of the obligation (when combined with amounts available to the borrower from other sources) is sufficient to carry out the project;

(3) the obligation is not subordinate to other financing;

(4) the obligation bears interest at a rate that does not exceed a level that the Secretary determines appropriate, taking

into account the prevailing rate of interest in the private sector for similar loans and risks; and

(5) the term of an obligation requires full repayment over a period not to exceed the lesser of—

(A) 30 years; or

(B) 90 percent of the projected useful life, as determined by the Secretary, of the physical asset to be financed by the obligation.

(f) DEFAULTS.—

(1) PAYMENT BY SECRETARY.—

(A) IN GENERAL.—If a borrower defaults (as defined in regulations promulgated by the Secretary and specified in the loan guarantee) on the obligation, the holder of the loan guarantee shall have the right to demand payment of the unpaid amount from the Secretary.

(B) PAYMENT REQUIRED.—Within such period as may be specified in the loan guarantee or related agreements, the Secretary shall pay to the holder of the loan guarantee the unpaid interest on and unpaid principal of the obligation as to which the borrower has defaulted, unless the Secretary finds that there was no default by the borrower in the payment of interest or principal or that the default has been remedied.

(C) FORBEARANCE.—Nothing in this subsection precludes any forbearance by the holder of the obligation for the benefit of the borrower which may be agreed upon by the parties to the obligation and approved by the Secretary.

(2) SUBROGATION.—

(A) IN GENERAL.—If the Secretary makes a payment under paragraph (1), the Secretary shall be subrogated to the rights, as specified in the loan guarantee, of the recipient of the payment or related agreements including, if appropriate, the authority (notwithstanding any other provision of law)—

(i) to complete, maintain, operate, lease, or otherwise dispose of any property acquired pursuant to such loan guarantee or related agreement; or

(ii) to permit the borrower, pursuant to an agreement with the Secretary, to continue to pursue the purposes of the project if the Secretary determines that such an agreement is in the public interest.

(B) SUPERIORITY OF RIGHTS.—The rights of the Secretary, with respect to any property acquired pursuant to a loan guarantee or related agreements, shall be superior to the rights of any other person with respect to the property.

(3) NOTIFICATION.—If the borrower defaults on an obligation, the Secretary shall notify the Attorney General of the default.

(g) TERMS AND CONDITIONS.—A loan guarantee under this section shall include such detailed terms and conditions as the Secretary determines appropriate—

(1) to protect the interests of the United States in the case of default; and

(2) to have available all the patents and technology necessary for any person selected, including the Secretary, to complete and operate the project.

(h) CONSULTATION.—In establishing the terms and conditions of a loan guarantee under this section, the Secretary shall consult with the Secretary of the Treasury.

(i) FEES.—

(1) IN GENERAL.—The Secretary shall charge and collect fees for loan guarantees in amounts the Secretary determines are sufficient to cover applicable administrative expenses.

(2) AVAILABILITY.—Fees collected under this subsection shall—

(A) be deposited by the Secretary into the Treasury of the United States; and

(B) remain available until expended, subject to such other conditions as are contained in annual appropriations Acts.

(3) LIMITATION.—In charging and collecting fees under paragraph (1), the Secretary shall take into consideration the amount of the obligation.

(j) RECORDS.—

(1) IN GENERAL.—With respect to a loan guarantee under this section, the borrower, the lender, and any other appropriate party shall keep such records and other pertinent documents as the Secretary shall prescribe by regulation, including such records as the Secretary may require to facilitate an effective audit.

(2) ACCESS.—The Secretary and the Comptroller General of the United States, or their duly authorized representatives, shall have access to records and other pertinent documents for the purpose of conducting an audit.

(k) FULL FAITH AND CREDIT.—The full faith and credit of the United States is pledged to the payment of all loan guarantees issued under this section with respect to principal and interest.

(l) REGULATIONS.—The Secretary shall issue final regulations before making any loan guarantees under the program. The regulations shall include—

(1) criteria that the Secretary shall use to determine eligibility for loan guarantees under this section, including—

(A) whether a borrower is a small- or medium-sized manufacturer; and

(B) whether a borrower demonstrates that a market exists for the innovative technology product, or the integral component of such a product, to be manufactured, as evidenced by written statements of interest from potential purchasers;

(2) criteria that the Secretary shall use to determine the amount of any fees charged under subsection (i), including criteria related to the amount of the obligation;

(3) policies and procedures for selecting and monitoring lenders and loan performance; and

(4) any other policies, procedures, or information necessary to implement this section.

(m) AUDIT.—

(1) ANNUAL INDEPENDENT AUDITS.—The Secretary shall enter into an arrangement with an independent auditor for annual evaluations of the program under this section.

(2) REPORT.—The results of the independent audit under paragraph (1) shall be provided directly to the Committee on Science and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.

(n) REPORT TO CONGRESS.—Concurrent with the submission to Congress of the President's annual budget request in each year after the date of enactment of the America COMPETES Reauthorization Act of 2010, the Secretary shall transmit to the Committee on Science and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report containing a summary of all activities carried out under this section.

(o) COORDINATION AND NONDUPLICATION.—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 loan guarantee programs within the Federal Government.

(p) MEP CENTERS.—The Secretary may use centers established under section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k) to provide information about the program established under this section and to conduct outreach to potential borrowers, as appropriate.

(q) MINIMIZING RISK.—The Secretary shall promulgate regulations and policies to carry out this section in accordance with Office of Management and Budget Circular No. A-129, entitled "Policies for Federal Credit Programs and Non-Tax Receivables", as in effect on the date of enactment of the America COMPETES Reauthorization Act of 2010.

(r) SENSE OF CONGRESS.—It is the sense of Congress that no loan guarantee shall be made under this section unless the borrower agrees to use a federally-approved electronic employment eligibility verification system to verify the employment eligibility of—

(1) all persons hired during the contract term by the borrower to perform employment duties within the United States; and

(2) all persons assigned by the borrower to perform work within the United States on the project.

(s) DEFINITIONS.—In this section:

(1) COST.—The term "cost" has the meaning given such term under section 502 of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a).

(2) INNOVATIVE PROCESS.—The term "innovative process" means a process that is significantly improved as compared to the process in general use in the commercial marketplace in the United States at the time the loan guarantee is issued.

(3) INNOVATIVE TECHNOLOGY.—The term "innovative technology" means a technology that is significantly improved as

compared to the technology in general use in the commercial marketplace in the United States at the time the loan guarantee is issued.

(4) **LOAN GUARANTEE.**—The term “loan guarantee” has the meaning given such term in section 502 of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a). The term includes a loan guarantee commitment (as defined in section 502 of such Act (2 U.S.C. 661a)).

(5) **OBLIGATION.**—The term “obligation” means the loan or other debt obligation that is guaranteed under this section.

(6) **PROGRAM.**—The term “program” means the loan guarantee program established in subsection (a).

(t) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated \$20,000,000 for each of fiscal years 2011 through 2013 to provide the cost of loan guarantees under this section.

SEC. 27. [15 U.S.C. 3722] REGIONAL INNOVATION PROGRAM.

(a) **DEFINITIONS.**—In this section:

(1) **ELIGIBLE RECIPIENT.**—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, a venture development organization, or an economic development organization or similar entity that is focused primarily on improving science, technology, innovation, or entrepreneurship; and

(ii) has an application submitted under subsection (c)(4) 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).

(2) **REGIONAL INNOVATION INITIATIVE.**—The term “regional innovation initiative” means a geographically-bounded public or nonprofit activity or program to address issues in the local innovation systems in order to—

- (A) increase the success of innovation-driven industry;
- (B) strengthen the competitiveness of industry through new product innovation and new technology adoption;
- (C) improve the pace of market readiness and overall commercialization of innovative research;
- (D) enhance the overall innovation capacity and long-term resilience of the region;
- (E) leverage the region’s unique competitive strengths to stimulate innovation; and
- (F) increase the number of full-time equivalent employment opportunities within innovation-based business ventures in the geographic region.

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

(4) VENTURE DEVELOPMENT ORGANIZATION.—The term “venture development organization” means a State or nonprofit organization that contributes to regional or sector-based economic prosperity by providing services for the purposes of accelerating the commercialization of research.

(b) ESTABLISHMENT.—The Secretary shall establish a regional innovation program to encourage and support the development of regional innovation strategies designed to increase innovation-driven economic opportunity within their respective regions.

(c) REGIONAL INNOVATION GRANTS.—

(1) AUTHORIZATION OF GRANTS.—As part of the program established pursuant to subsection (b), the Secretary may award grants, on a competitive basis, to eligible recipients for activities designed to develop and support a regional innovation initiative.

(2) PERMISSIBLE ACTIVITIES.—A grant awarded under this subsection shall be used for multiple activities determined appropriate by the Secretary, including—

(A) planning, technical assistance, and communication among participants of a regional innovation initiative to improve the connectedness and strategic orientation of the regional innovation initiative;

(B) attracting additional participants to a regional innovation initiative;

(C) increasing the availability and investment of private and philanthropic financing that supports innovation-based business ventures; and

(D) facilitating commercialization of products, processes, and services, including through demonstration, deployment, technology transfer, and entrepreneurial activities.

(3) RESTRICTED ACTIVITIES.—Grants awarded under this subsection may not be used to pay for—

(A) costs related to the recruitment, inducement, or associated financial or tangible incentives that might be offered to relocate an existing business from a geographic area to another geographic area; or

(B) costs associated with offsetting revenues forgone by 1 or more taxing authorities through tax incentives, tax increment financing, special improvement districts, tax abatements for private development within designated zones or geographic areas, or other reduction in revenues resulting from tax credits affecting the geographic region of the eligible recipients.

(4) APPLICATIONS.—

(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.—Each application submitted under subparagraph (A) shall—

- (i) describe the regional innovation initiative;
- (ii) indicate whether the regional innovation initiative is supported by the private sector, State and local governments, and other relevant stakeholders;
- (iii) identify what activities the regional innovation initiative will undertake;
- (iv) describe the expected outcomes of the regional innovation initiative and the metrics the eligible recipient will use to assess progress toward those outcomes;
- (v) indicate whether the participants in the regional innovation initiative have access to, or contribute to, a well-trained workforce and other innovation assets that are critical to the successful outcomes specified in the application;
- (vi) indicate whether the participants in the regional innovation initiative are capable of attracting additional funds from non-Federal sources; and
- (vii) if appropriate for the activities proposed in the application, analyze the likelihood that the participants in the regional innovation initiative will be able to sustain activities after grant funds received under this subsection have been expended.

(C) FEEDBACK.—The Secretary shall provide feedback to program applicants that are not awarded grants to help them improve future applications.

(D) SPECIAL CONSIDERATIONS.—The Secretary shall give special consideration to—

- (i) applications proposing to include workforce or training related activities in their regional innovation initiative from eligible recipients who agree to collaborate with local workforce investment area boards; and
- (ii) applications from regions that contain communities negatively impacted by trade.

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

(6) 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 initiatives under this subsection.

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

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

(d) REGIONAL INNOVATION RESEARCH AND INFORMATION PROGRAM.—

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

(A) to gather, analyze, and disseminate information on best practices for regional innovation initiatives, 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 initiatives;

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

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

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

(ii) the regional domestic product contribution, total jobs and earnings by key occupations, establishment size, nature of specialization, patents, Federal research and development spending, and other relevant information for regional innovation initiatives; and

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

(2) RESEARCH GRANTS.—The Secretary may award research grants on a competitive basis to support and further the goals of the program established under this section.

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

(4) REGIONAL INNOVATION GRANT PROGRAM.—The Secretary shall incorporate data and analysis relating to any grant awarded under subsection (c) into the program established under this subsection.

(e) INTERAGENCY COORDINATION.—

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

(2) COLLABORATION.—

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

through multi-agency funding opportunities, on regional innovation strategies.

(B) SMALL BUSINESSES.—The Secretary shall ensure that such collaboration with Federal agencies prioritizes the needs and challenges of small businesses.

(f) EVALUATION.—

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

(2) REQUIREMENTS.—The evaluation conducted under paragraph (1) shall include—

(A) an assessment of whether the program is achieving its goals;

(B) the program’s efficacy in providing awards to geographically diverse entities;

(C) any recommendations for how the program may be improved; and

(D) a recommendation as to whether the program should be continued or terminated.

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

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

SEC. 28. [15 U.S.C. 3722a] REGIONAL TECHNOLOGY AND INNOVATION HUB PROGRAM.

(a) DEFINITIONS.—In this section:

(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term “appropriate committees of Congress” means—

(A) the Committee on Commerce, Science, and Transportation, the Committee on Environment and Public Works, and the Committee on Appropriations of the Senate; and

(B) the Committee on Science, Space, and Technology and the Committee on Appropriations of the House of Representatives.

(2) COOPERATIVE EXTENSION SERVICES.—The term “cooperative extension services” has the meaning given the term in section 1404 of the Food and Agriculture Act of 1977 (7 U.S.C. 3103).

(3) SITE CONNECTIVITY INFRASTRUCTURE.—The term “site connectivity infrastructure” means localized driveways and access roads to a facility as well as hookups to the new facility for drinking water, waste water, broadband, and other basic infrastructure services already present in the area.

(4) VENTURE DEVELOPMENT ORGANIZATION.—The term “venture development organization” has the meaning given

such term in section 27(a) of the Stevenson-Wydler Act of 1980 (15 U.S.C. 3722(a)).

(5) **COMMUNITY DEVELOPMENT FINANCIAL INSTITUTION.**—The term “community development financial institution” has the meaning given in section 103 of the Community Development Banking and Financial Institutions Act of 1994 (12 U.S.C. 4702).

(6) **MINORITY DEPOSITORY INSTITUTION.**—The term “minority depository institution” means an entity that is—

(A) a minority depository institution, as defined in section 308 of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (12 U.S.C. 1463 note); or

(B) considered to be a minority depository institution by—

(i) the appropriate Federal banking agency; or

(ii) the National Credit Union Administration, in the case of an insured credit union.

(7) **LOW POPULATION STATE.**—The term “low population State” means a State without an urbanized area with a population greater than 250,000 as reported in the decennial census.

(8) **SMALL AND RURAL COMMUNITIES.**—The term “small and rural community” means a noncore area, a micropolitan area, or a small metropolitan statistical area with a population of not more than 250,000.

(b) **REGIONAL TECHNOLOGY AND INNOVATION HUB PROGRAM.**—

(1) **IN GENERAL.**—Subject to the availability of appropriations, the Secretary shall carry out a program—

(A) to encourage new and constructive collaborations among local, State, Tribal, and Federal government entities, institutions of higher education, the private sector, economic development organizations, labor organizations, nonprofit organizations, and community organizations that promote broad-based regional innovation initiatives;

(B) to support eligible consortia in the development and implementation of regional innovation strategies;

(C) to designate eligible consortia as regional technology and innovation hubs and facilitate activities by consortia designated as regional technology and innovation hubs in implementing their regional innovation strategies—

(i) to enable United States leadership in technology and innovation sectors critical to national and economic security;

(ii) to support regional economic development and resilience, including in small cities and rural areas, and promote increased geographic diversity of innovation across the United States;

(iii) to promote the benefits of technology development and innovation for all Americans, including underserved communities and vulnerable communities;

(iv) to support the modernization and expansion of United States manufacturing based on advances in technology and innovation;

(v) to support domestic job creation and broad-based economic growth; and

(vi) to improve the pace of market readiness, industry maturation, and overall commercialization and domestic production of innovative research;

(D) to ensure that the regional technology and innovation hubs address the intersection of emerging technologies and either regional challenges or national challenges; and

(E) to conduct ongoing research, evaluation, analysis, and dissemination of best practices for regional development and competitiveness in technology and innovation.

(2) AWARDS.—The Secretary shall carry out the program required by paragraph (1) through the award of the following:

(A) Strategy development grants or cooperative agreements to eligible consortia under subsection (e).

(B) Strategy implementation grants or cooperative agreements to regional technology and innovation hubs under subsection (f).

(3) ADMINISTRATION.—The Secretary shall carry out this section through the Assistant Secretary of Commerce for Economic Development in coordination with the Under Secretary of Commerce for Standards and Technology.

(c) ELIGIBLE CONSORTIA.—For purposes of this section, an eligible consortium is a consortium that—

(1) includes 1 or more of each of the following—

(A) institutions of higher education, which may include Historically Black Colleges and Universities, Tribal Colleges or Universities, and minority-serving institutions;

(B) State, territorial, local, or Tribal governments or other political subdivisions of a State, including State and local agencies, or a consortium thereof;

(C) industry or firms in relevant technology, innovation, or manufacturing sectors;

(D) economic development organizations or similar entities that are focused primarily on improving science, technology, innovation, entrepreneurship, or access to capital; and

(E) labor organizations or workforce training organizations, which may include State and local workforce development boards as established under sections 101 and 107 of the Workforce Investment and Opportunity Act (29 U.S.C. 3111; 3122); and

(2) may include 1 or more—

(A) economic development entities with relevant expertise, including a district organization (as defined in section 300.3 of title 13, Code of Federal Regulations, or successor regulation);

(B) organizations that contribute to increasing the participation of underserved populations in science, technology, innovation, and entrepreneurship;

(C) venture development organizations;

(D) organizations that promote local economic stability, high-wage domestic jobs, and broad-based economic opportunities, such as employee ownership membership as-

sociations and State or local employee ownerships and cooperative development centers, financial institutions and investment funds, including community development financial institutions and minority depository institutions;

(E) elementary schools and secondary schools, including area career and technical education schools (as defined in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (29 U.S.C. 2302));

(F) National Laboratories (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801));

(G) Federal laboratories;

(H) Manufacturing extension centers;

(I) Manufacturing USA institutes;

(J) transportation planning organizations;

(K) a cooperative extension services;

(L) organizations that represent the perspectives of underserved communities in economic development initiatives; and

(M) institutions receiving an award under section 10388 of the Research and Development, Competition, and Innovation Act.

(d) DESIGNATION OF REGIONAL TECHNOLOGY AND INNOVATION HUBS.—

(1) IN GENERAL.—In carrying out subsection (b)(1)(C), the Secretary shall use a competitive, merit-review process to designate eligible consortia as regional technology and innovation hubs.

(2) DISTRIBUTION.—In conducting the competitive process under paragraph (1), the Secretary shall ensure geographic and demographic diversity in the designation of regional technology hubs by, subject to available appropriations, designating at least 20 technology hubs, and—

(A) seeking to designate at least three technology hubs in each region covered by a regional office of the Economic Development Administration, while—

(i) ensuring that not fewer than one-third of eligible consortia so designated as regional technology hubs significantly benefit a small and rural community, which may include a State or territory described in clauses (ii) and (iii);

(ii) ensuring that not fewer than one-third of eligible consortia so designated as regional technology hubs include as a member of the eligible consortia at least 1 member that is a State or territory that is eligible to receive funding from the Established Program to Stimulate Competitive Research of the National Science Foundation; and

(iii) ensuring that at least one eligible consortium so designated as a regional technology hub is headquartered in a low population State that is eligible to receive funding from the Established Program to Stimulate Competitive Research of the National Science Foundation;

(B) seeking to designate an additional two regional technology hubs based on selection factors which shall include likelihood of success and may include regional factors such as the extent to which the regional technology and innovation hub significantly engages and benefits underserved communities in and near metropolitan areas;

(C) encouraging eligible consortia to leverage institutions of higher education serving populations historically underrepresented in STEM, including historically Black Colleges and Universities, Tribal Colleges or Universities, and minority-serving institutions to significantly benefit an area or region; and

(D) encouraging proposals from eligible consortia that would significantly benefit an area or region whose economy significantly relies on or has recently relied on coal, oil, or natural gas production or development.

(3) RELATION TO CERTAIN GRANT AWARDS.—The Secretary shall not require an eligible consortium to receive a grant or cooperative agreement under subsection (e) in order to be designated as a regional technology and innovation hub under paragraph (1) of this subsection.

(e) STRATEGY DEVELOPMENT GRANTS AND COOPERATIVE AGREEMENTS.—

(1) IN GENERAL.—The Secretary shall use a competitive, merit-review process to award grants or cooperative agreements to eligible consortia for the development of regional innovation strategies.

(2) NUMBER OF RECIPIENTS.—Subject to availability of appropriations, the Secretary shall seek to award a grant or cooperative agreement under paragraph (1) to not fewer than 60 eligible consortia.

(3) GEOGRAPHIC DIVERSITY AND REPRESENTATION.—

(A) IN GENERAL.—The Secretary shall carry out paragraph (1) in a manner that ensures geographic diversity and representation from communities of differing populations.

(B) AWARDS TO SMALL AND RURAL COMMUNITIES.—In carrying out paragraph (1), the Secretary shall—

(i) award not fewer than one-third of the grants and cooperative agreements under such paragraph to eligible consortia that significantly benefit a small and rural community, which may include a State described in clause (ii); and

(ii) award not fewer than one-third of the grants and cooperative agreements under such paragraph to eligible consortia that include as a member of the eligible consortia at least 1 member that is a State or territory that is eligible to receive funding from the Established Program to Stimulate Competitive Research of the National Science Foundation.

(4) USE OF FUNDS.—

(A) Use of funds under this grant shall include—

(i) coordination of a locally defined planning processes, across jurisdictions and agencies, relating to developing a comprehensive regional technology strategy;

(ii) identification of regional partnerships for developing and implementing a comprehensive regional technology strategy;

(iii) implementation or updating of assessments to determine regional needs and capabilities;

(iv) development or updating of goals and strategies to implement an existing comprehensive regional plan;

(v) identification or implementation of planning and local zoning and other code changes necessary to implement a comprehensive regional technology strategy; and

(vi) development of plans for promoting broad-based economic growth in a region.

(B) Use of funds under this grant may include the formation of a workforce development strategy, according to the needs for a skilled and technical workforce at all skill and degree levels in the region proposed to be served by the eligible consortia. Any workforce development strategy submitted pursuant to paragraph (1) should include—

(i) how the eligible consortia will develop, offer, or improve educational or career training programs and curriculum for a skilled and technical workforce;

(ii) the extent to which such programs developed and offered by the eligible consortia will meet the educational or career training needs of a skilled and technical workforce in the region to be served;

(iii) how the eligible consortia will provide facilities for students to receive training under such programs developed and offered by the eligible consortia; and

(iv) how the eligible consortia will enhance outreach and recruitment for such programs developed and offered by the eligible consortia to populations underrepresented in STEM.

(5) FEDERAL SHARE.—The Federal share of the cost of an effort carried out using a grant or cooperative agreement awarded under this subsection may not exceed 80 percent—

(A) where in-kind contributions may be used for all or part of the non-Federal share, but Federal funding from other government sources may not count towards the non-Federal share;

(B) except in the case of an eligible consortium that represents all or part of a small and rural or other underserved community, the Federal share may be up to 90 percent of the total cost, subject to subparagraph (A); and

(C) except in the case of an eligible consortium that is led by a Tribal government, the Federal share may be up to 100 percent of the total cost of the project.

(f) STRATEGY IMPLEMENTATION GRANTS AND COOPERATIVE AGREEMENTS.—

(1) IN GENERAL.—The Secretary shall use a competitive, merit-review process to award grants or cooperative agreements to regional technology and innovation hubs for the implementation of regional innovation strategies, including regional strategies for infrastructure and site development, in support of the regional innovation and technology and innovation hub's plans and programs. The Secretary should determine the size and number of awards based on appropriations available to ensure the success of regional technology and innovation hubs as outlined in subsection (h).

(2) USE OF FUNDS.—Grants or cooperative agreements awarded under paragraph (1) to a regional technology and innovation hub may be used by the regional technology and innovation hub to support any of the following activities, consistent with the most current regional innovation strategy of the regional technology and innovation hub, which may have been developed with or without financial assistance received under subsection (e) of this section:

(A) WORKFORCE DEVELOPMENT ACTIVITIES.—Workforce development activities including activities relating to the following:

(i) The creation of partnerships between industry, workforce, nonprofit, and educational institutions, which may include community colleges, to create and align technical training and educational programs, including for a skilled technical workforce.

(ii) The design, development, and updating of educational and training curriculum and programs, including training of trainers, teachers, or instructors tied to demonstrated regional skilled and technical workforce needs.

(iii) The procurement of facilities and equipment, as required to train a skilled and technical workforce.

(iv) The development and execution of programs, including traineeships and apprenticeships, to rapidly provide training and award certificates or credentials recognized by regional industries or other organizations.

(v) The matching of regional employers with a potential new entrant, underemployed, underrepresented, reentering, or incumbent workforce, as well as the securing of commitments from employers to hire workers who successfully complete training programs, or who are awarded certificates or credentials.

(vi) The expansion of successful training programs at a scale required by the region served by the regional technology and innovation hub, including through the use of online education and mentoring.

(vii) The development and expansion of programs with the goal of increasing the participation of persons historically underrepresented in STEM and manufacturing in the workforce development plans of the regional technology and innovation hub.

(viii) The provision of support services for attendees of training programs developed, updated, or expanded pursuant to this subsection, including career counseling.

(ix) The implementation of outreach and recruitment for training programs developed, updated, or expanded pursuant to this subsection, particularly at local educational institutions, including high schools and community colleges.

(B) BUSINESS AND ENTREPRENEUR DEVELOPMENT ACTIVITIES.—Business and entrepreneur development activities, including activities relating to the following:

(i) The development and growth of local and regional businesses and the training of entrepreneurs, which may include support for the expansion of employee owned businesses and cooperatives.

(ii) The support of technology commercialization, including funding for activities relevant to the protection of intellectual property and for advancing potential ventures such as acceleration, incubation, early-stage production and other relevant programming.

(iii) The development of local and regional capital networks and consortia to attract necessary private funding to businesses and entrepreneurs in the region.

(iv) The development of local and regional networks for business and entrepreneur mentorship.

(C) TECHNOLOGY DEVELOPMENT AND MATURATION ACTIVITIES.—Technology maturation activities, including activities relating to the following:

(i) The development and deployment of technologies in sectors critical to the region served by the regional technology and innovation hub or to national and economic security, including industry-university research cooperation, proof of concept, prototype development, testing, and scale-up for manufacturing.

(ii) The development of programming to support the creation and transfer of intellectual property into private use, such as through startup creation.

(iii) The provision of facilities for technology maturation, including incubators and production testbeds for collaborative development of technologies by private sector, academic, nonprofit, and other entities.

(iv) Activities to provide or ensure access to capital for new business and business expansion, including by attracting new private, public, and philanthropic investment and by establishing local and regional venture and loan funds, community development financial institutions, and minority depository institutions.

(D) INFRASTRUCTURE-RELATED ACTIVITIES.—The building of facilities and site connectivity infrastructure necessary to carry out activities described in subparagraphs (A), (B), and (C), including activities relating to the following:

(i) Establishing a center with required tools and instrumentation for workforce development.

(ii) Establishing a facility for technology development, demonstration, and testing.

(iii) Establishing collaborative incubators to support technology commercialization and entrepreneur training.

(3) TERM.—

(A) INITIAL PERFORMANCE PERIOD.—The term of an initial grant or cooperative agreement awarded under this subsection shall be for a period that the Secretary deems appropriate for the proposed activities but not less than 2 years.

(B) SUBSEQUENT PERFORMANCE PERIOD.—The Secretary may renew a grant or cooperative agreement awarded to a regional technology and innovation hub under paragraph (1) for such period as the Secretary considers appropriate, if the Secretary determines that the regional technology and innovation hub has made satisfactory progress towards the metrics agreed to under subsection (j).

(C) FLEXIBLE APPROACH.—In renewing a grant or cooperative agreement under subparagraph (B), the Secretary and the eligible consortium may agree to new or additional uses of funds in order to meet changes in the needs of the region.

(4) LIMITATION ON AMOUNT OF AWARDS.—

(A) INITIAL PERFORMANCE PERIOD.—The amount of an initial grant or cooperative agreements awarded to a regional technology and innovation hub under paragraph (3)(A) shall be no more than \$150,000,000.

(B) SUBSEQUENT PERFORMANCE PERIOD.—Upon renewal of a grant or cooperative agreement under paragraph (3)(B), the Secretary may award funding in the amount that the Secretary considers appropriate, ensuring that no single regional technology and innovation hub receives more than 10 percent of the aggregate amount of the grants and cooperative agreements awarded under this subsection.

(5) MATCHING REQUIRED.—

(A) INITIAL PERFORMANCE PERIOD.—Except in the case of a regional technology and innovation hub described in subparagraph (C), the total amount of all grants awarded to a regional technology and innovation hub under this subsection in phase one shall not exceed 90 percent of the total operating costs of the regional technology and innovation hub during the initial performance period.

(B) SUBSEQUENT PERFORMANCE PERIOD.—Except in the case of a regional technology and innovation hub described in subparagraph (C), the total amount of all grants awarded to a regional technology and innovation hub in subsequent performance periods shall not exceed 75 percent of the total operating costs of the regional technology and in-

novation hub in each year of the grant or cooperative agreement.

(C) SMALL AND RURAL COMMUNITIES, UNDERSERVED COMMUNITIES, AND INDIAN TRIBES.—

(i) IN GENERAL.—The total Federal financial assistance awarded in a given year to a regional technology and innovation hub under this subsection shall not exceed amounts as follows:

(I) In the case of a regional technology and innovation hub that primarily serves a small and rural community or other underserved community, in a fiscal year, 90 percent of the total funding of the regional technology and innovation hub in that fiscal year.

(II) In the case of a regional technology and innovation hub that is led by a Tribal government, in a fiscal year, 100 percent of the total funding of the regional technology and innovation hub in that fiscal year.

(ii) MINIMUM THRESHOLD OF RURAL REPRESENTATION.—For purposes of clause (i)(I), the Secretary shall establish a minimum threshold of rural representation in the regional technology and innovation hub.

(D) IN-KIND CONTRIBUTIONS.—For purposes of this paragraph, in-kind contributions may be used for part of the non-Federal share of the total funding of a regional technology and innovation hub in a fiscal year.

(6) GRANTS FOR INFRASTRUCTURE.—Any grant or cooperative agreement awarded under this subsection to support the construction of facilities and site connectivity infrastructure shall be awarded pursuant to section 201 of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3141) and subject to the provisions of such Act, except that subsection (b) of such section and sections 204 and 301 of such Act (42 U.S.C. 3144; 3161) shall not apply.

(7) RELATION TO CERTAIN GRANT AWARDS.—The Secretary shall not require a regional technology and innovation hub to receive a grant or cooperative agreement under subsection (e) in order to receive a grant or cooperative agreement under this subsection.

(g) APPLICATIONS.—An eligible consortium seeking designation as a regional technology and innovation hub under subsection (d) or a grant or cooperative agreement under subsection (e) or (f) shall submit to the Secretary an application therefore at such time, in such manner, and containing such information as the Secretary may specify.

(h) CONSIDERATIONS FOR DESIGNATION AND AWARD OF STRATEGY IMPLEMENTATION GRANTS AND COOPERATIVE AGREEMENTS.—In selecting an eligible consortium that submitted an application under subsection (g) for designation under subsection (d) or for a grant or cooperative agreement under subsection (f), the Secretary shall consider the following:

(1) The potential of the eligible consortium to advance the research, development, deployment, and domestic manufac-

turing of technologies in a key technology focus area, as described in section 10387 of the Research and Development, Competition, and Innovation Act or other technology or innovation sector critical to national security and economic competitiveness.

(2) The likelihood of positive regional economic effect, including increasing the number of high wage domestic jobs, creating new economic opportunities for economically disadvantaged and underrepresented populations, and building and retaining wealth in the region.

(3) How the eligible consortium plans to integrate with and leverage the resources of 1 or more federally funded research and development centers, National Laboratories, Federal laboratories, Manufacturing USA institutes, Hollings Manufacturing Extension Partnership centers, regional innovation engines or translation accelerators established under sections 10388 and 10389 of the Research and Development, Competition, and Innovation Act, test beds established and operated under section 10390 of such Act, or other Federal entities.

(4) How the eligible consortium will engage with the private sector, including small- and medium-sized businesses and cooperatives, and employee-owned businesses and cooperatives, to commercialize new technologies and improve the resiliency and sustainability of domestic supply chains in a key technology focus area, or other technology or innovation sector critical to national security and economic competitiveness.

(5) How the eligible consortium will carry out workforce development and skills acquisition programming, including through partnerships with entities that include State and local workforce development boards, institutions of higher education, including community colleges, historically Black colleges and universities, Tribal Colleges or Universities, and minority-serving institutions, labor organizations, nonprofit organizations, workforce development programs, and other related activities authorized by the Secretary, to support the development of a skilled technical workforce for the regional technology and innovation hub, including key technology focus area or other technology or innovation sector critical to national security and economic competitiveness.

(6) How the eligible consortium will improve or expand science, technology, engineering, and mathematics education programs and opportunities in the identified region in elementary and secondary school and higher education institutions located in the identified region to support the development of a key technology focus area or other technology or innovation sector critical to national security and economic competitiveness.

(7) How the eligible consortium plans to develop partnerships with venture development organizations, community development financial institutions and minority depository institutions, and sources of private investment in support of private sector activity, including launching new or expanding existing companies in a key technology focus area or other technology

or innovation sector critical to national security and economic competitiveness.

(8) How the eligible consortium plans to organize the activities of regional partners across sectors in support of a regional technology and innovation hub.

(9) How the eligible consortium considers opportunities to support local and regional businesses through procurement, including from minority-owned and women-owned businesses.

(10) How the eligible consortium will ensure that growth in technology, innovation, and advanced manufacturing sectors produces opportunity across the identified region and for economically disadvantaged, minority, underrepresented and rural populations, including, as appropriate, consideration of how the eligible consortium takes into account the relevant impact of existing regional status and plans or may affect regional goals for affordable housing availability, local and regional transportation, high-speed internet access, and primary and secondary education.

(11) How well the region's education institutions align their activities, including research, educational programs, training, with the proposed areas of focus.

(12) The likelihood efforts served by the consortium will be sustained once Federal support ends.

(13) How the eligible consortium will, as appropriate—

(A) enhance the economic, environmental, and energy security of the United States by promoting domestic development, manufacture, and deployment of innovative clean technologies and advanced manufacturing practices; and

(B) support translational research, technology development, manufacturing innovation, and commercialization activities relating to clean technology.

(i) COORDINATION AND COLLABORATION.—

(1) COORDINATION WITH REGIONAL INNOVATION PROGRAM.—The Secretary shall ensure the activities under this section do not duplicate activities or efforts under section 27.

(2) COORDINATION AMONG HUBS.—The Secretary shall ensure eligible consortia that receive a grant or cooperative agreement under this section coordinate and share best practices for regional economic development.

(3) COORDINATION WITH PROGRAMS OF THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.—The Secretary shall coordinate the activities of regional technology and innovation hubs designated under this section, the Hollings Manufacturing Extension Partnership, and the Manufacturing USA Program, as the Secretary considers appropriate, to maintain the effectiveness of a manufacturing extension center or a Manufacturing USA institute.

(4) COORDINATION WITH DEPARTMENT OF ENERGY PROGRAMS.—The Secretary shall, in collaboration with the Secretary of Energy, coordinate the activities and selection of regional technology and innovation hubs designated under this section, as the Secretaries consider appropriate, to maintain the effectiveness of activities at the Department of Energy and the National Laboratories.

(5) INTERAGENCY COLLABORATION.—In designating regional technology and innovation hubs under subsection (d) and awarding grants or cooperative agreements under subsection (f), the Secretary—

(A) shall collaborate with Federal departments and agencies whose missions contribute to the goals of the regional technology and innovation hub;

(B) shall consult with the Director of the National Science Foundation for the purpose of ensuring that the regional technology and innovation hubs are aligned with relevant science, technology, and engineering expertise; and

(C) may accept funds from other Federal agencies to support grants, cooperative agreements, and activities under this section.

(j) PERFORMANCE MEASUREMENT, TRANSPARENCY, AND ACCOUNTABILITY.—

(1) METRICS, STANDARDS, AND ASSESSMENT.—For each grant and cooperative agreement awarded under subsection (f) for a regional technology and innovation hub, the Secretary shall—

(A) in consultation with the regional technology and innovation hub, develop metrics, which may include metrics relating to domestic job creation, patent awards, increases in research funding, business formation and expansion, and participation of individuals or communities historically underrepresented in STEM, to assess the effectiveness of the activities funded in making progress toward the purposes set forth under subsection (b)(1);

(B) establish standards for the performance of the regional technology and innovation hub that are based on the metrics developed under subparagraph (A); and

(C) prior to any award made under a subsequent performance period in subsection (f) and every 2 years thereafter until Federal financial assistance under this section for the regional technology and innovation hub is discontinued, conduct an assessment of the regional technology and innovation hub to confirm whether the performance of the regional technology and innovation hub is meeting the standards for performance established under subparagraph (B) of this paragraph.

(2) FINAL REPORTS BY RECIPIENTS OF STRATEGY IMPLEMENTATION GRANTS AND COOPERATIVE AGREEMENTS.—

(A) IN GENERAL.—The Secretary shall require each eligible consortium that receives a grant or cooperative agreement under subsection (f) for activities of a regional technology and innovation hub, as a condition of receipt of such grant or cooperative agreement, to submit to the Secretary, not later than 120 days after the last day of the term of the grant or cooperative agreement, a report on the activities of the regional technology and innovation hub supported by the grant or cooperative agreement.

(B) CONTENTS OF REPORT.—Each report submitted by an eligible consortium under subparagraph (A) shall include the following:

(i) A detailed description of the activities carried out by the regional technology and innovation hub using the grant or cooperative agreement described in subparagraph (A), including the following:

(I) A description of each project the regional technology and innovation hub completed using such grant or cooperative agreement.

(II) An explanation of how each project described in subclause (I) achieves a specific goal under this section in the region of the regional technology and innovation hub with respect to—

(aa) the resiliency and sustainability of a supply chain;

(bb) research, development, and deployment of a critical technology;

(cc) workforce training and development;

(dd) domestic job creation;

(ee) entrepreneurship and company formation;

(ff) commercialization;

(gg) access to private capital; or

(hh) participation of individuals or communities historically underrepresented in STEM.

(ii) A discussion of any obstacles encountered by the regional technology and innovation hub in the implementation of the regional technology and innovation hub and how the regional technology and innovation hub overcame those obstacles.

(iii) An evaluation of the success of the projects of the regional technology and innovation hub using the performance standards and measures established under paragraph (1), including an evaluation of the planning process and how the project contributes to carrying out the regional innovation strategy of the regional technology and innovation hub.

(iv) The effectiveness of the regional technology and innovation hub in ensuring that, in the region of the regional technology and innovation hub, growth in technology and innovation sectors produces broadly shared opportunity across the region, including for economic disadvantaged and underrepresented populations and rural areas.

(v) Information regarding such other matters as the Secretary may require.

(3) INTERIM REPORTS BY RECIPIENTS OF GRANTS AND COOPERATIVE AGREEMENTS.—In addition to requiring submittal of final reports under paragraph (2)(A), the Secretary may require a regional technology and innovation hub described in such paragraph to submit to the Secretary such interim reports as the Secretary considers appropriate.

(4) ANNUAL REPORTS TO CONGRESS.—Not less frequently than once each year, the Secretary shall submit to the appropriate committees of Congress an annual report on the results of the assessments conducted by the Secretary under paragraph (1)(C) during the period covered by the report.

(k) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary—

(1) \$50,000,000 to award grants and cooperative agreements under subsection (e) for the period of fiscal years 2023 through 2027;

(2) \$2,950,000,000 to award grants and cooperative agreements under subsection (f) for the period of fiscal years 2023 and 2024; and

(3) \$7,000,000,000 to award grants and cooperative agreements under subsection (f) for the period of fiscal years 2025 through 2027.

(l) ADMINISTRATION.—The Secretary may use funds made available to carry out this section for administrative costs under this section.

SEC. 29. [15 U.S.C. 3722b] DISTRESSED AREA RECOMPETE PILOT PROGRAM.

(a) IN GENERAL.—Within the program authorized under section 28, the Secretary is authorized to establish a pilot program, to be known as the “Recompete Pilot Program”, to provide grants to eligible recipients representing eligible areas or Tribal lands to alleviate persistent economic distress and support long-term comprehensive economic development and job creation in eligible areas.

(b) STRATEGY DEVELOPMENT GRANTS AND COOPERATIVE AGREEMENTS.—Subject to available appropriations, the Secretary is authorized, on the application of an eligible recipient, to award up to one half of the number of grants under subsection (e) of section 28 to eligible recipients to develop a recompete plan and carry out related predevelopment activities.

(c) STRATEGY IMPLEMENTATION GRANTS AND COOPERATIVE AGREEMENTS.—Subject to available appropriations and subsection (f), the Secretary shall award, on the application of an eligible recipient, at least ten strategy implementation grants, in accordance with a recompete plan review and approved by the Secretary, to carry out coordinated and comprehensive economic development programs and activities in an eligible area, consistent with a recompete plan approved by the Secretary. Such activities may include—

(1) workforce development activities of the kind described in section 28(f) or other job training and workforce outreach programs oriented to local employer needs, such as—

(A) customized job training programs carried out by local community colleges and other training or educational organizations in partnership with local businesses;

(B) workforce outreach programs located in, and targeted to, lower-income and underemployed neighborhoods; and

(C) programs to embed job placement and training services in neighborhood institutions such as churches, housing projects, and community advocacy programs; and

(D) job retention programs and activities, such as the provision of career coaches;

(2) business and entrepreneur development activities of the kind described in section 28(f), technology development and maturation activities of the kind described in such section, or the provision of business advice and assistance to small and medium-sized local businesses and entrepreneurs. Such advice and assistance may include—

(A) manufacturing extension services;

(B) small business development centers;

(C) centers to help businesses bid for Federal procurement contracts;

(D) entrepreneurial assistance programs that link entrepreneurs with available public and private resources;

(E) legal advice and resources; and

(F) assistance in accessing capital;

(3) infrastructure related activities of the kind described in section 28(f) or other land and site development programs, such as brownfield redevelopment, research and technology parks, business incubators, business corridor development, and other infrastructure activities related to supporting job creation and employment for residents, subject to the requirements of section 28(f)(6); and

(4) additional planning, predevelopment, technical assistance, and other administrative activities as may be necessary for the ongoing implementation, administration, and operation of the programs and activities carried out with a grant or cooperative agreement under this section, including but not limited to economic development planning and evaluation.

(d) TERM.—

(1) INITIAL PERFORMANCE PERIOD.—The term of an initial grant or cooperative agreement awarded under subsection (c) shall be for a period that the Secretary deems appropriate for the proposed activities but not less than 2 years.

(2) SUBSEQUENT PERFORMANCE PERIOD.—The Secretary may renew a grant or cooperative agreement awarded under subsection (c) for such period, such amount, and such terms as the Secretary considers appropriate, if the Secretary determines that the recipient of an award under subsection (c) has made satisfactory progress towards metrics or benchmarking requirements established by the Secretary at time of award.

(3) FLEXIBLE APPROACH.—In renewing a grant or cooperative agreement under subsection (c), the Secretary may approve new or additional uses of funds, consistent with the uses described in subsection (c), to meet changes in the needs of the region.

(e) LIMITATIONS.—

(1) LIMITATION ON ELIGIBLE AREAS.—An eligible area may not benefit from more than 1 grant or cooperative agreement described in subsection (b) and 1 grant or cooperative agreement described in subsection (c), provided that a renewal described in subsection (d)(2) shall not constitute an additional grant.

(2) LIMITATION ON RECIPIENTS.—For purposes of the program under this section, an eligible recipient may not receive multiple grants described in subsection (c) on behalf of more than 1 eligible area.

(f) AWARD AMOUNT.—

(1) IN GENERAL.—In determining the amount of a grant that an eligible recipient may be awarded under subsection (c), the Secretary shall—

(A) take into consideration the proposed activities and projected expenditures outlined in an approved recompetete plan; and

(B) award not more than the product obtained by multiplying—

(i) the prime-age employment gap of the eligible area;

(ii) the prime-age population of the eligible area;

and

(iii) either—

(I) \$70,585 for local labor markets; or

(II) \$53,600 for local communities.

(2) MINIMUM AMOUNT.—The Secretary may not make an award that is less than \$20,000,000 to an eligible recipient.

(g) APPLICATIONS.—To be considered for a grant or cooperative agreement under—

(1) subsection (b) of this section, an eligible recipient shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary determines to be appropriate; and

(2) subsection (c) of this section, an eligible recipient shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary determines to be appropriate, including a recompetete plan approved by the Secretary.

(h) RELATION TO CERTAIN GRANT AWARDS.—The Secretary shall not require an eligible recipient to receive a grant or cooperative agreement under subsection (b) in order to receive a grant or cooperative agreement under subsection (c).

(i) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary \$1,000,000,000 to award grants and cooperative agreements under subsection (c) of this section, for the period of fiscal years 2022 through 2026.

(j) DEFINITIONS.—In this section:

(1) ELIGIBLE AREA.—The term “eligible area” means either of the following:

(A) A local labor market that—

(i) has a prime-age employment gap equal to not less than 2.5 percent; and

(ii) meets additional criteria as the Secretary may establish.

(B) A local community that—

(i) has a prime-age employment gap equal to not less than 5 percent;

(ii) is not located within an eligible local labor market that meets the criteria described in subparagraph (A);

(iii) has a median annual household income of not more than \$75,000; and

(iv) meets additional criteria as the Secretary may establish.

(2) **ELIGIBLE RECIPIENT.**—The term “eligible recipient” means a specified entity that has been authorized in a manner as determined by the Secretary to represent and act on behalf of an eligible area for the purposes of this section.

(3) **LOCAL LABOR MARKET.**—The term “local labor market” means any of the following areas that contains 1 or more specified entities described in subparagraphs (A) through (D) of paragraph (6):

(A) A metropolitan statistical area or micropolitan statistical area, excluding any area described in subparagraph (C).

(B) A commuting zone, excluding any areas described in subparagraphs (A) and (C).

(C) The Tribal land with a Tribal prime-age population represented by a Tribal government.

(4) **LOCAL COMMUNITY.**—The term “local community” means the area served by a general-purpose unit of local government that is located within, but does not cover the entire area of, a local labor market that does not meet the criteria described in paragraph (1)(A).

(5) **PRIME-AGE EMPLOYMENT GAP.**—

(A) **IN GENERAL.**—The term “prime-age employment gap” means the difference (expressed as a percentage) between—

(i) the national 5-year average prime-age employment rate; and

(ii) the 5-year average prime-age employment rate of the eligible area.

(B) **CALCULATION.**—For the purposes of subparagraph (A), an individual is prime-age if such individual between the ages of 25 years and 54 years.

(6) **RECOMPETE PLAN.**—The term “recompete plan” means a comprehensive multiyear economic development plan that—

(A) includes—

(i) proposed programs and activities to be carried out with a grant awarded under subsection (c) to address the economic challenges of the eligible area in a comprehensive manner that promotes long-term, sustained economic growth, lasting job creation, per capita wage increases, and reduction in the prime-age employment gap of the eligible area;

(ii) projected costs and annual expenditures and proposed disbursement schedule;

(iii) the roles and responsibilities of specified entities that may receive grant funds awarded under subsection (c); and

(iv) other information as the Secretary determines appropriate;

(B) is submitted to the Secretary for approval for an eligible recipient to be considered for a grant described in subsection (c); and

(C) may be modified over the term of the grant by the eligible recipient, subject to the approval of the Secretary or at the direction of the Secretary, if the Secretary determines benchmarking requirements are repeatedly not met or if other circumstances necessitate a modification.

(7) SPECIFIED ENTITY.—The term “specified entity” means—

(A) a unit of local government;

(B) the District of Columbia;

(C) a territory of the United States;

(D) a Tribal government;

(E) political subdivision of a State or other entity, including a special-purpose entity engaged in economic development activities;

(F) a public entity or nonprofit organization, acting in cooperation with the officials of a political subdivision of a State or other entity described in subparagraph (E);

(G) an economic development district (as defined in section 3 of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3122); and

(H) a consortium of any of the specified entities described in this paragraph which serve or are contained within the same eligible area.

(8) TRIBAL LAND.—The term “Tribal land” means any land—

(A) located within the boundaries of an Indian reservation, pueblo, or rancharia; or

(B) not located within the boundaries of an Indian reservation, pueblo, or rancharia, the title to which is held—

(i) in trust by the United States for the benefit of an Indian Tribe or an individual Indian;

(ii) by an Indian Tribe or an individual Indian, subject to restriction against alienation under laws of the United States; or

(iii) by a dependent Indian community.

(9) TRIBAL PRIME-AGE POPULATION.—

(A) IN GENERAL.—The term “Tribal prime-age population” shall be equal to the sum obtained by adding—

(i) the product obtained by multiplying—

(I) the total number of individuals ages 25 through 54 residing on the Tribal land of the Tribal government; and

(II) 0.65; and

(ii) the product obtained by multiplying—

(I) the total number of individuals ages 25 through 54 included on the membership roll of the Tribal government; and

(II) 0.35

(B) USE OF DATA.—A calculation under subparagraph (A) shall be determined based on data provided by the applicable Tribal government to the Department of the Treasury under the Coronavirus State and Local Fiscal Recovery Fund programs under title VI of the Social Security Act (42 U.S.C. 801 et seq.).

SEC. 30. [15 U.S.C. 3723] STEM APPRENTICESHIP PROGRAMS.

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

(b) ELIGIBLE RECIPIENT DEFINED.—In this section, the term “eligible recipient” means—

- (1) a State;
- (2) an Indian tribe;
- (3) a city or other political subdivision of a State;
- (4) an entity that—

(A) is a nonprofit organization, an institution of higher education, a public-private partnership, a science or research park, a Federal laboratory, or an economic development organization or similar entity; and

(B) has an application that is supported by a State, a political subdivision of a State, or a native organization; or

(5) a consortium of any of the entities described in paragraphs (1) through (5).

(c) NEEDS ASSESSMENT GRANTS.—The Secretary of Commerce may provide a grant to an eligible recipient to conduct a needs assessment to identify—

(1) the unmet need of a region’s employer base for skilled STEM workers;

(2) the potential of STEM apprenticeships to address the unmet need described in paragraph (1); and

(3) any barriers to addressing the unmet need described in paragraph (1).

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