

one promising project would help double current flows of oil from Canada, which is already our No. 1 trading partner.

One estimate projects that the project will create—and these are numbers the company has put forward in advancing this project—at least 20,000 high-paying jobs during the construction phase and more than 250,000 permanent jobs. It will spur more than \$100 billion in annual total expenditures in the U.S. economy. It will generate \$6.5 billion in new personal income for U.S. workers and their families, and it will stimulate nearly \$600 million in revenue for State and local governments along its route.

Federal approval is something that will cost our Nation not one penny. What it will do, however, is create assurances in markets that the energy we need to power our Nation will be there in the future, and it will be there when we need it. That in turn will help to reduce our dependence on unstable overseas regimes, hold down the cost of gasoline at the pump, and create thousands of good American jobs at a time when unemployment is still hovering at about 9 percent.

Keystone XL is just one example. Across America there are hundreds of projects like it that could be advanced with good environmental stewardship and responsible oversight, if we resolve to do it and we create the climate to do it.

Today the United States, Canada, and Mexico combined produce 75 percent of the total oil we need. We can do much more. Our Nation needs to send a signal to energy markets that the United States is committed to a policy of aggressive domestic energy development by creating a strong business environment and a pro-energy agenda, including the legal, tax, and regulatory certainty companies need in order to make the kinds of investments that will truly lessen our dependence on foreign oil.

We are at a moment in history when we can truly turn adversity into opportunity and potential into reality. I urge Members to seize this opportunity to make America stronger, safer, and more financially secure with a comprehensive approach to truly develop American energy right here at home, to meet our needs both now and for future generations. We can do it. We must do it, for the well-being of our country today and for future generations.

I thank the Chair for this opportunity, yield the floor, and suggest the absence of a quorum.

The ACTING PRESIDENT pro tempore. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Ms. LANDRIEU. Madam President, I ask unanimous consent that the order for the quorum call be rescinded.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

## CONCLUSION OF MORNING BUSINESS

The ACTING PRESIDENT pro tempore. Morning business is closed.

## SBIR/STTR REAUTHORIZATION ACT OF 2011

The ACTING PRESIDENT pro tempore. Under the previous order, the Senate will proceed to the consideration of S. 493, which the clerk will report.

The assistant legislative clerk read as follows:

A bill (S. 493) to reauthorize and improve the SBIR and STTR programs, and for other purposes.

The Senate proceeded to consider the bill, which had been reported from the Committee on Small Business and Entrepreneurship, with amendments; as follows:

(The parts of the bill intended to be stricken are shown in boldface brackets and the parts of the bill intended to be inserted are shown in italic.)

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

### SECTION 1. SHORT TITLE.

This Act may be cited as the “SBIR/STTR Reauthorization Act of 2011”.

### SEC. 2. TABLE OF CONTENTS.

The table of contents for this Act is as follows:

- Sec. 1. Short title.
- Sec. 2. Table of contents.
- Sec. 3. Definitions.

### TITLE I—REAUTHORIZATION OF THE SBIR AND STTR PROGRAMS

- Sec. 101. Extension of termination dates.
- Sec. 102. Status of the Office of Technology.
- Sec. 103. SBIR allocation increase.
- Sec. 104. STTR allocation increase.
- Sec. 105. SBIR and STTR award levels.
- Sec. 106. Agency and program flexibility.
- Sec. 107. Elimination of Phase II invitations.
- Sec. 108. Participation by firms with substantial investment from multiple venture capital operating companies in a portion of the SBIR program.
- Sec. 109. SBIR and STTR special acquisition preference.
- Sec. 110. Collaborating with Federal laboratories and research and development centers.
- Sec. 111. Notice requirement.
- Sec. 112. Express authority for an agency to award sequential Phase II awards for SBIR or STTR funded projects.

### TITLE II—OUTREACH AND COMMERCIALIZATION INITIATIVES

- Sec. 201. Rural and State outreach.
- [Sec. 202. SBIR—STEM Workforce Development Grant Pilot Program.]
- Sec. [203]202. Technical assistance for awardees.
- Sec. [204]203. Commercialization Readiness Program at Department of Defense.
- Sec. [205]204. Commercialization Readiness Pilot Program for civilian agencies.
- Sec. [206]205. Accelerating cures.
- Sec. [207]206. Federal agency engagement with SBIR and STTR awardees that have been awarded multiple Phase I awards but have not been awarded Phase II awards.

Sec. [208]207. Clarifying the definition of “Phase III”.

Sec. [209]208. Shortened period for final decisions on proposals and applications.

### TITLE III—OVERSIGHT AND EVALUATION

- Sec. 301. Streamlining annual evaluation requirements.
- Sec. 302. Data collection from agencies for SBIR.
- Sec. 303. Data collection from agencies for STTR.
- Sec. 304. Public database.
- Sec. 305. Government database.
- Sec. 306. Accuracy in funding base calculations.
- Sec. 307. Continued evaluation by the National Academy of Sciences.
- Sec. 308. Technology insertion reporting requirements.
- Sec. 309. Intellectual property protections.
- Sec. 310. Obtaining consent from SBIR and STTR applicants to release contact information to economic development organizations.
- Sec. 311. Pilot to allow funding for administrative, oversight, and contract processing costs.
- Sec. 312. GAO study with respect to venture capital operating company involvement.
- Sec. 313. Reducing vulnerability of SBIR and STTR programs to fraud, waste, and abuse.
- Sec. 314. Interagency policy committee.
- Sec. 315. *Simplified paperwork requirements.*

### TITLE IV—POLICY DIRECTIVES

- Sec. 401. Conforming amendments to the SBIR and the STTR Policy Directives.

### TITLE V—OTHER PROVISIONS

- Sec. 501. Research topics and program diversification.
- Sec. 502. Report on SBIR and STTR program goals.
- Sec. 503. Competitive selection procedures for SBIR and STTR programs.

### SEC. 3. DEFINITIONS.

In this Act—

(1) the terms “Administration” and “Administrator” mean the Small Business Administration and the Administrator thereof, respectively;

(2) the terms “extramural budget”, “Federal agency”, “Small Business Innovation Research Program”, “SBIR”, “Small Business Technology Transfer Program”, and “STTR” have the meanings given such terms in section 9 of the Small Business Act (15 U.S.C. 638); and

(3) the term “small business concern” has the meaning given that term under section 3 of the Small Business Act (15 U.S.C. 632).

### TITLE I—REAUTHORIZATION OF THE SBIR AND STTR PROGRAMS

#### SEC. 101. EXTENSION OF TERMINATION DATES.

(a) SBIR.—Section 9(m) of the Small Business Act (15 U.S.C. 638(m)) is amended—

(1) by striking “TERMINATION.—” and all that follows through “the authorization” and inserting “TERMINATION.—The authorization”;

(2) by striking “2008” and inserting “2019”; and

(3) by striking paragraph (2).

(b) STTR.—Section 9(n)(1)(A) of the Small Business Act (15 U.S.C. 638(n)(1)(A)) is amended—

(1) by striking “IN GENERAL.—” and all that follows through “with respect” and inserting “IN GENERAL.—With respect”;

(2) by striking “2009” and inserting “2019”; and

(3) by striking clause (ii).

#### SEC. 102. STATUS OF THE OFFICE OF TECHNOLOGY.

Section 9(b) of the Small Business Act (15 U.S.C. 638(b)) is amended—

(1) in paragraph (7), by striking “and” at the end;

(2) in paragraph (8), by striking the period at the end and inserting “; and”;

(3) by redesignating paragraph (8) as paragraph (9); and

(4) by adding at the end the following:

“(10) to maintain an Office of Technology to carry out the responsibilities of the Administration under this section, which shall be—

“(A) headed by the Assistant Administrator for Technology, who shall report directly to the Administrator; and

“(B) independent from the Office of Government Contracting of the Administration and sufficiently staffed and funded to comply with the oversight, reporting, and public database responsibilities assigned to the Office of Technology by the Administrator.”.

**SEC. 103. SBIR ALLOCATION INCREASE.**

Section 9(f) of the Small Business Act (15 U.S.C. 638(f)) is amended—

(1) in paragraph (1)—

(A) in the matter preceding subparagraph (A), by striking “Each” and inserting “Except as provided in paragraph (2)(B), each”;

(B) in subparagraph (B), by striking “and” at the end; and

(C) by striking subparagraph (C) and inserting the following:

“(C) not less than 2.5 percent of such budget in fiscal year 2013;

“(D) not less than 2.6 percent of such budget in fiscal year 2014;

“(E) not less than 2.7 percent of such budget in fiscal year 2015;

“(F) not less than 2.8 percent of such budget in fiscal year 2016;

“(G) not less than 2.9 percent of such budget in fiscal year 2017;

“(H) not less than 3.0 percent of such budget in fiscal year 2018;

“(I) not less than 3.1 percent of such budget in fiscal year 2019;

“(J) not less than 3.2 percent of such budget in fiscal year 2020;

“(K) not less than 3.3 percent of such budget in fiscal year 2021;

“(L) not less than 3.4 percent of such budget in fiscal year 2022; and

“(M) not less than 3.5 percent of such budget in fiscal year 2023 and each fiscal year thereafter.”; [and]

(2) in paragraph (2)—

(A) by redesignating subparagraphs (A) and (B) as clauses (i) and (ii), respectively, and adjusting the margins accordingly;

(B) by striking “A Federal agency” and inserting the following:

“(A) IN GENERAL.—A Federal agency”;

(C) by adding at the end the following:

“(B) DEPARTMENT OF DEFENSE AND DEPARTMENT OF ENERGY.—For the Department of Defense and the Department of Energy, to the greatest extent practicable, the percentage of the extramural budget in excess of 2.5 percent required to be expended with small business concerns under subparagraphs (D) through (M) of paragraph (1)—

“(i) may not be used for new Phase I or Phase II awards; and

“(ii) shall be used for activities that further the readiness levels of technologies developed under Phase II awards, including conducting testing and evaluation to promote the transition of such technologies into commercial or defense products, or systems furthering the mission needs of the Department of Defense or the Department of Energy, as the case may be.” [.] and

(3) by adding at the end the following:

“(4) *RULE OF CONSTRUCTION.*—Nothing in this subsection may be construed to prohibit a Federal agency from expending with small business concerns an amount of the extramural budget for research or research and development of the

Federal agency that exceeds the amount required under paragraph (1).”.

**SEC. 104. STTR ALLOCATION INCREASE.**

Section 9(n)(1)(B) of the Small Business Act (15 U.S.C. 638(n)(1)(B)) is amended—

(1) in clause (i), by striking “and” at the end;

(2) in clause (ii), by striking “‘thereafter.’” and inserting “‘through fiscal year 2012.’”; [and]

(3) by adding at the end the following:

“(iii) 0.4 percent for fiscal years 2013 and 2014;

“(iv) 0.5 percent for fiscal years 2015 and 2016; and

“(v) 0.6 percent for fiscal year 2017 and each fiscal year thereafter.” [.] and

(4) by adding at the end the following:

“(4) *RULE OF CONSTRUCTION.*—Nothing in this subsection may be construed to prohibit a Federal agency from expending with small business concerns an amount of the extramural budget for research or research and development of the Federal agency that exceeds the amount required under paragraph (1).”.

**SEC. 105. SBIR AND STTR AWARD LEVELS.**

(a) SBIR ADJUSTMENTS.—Section 9(j)(2)(D) of the Small Business Act (15 U.S.C. 638(j)(2)(D)) is amended—

(1) by striking “\$100,000” and inserting “\$150,000”; and

(2) by striking “\$750,000” and inserting “\$1,000,000”.

(b) STTR ADJUSTMENTS.—Section 9(p)(2)(B)(ix) of the Small Business Act (15 U.S.C. 638(p)(2)(B)(ix)) is amended—

(1) by striking “\$100,000” and inserting “\$150,000”; and

(2) by striking “\$750,000” and inserting “\$1,000,000”.

(c) ANNUAL ADJUSTMENTS.—Section 9 of the Small Business Act (15 U.S.C. 638) is amended—

(1) in subsection (j)(2)(D), by striking “once every 5 years to reflect economic adjustments and programmatic considerations” and inserting “every year for inflation”; and

(2) in subsection (p)(2)(B)(ix), as amended by subsection (b) of this section, by inserting “(each of which the Administrator shall adjust for inflation annually)” after “\$1,000,000.”.

(d) LIMITATION ON SIZE OF AWARDS.—Section 9 of the Small Business Act (15 U.S.C. 638) is amended by adding at the end the following:

“(aa) LIMITATION ON SIZE OF AWARDS.—

“(1) LIMITATION.—No Federal agency may issue an award under the SBIR program or the STTR program if the size of the award exceeds the award guidelines established under this section by more than 50 percent.

“(2) MAINTENANCE OF INFORMATION.—Participating agencies shall maintain information on awards exceeding the guidelines established under this section, including—

“(A) the amount of each award;

“(B) a justification for exceeding the award amount;

“(C) the identity and location of each award recipient; and

“(D) whether an award recipient has received any venture capital investment and, if so, whether the recipient is majority-owned by multiple venture capital operating companies.

“(3) REPORTS.—The Administrator shall include the information described in paragraph (2) in the annual report of the Administrator to Congress.

“(4) *RULE OF CONSTRUCTION.*—Nothing in this subsection shall be construed to prevent a Federal agency from supplementing an award under the SBIR program or the STTR program using funds of the Federal agency that are not part of the SBIR program or the STTR program of the Federal agency.”.

**SEC. 106. AGENCY AND PROGRAM FLEXIBILITY.**

Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

“(bb) SUBSEQUENT PHASE II AWARDS.—

“(1) AGENCY FLEXIBILITY.—A small business concern that received an award from a Federal agency under this section shall be eligible to receive a subsequent Phase II award from another Federal agency, if the head of each relevant Federal agency or the relevant component of the Federal agency makes a written determination that the topics of the relevant awards are the same and both agencies report the awards to the Administrator for inclusion in the public database under subsection (k).

“(2) SBIR AND STTR PROGRAM FLEXIBILITY.—A small business concern that received an award under this section under the SBIR program or the STTR program may receive a subsequent Phase II award in either the SBIR program or the STTR program and the participating agency or agencies shall report the awards to the Administrator for inclusion in the public database under subsection (k).

“(3) PREVENTING DUPLICATIVE AWARDS.—Before making an award under paragraph (1) or (2), the head of a Federal agency shall verify that the project to be performed with the award has not been funded under the SBIR program or STTR program of another Federal agency.”.

**SEC. 107. ELIMINATION OF PHASE II INVITATIONS.**

(a) IN GENERAL.—Section 9(e) of the Small Business Act (15 U.S.C. 638(e)) is amended—

(1) in paragraph (4)(B), by striking “to further” and inserting: “which shall not include any invitation, pre-screening, pre-selection, or down-selection process for eligibility for the second phase, that will further”; and

(2) in paragraph (6)(B), by striking “to further develop proposed ideas to” and inserting “which shall not include any invitation, pre-screening, pre-selection, or down-selection process for eligibility for the second phase, that will further develop proposals that”.

**SEC. 108. PARTICIPATION BY FIRMS WITH SUBSTANTIAL INVESTMENT FROM MULTIPLE VENTURE CAPITAL OPERATING COMPANIES IN A PORTION OF THE SBIR PROGRAM.**

(a) IN GENERAL.—Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

“(cc) PARTICIPATION OF SMALL BUSINESS CONCERNS MAJORITY-OWNED BY VENTURE CAPITAL OPERATING COMPANIES IN THE SBIR PROGRAM.—

“(1) AUTHORITY.—Upon a written determination described in paragraph (2) provided to the Administrator and to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business of the House of Representatives not later than 30 days before the date on which an award is made—

“(A) the Director of the National Institutes of Health, the Secretary of Energy, and the Director of the National Science Foundation may award not more than 25 percent of the funds allocated for the SBIR program of the Federal agency to small business concerns that are owned in majority part by multiple venture capital operating companies through competitive, merit-based procedures that are open to all eligible small business concerns; and

“(B) the head of a Federal agency other than a Federal agency described in subparagraph (A) that participates in the SBIR program may award not more than 15 percent of the funds allocated for the SBIR program of the Federal agency to small business concerns that are owned in majority part by

multiple venture capital operating companies through competitive, merit-based procedures that are open to all eligible small business concerns.

“(2) DETERMINATION.—A written determination described in this paragraph is a written determination by the head of a Federal agency that explains how the use of the authority under paragraph (1) will—

“(A) induce additional venture capital funding of small business innovations;

“(B) substantially contribute to the mission of the Federal agency;

“(C) demonstrate a need for public research; and

“(D) otherwise fulfill the capital needs of small business concerns for additional financing for the SBIR project.

“(3) REGISTRATION.—A small business concern that is majority-owned by multiple venture capital operating companies and qualified for participation in the program authorized under paragraph (1) shall—

“(A) register with the Administrator on the date that the small business concern submits an application for an award under the SBIR program; and

“(B) indicate in any SBIR proposal that the small business concern is registered under subparagraph (A) as majority-owned by multiple venture capital operating companies.

“(4) COMPLIANCE.—

“(A) IN GENERAL.—The head of a Federal agency that makes an award under this subsection during a fiscal year shall collect and submit to the Administrator data relating to the number and dollar amount of Phase I awards, Phase II awards, and any other category of awards by the Federal agency under the SBIR program during that fiscal year.

“(B) ANNUAL REPORTING.—The Administrator shall include as part of each annual report by the Administration under subsection (b)(7) any data submitted under subparagraph (A) and a discussion of the compliance of each Federal agency that makes an award under this subsection during the fiscal year with the maximum percentages under paragraph (1).

“(5) ENFORCEMENT.—If a Federal agency awards more than the percent of the funds allocated for the SBIR program of the Federal agency authorized under paragraph (1) for a purpose described in paragraph (1), the head of the Federal agency shall transfer an amount equal to the amount awarded in excess of the amount authorized under paragraph (1) to the funds for general SBIR programs from the non-SBIR and non-STTR research and development funds of the Federal agency not later than 180 days after the date on which the Federal agency made the award that caused the total awarded under paragraph (1) to be more than the amount authorized under paragraph (1) for a purpose described in paragraph (1).

“(6) FINAL DECISIONS ON APPLICATIONS UNDER THE SBIR PROGRAM.—

“(A) DEFINITION.—In this paragraph, the term ‘covered small business concern’ means a small business concern that—

“(i) was not majority-owned by multiple venture capital operating companies on the date on which the small business concern submitted an application in response to a solicitation under the SBIR programs; and

“(ii) on the date of the award under the SBIR program is majority-owned by multiple venture capital operating companies.

“(B) IN GENERAL.—If a Federal agency does not make an award under a solicitation under the SBIR program before the date that is 9 months after the date on which the period for submitting applications under the solicitation ends—

“(i) a covered small business concern is eligible to receive the award, without regard to

whether the covered small business concern meets the requirements for receiving an award under the SBIR program for a small business concern that is majority-owned by multiple venture capital operating companies, if the covered small business concern meets all other requirements for such an award; and

“(ii) the head of the Federal agency shall transfer an amount equal to any amount awarded to a covered small business concern under the solicitation to the funds for general SBIR programs from the non-SBIR and non-STTR research and development funds of the Federal agency, not later than 90 days after the date on which the Federal agency makes the award.

“(6)(7) EVALUATION CRITERIA.—A Federal agency may not use investment of venture capital as a criterion for the award of contracts under the SBIR program or STTR program.

(b) TECHNICAL AND CONFORMING AMENDMENT.—Section 3 of the Small Business Act (15 U.S.C. 632) is amended by adding at the end the following:

“(aa) VENTURE CAPITAL OPERATING COMPANY.—In this Act, the term ‘venture capital operating company’ means an entity described in clause (i), (v), or (vi) of section 121.103(b)(5) of title 13, Code of Federal Regulations (or any successor thereto).”

(c) RULEMAKING TO ENSURE THAT FIRMS THAT ARE MAJORITY-OWNED BY MULTIPLE VENTURE CAPITAL OPERATING COMPANIES ARE ABLE TO PARTICIPATE IN A PORTION OF THE SBIR PROGRAM.—

(1) STATEMENT OF CONGRESSIONAL INTENT.—It is the stated intent of Congress that the Administrator should promulgate regulations to carry out the authority under section 9(cc) of the Small Business Act, as added by this section, that—

(A) permit small business concerns that are majority-owned by multiple venture capital operating companies to participate in the SBIR program in accordance with section 9(cc) of the Small Business Act;

(B) provide specific guidance for small business concerns that are majority-owned by multiple venture capital operating companies with regard to eligibility, participation, and affiliation rules; and

(C) preserve and maintain the integrity of the SBIR program as a program for small business concerns in the United States, prohibiting large businesses or large entities or foreign-owned businesses or entities from participation in the program established under section 9 of the Small Business Act.

(2) RULEMAKING REQUIRED.—

(A) PROPOSED REGULATIONS.—Not later than 4 months after the date of enactment of this Act, the Administrator shall issue proposed regulations to amend section 121.103 (relating to determinations of affiliation applicable to the SBIR program) and section 121.702 (relating to ownership and control standards and size standards applicable to the SBIR program) of title 13, Code of Federal Regulations, for firms that are majority-owned by multiple venture capital operating companies and participating in the SBIR program solely under the authority under section 9(cc) of the Small Business Act, as added by this section.

(B) FINAL REGULATIONS.—Not later than 1 year after the date of enactment of this Act, and after providing notice of and opportunity for comment on the proposed regulations issued under subparagraph (A), the Administrator shall issue final or interim final regulations under this subsection.

(3) CONTENTS.—

(A) IN GENERAL.—The regulations issued under this subsection shall permit the participation of applicants majority-owned by multiple venture capital operating companies in the SBIR program in accordance with

section 9(cc) of the Small Business Act, as added by this section, unless the Administrator determines—

(i) in accordance with the size standards established under subparagraph (B), that the applicant is—

(I) a large business or large entity; or  
(II) majority-owned or controlled by a large business or large entity; or

(ii) in accordance with the criteria established under subparagraph (C), that the applicant—

(I) is a foreign business or a foreign entity or is not a citizen of the United States or alien lawfully admitted for permanent residence; or

(II) is majority-owned or controlled by a foreign business, foreign entity, or person who is not a citizen of the United States or alien lawfully admitted for permanent residence.

(B) SIZE STANDARDS.—Under the authority to establish size standards under paragraphs (2) and (3) of section 3(a) of the Small Business Act (15 U.S.C. 632(a)), the Administrator shall, in accordance with paragraph (1) of this subsection, establish size standards for applicants seeking to participate in the SBIR program solely under the authority under section 9(cc) of the Small Business Act, as added by this section.

(C) CRITERIA FOR DETERMINING FOREIGN OWNERSHIP.—The Administrator shall establish criteria for determining whether an applicant meets the requirements under subparagraph (A)(ii), and, in establishing the criteria, shall consider whether the criteria should include—

(i) whether the applicant is at least 51 percent owned or controlled by citizens of the United States or domestic venture capital operating companies;

(ii) whether the applicant is domiciled in the United States; and

(iii) whether the applicant is a direct or indirect subsidiary of a foreign-owned firm, including whether the criteria should include that an applicant is a direct or indirect subsidiary of a foreign-owned entity if—

(I) any venture capital operating company that owns more than 20 percent of the applicant is a direct or indirect subsidiary of a foreign-owned entity; or

(II) in the aggregate, entities that are direct or indirect subsidiaries of foreign-owned entities own more than 49 percent of the applicant.

(D) CRITERIA FOR DETERMINING AFFILIATION.—The Administrator shall establish criteria, in accordance with paragraph (1), for determining whether an applicant is affiliated with a venture capital operating company or any other business that the venture capital operating company has financed and, in establishing the criteria, shall specify that—

(i) if a venture capital operating company that is determined to be affiliated with an applicant is a minority investor in the applicant, the portfolio companies of the venture capital operating company shall not be determined to be affiliated with the applicant, unless—

(I) the venture capital operating company owns a majority of the portfolio company; or

(II) the venture capital operating company holds a majority of the seats on the board of directors of the portfolio company;

(ii) subject to clause (i), the Administrator retains the authority to determine whether a venture capital operating company is affiliated with an applicant, including establishing other criteria;

(iii) the Administrator may not determine that a portfolio company of a venture capital operating company is affiliated with an applicant based solely on one or more shared investors; and

(iv) subject to clauses (i), (ii), and (iii), the Administrator retains the authority to determine whether a portfolio company of a venture capital operating company is affiliated with an applicant based on factors independent of whether there is a shared investor, such as whether there are contractual obligations between the portfolio company and the applicant.

(4) ENFORCEMENT.—If the Administrator does not issue final or interim final regulations under this subsection on or before the date that is 1 year after the date of enactment of this Act, the Administrator may not carry out any activities under section 4(h) of the Small Business Act (15 U.S.C. 633(h)) (as continued in effect pursuant to the Act entitled “An Act to extend temporarily certain authorities of the Small Business Administration”, approved October 10, 2006 (Public Law 109-316; 120 Stat. 1742)) during the period beginning on the date that is 1 year and 1 day after the date of enactment of this Act, and ending on the date on which the final or interim final regulations are issued.

(5) DEFINITION.—In this subsection, the term “venture capital operating company” has the same meaning as in section 3(aa) of the Small Business Act, as added by this section.

(d) ASSISTANCE FOR DETERMINING AFFILIATES.—

(1) CLEAR EXPLANATION REQUIRED.—Not later than 30 days after the date of enactment of this Act, the Administrator shall post on the Web site of the Administration (with a direct link displayed on the homepage of the Web site of the Administration or the SBIR and STTR Web sites of the Administration)—

(A) a clear explanation of the SBIR and STTR affiliation rules under part 121 of title 13, Code of Federal Regulations; and

(B) contact information for officers or employees of the Administration who—

(i) upon request, shall review an issue relating to the rules described in subparagraph (A); and

(ii) shall respond to a request under clause (i) not later than 20 business days after the date on which the request is received.

(2) INCLUSION OF AFFILIATION RULES FOR CERTAIN SMALL BUSINESS CONCERNS.—On and after the date on which the final regulations under subsection (c) are issued, the Administrator shall post on the Web site of the Administration information relating to the regulations, in accordance with paragraph (1).

#### SEC. 109. SBIR AND STTR SPECIAL ACQUISITION PREFERENCE.

Section 9(r) of the Small Business Act (15 U.S.C. 638(r)) is amended by adding at the end the following:

“(4) PHASE III AWARDS.—To the greatest extent practicable, Federal agencies and Federal prime contractors shall issue Phase III awards relating to technology, including sole source awards, to the SBIR and STTR award recipients that developed the technology.”

#### SEC. 110. COLLABORATING WITH FEDERAL LABORATORIES AND RESEARCH AND DEVELOPMENT CENTERS.

Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

“(dd) COLLABORATING WITH FEDERAL LABORATORIES AND RESEARCH AND DEVELOPMENT CENTERS.—

“(1) AUTHORIZATION.—Subject to the limitations under this section, the head of each participating Federal agency may make SBIR and STTR awards to any eligible small business concern that—

“(A) intends to enter into an agreement with a Federal laboratory or federally funded research and development center for portions of the activities to be performed under that award; or

“(B) has entered into a cooperative research and development agreement (as defined in section 12(d) of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3710a(d))) with a Federal laboratory.

“(2) PROHIBITION.—No Federal agency shall—

“(A) condition an SBIR or STTR award upon entering into agreement with any Federal laboratory or any federally funded laboratory or research and development center for any portion of the activities to be performed under that award;

“(B) approve an agreement between a small business concern receiving a SBIR or STTR award and a Federal laboratory or federally funded laboratory or research and development center, if the small business concern performs a lesser portion of the activities to be performed under that award than required by this section and by the SBIR Policy Directive and the STTR Policy Directive of the Administrator; or

“(C) approve an agreement that violates any provision, including any data rights protections provision, of this section or the SBIR and the STTR Policy Directives.

“(3) IMPLEMENTATION.—Not later than 180 days after the date of enactment of this subsection, the Administrator shall modify the SBIR Policy Directive and the STTR Policy Directive issued under this section to ensure that small business concerns—

“(A) have the flexibility to use the resources of the Federal laboratories and federally funded research and development centers; and

“(B) are not mandated to enter into agreement with any Federal laboratory or any federally funded laboratory or research and development center as a condition of an award.”

#### SEC. 111. NOTICE REQUIREMENT.

(a) SBIR PROGRAM.—Section 9(g) of the Small Business Act (15 U.S.C. 638(g)) is amended—

(1) in paragraph (10), by striking “and” at the end;

(2) in paragraph (11), by striking the period at the end and inserting a semicolon; and

(3) by adding at the end the following:

“(12) provide timely notice to the Administrator of any case or controversy before any Federal judicial or administrative tribunal concerning the SBIR program of the Federal agency; and”

(b) STTR PROGRAM.—Section 9(o) of the Small Business Act (15 U.S.C. 638(o)) is amended—

(1) by striking paragraph (15);

(2) in paragraph (16), by striking the period at the end and inserting “; and”;

(3) by redesignating paragraph (16) as paragraph (15); and

(4) by adding at the end the following:

“(16) provide timely notice to the Administrator of any case or controversy before any Federal judicial or administrative tribunal concerning the STTR program of the Federal agency.”

#### SEC. 112. EXPRESS AUTHORITY FOR AN AGENCY TO AWARD SEQUENTIAL PHASE II AWARDS FOR SBIR OR STTR FUNDED PROJECTS.

Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

“(ee) ADDITIONAL PHASE II SBIR AND STTR AWARDS.—A small business concern that receives a Phase II SBIR award or a Phase II STTR award for a project remains eligible to receive an additional Phase II SBIR award or Phase II STTR award for that project.”

## TITLE II—OUTREACH AND COMMERCIALIZATION INITIATIVES

### SEC. 201. RURAL AND STATE OUTREACH.

(a) IN GENERAL.—Section 9 of the Small Business Act (15 U.S.C. 638) is amended by inserting after subsection (r) the following:

“(s) FEDERAL AND STATE TECHNOLOGY PARTNERSHIP PROGRAM.—

“(1) DEFINITIONS.—In this subsection, the following definitions apply:

“(A) APPLICANT.—The term ‘applicant’ means an entity, organization, or individual that submits a proposal for an award or a cooperative agreement under this subsection.

“(B) FAST PROGRAM.—The term ‘FAST program’ means the Federal and State Technology Partnership Program established under this subsection.

“(C) RECIPIENT.—The term ‘recipient’ means a person that receives an award or becomes party to a cooperative agreement under this subsection.

“(D) STATE.—The term ‘State’ means each of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa.

“(E) DEFINITIONS RELATING TO MENTORING NETWORKS.—The terms ‘business advice and counseling’, ‘mentor’, and ‘mentoring network’ have the meanings given those terms in section 34(e).

“(2) ESTABLISHMENT OF PROGRAM.—The Administrator shall establish a program to be known as the Federal and State Technology Partnership Program, the purpose of which shall be to strengthen the technological competitiveness of small business concerns in the States.

“(3) GRANTS AND COOPERATIVE AGREEMENTS.—

“(A) JOINT REVIEW.—In carrying out the FAST program, the Administrator and the program managers for the SBIR program and STTR program at the National Science Foundation, the Department of Defense, and any other Federal agency determined appropriate by the Administrator shall jointly review proposals submitted by applicants and may make awards or enter into cooperative agreements under this subsection based on the factors for consideration set forth in subparagraph (B), in order to enhance or develop in a State—

“(i) technology research and development by small business concerns;

“(ii) technology transfer from university research to technology-based small business concerns;

“(iii) technology deployment and diffusion benefitting small business concerns;

“(iv) the technological capabilities of small business concerns through the establishment or operation of consortia comprised of entities, organizations, or individuals, including—

“(I) State and local development agencies and entities;

“(II) representatives of technology-based small business concerns;

“(III) industries and emerging companies;

“(IV) universities; and

“(V) small business development centers; and

“(v) outreach, financial support, and technical assistance to technology-based small business concerns participating in or interested in participating in an SBIR program or STTR program, including initiatives—

“(I) to make grants or loans to companies to pay a portion or all of the cost of developing SBIR or STTR proposals;

“(II) to establish or operate a Mentoring Network within the FAST program to provide business advice and counseling that will assist small business concerns that have been identified by FAST program participants, program managers of participating

SBIR agencies, the Administration, or other entities that are knowledgeable about the SBIR and STTR programs as good candidates for the SBIR and STTR programs, and that would benefit from mentoring, in accordance with section 34;

“(III) to create or participate in a training program for individuals providing SBIR or STTR outreach and assistance at the State and local levels; and

“(IV) to encourage the commercialization of technology developed through funding under the SBIR program or the STTR program.

“(B) SELECTION CONSIDERATIONS.—In making awards or entering into cooperative agreements under this subsection, the Administrator and the program managers referred to in subparagraph (A)—

“(i) may only consider proposals by applicants that intend to use a portion of the Federal assistance provided under this subsection to provide outreach, financial support, or technical assistance to technology-based small business concerns participating in or interested in participating in the SBIR program or STTR program; and

“(ii) shall consider, at a minimum—

“(I) whether the applicant has demonstrated that the assistance to be provided would address unmet needs of small business concerns in the community, and whether it is important to use Federal funding for the proposed activities;

“(II) whether the applicant has demonstrated that a need exists to increase the number or success of small high-technology businesses in the State or an area of the State, as measured by the number of Phase I and Phase II SBIR awards that have historically been received by small business concerns in the State or area of the State;

“(III) whether the projected costs of the proposed activities are reasonable;

“(IV) whether the proposal integrates and coordinates the proposed activities with other State and local programs assisting small high-technology firms in the State;

“(V) the manner in which the applicant will measure the results of the activities to be conducted; and

“(VI) whether the proposal addresses the needs of small business concerns—

“(aa) owned and controlled by women;

“(bb) that are socially and economically disadvantaged small business concerns (as defined in section 8(a)(4)(A));

“(cc) that are HUBZone small business concerns;

“(dd) located in areas that have historically not participated in the SBIR and STTR programs;

“(ee) owned and controlled by service-disabled veterans;

“(ff) owned and controlled by Native Americans; and

“(gg) located in geographic areas with an unemployment rate that exceeds the national unemployment rate, based on the most recently available monthly publications of the Bureau of Labor Statistics of the Department of Labor.

“(C) PROPOSAL LIMIT.—Not more than 1 proposal may be submitted for inclusion in the FAST program under this subsection to provide services in any one State in any 1 fiscal year.

“(D) PROCESS.—Proposals and applications for assistance under this subsection shall be in such form and subject to such procedures as the Administrator shall establish. The Administrator shall promulgate regulations establishing standards for the consideration of proposals under subparagraph (B), including standards regarding each of the considerations identified in subparagraph (B)(ii).

“(4) COOPERATION AND COORDINATION.—In carrying out the FAST program, the Admin-

istrator shall cooperate and coordinate with—

“(A) Federal agencies required by this section to have an SBIR program; and

“(B) entities, organizations, and individuals actively engaged in enhancing or developing the technological capabilities of small business concerns, including—

“(i) State and local development agencies and entities;

“(ii) State committees established under the Experimental Program to Stimulate Competitive Research of the National Science Foundation (as established under section 113 of the National Science Foundation Authorization Act of 1988 (42 U.S.C. 1862g));

“(iii) State science and technology councils; and

“(iv) representatives of technology-based small business concerns.

“(5) ADMINISTRATIVE REQUIREMENTS.—

“(A) COMPETITIVE BASIS.—Awards and cooperative agreements under this subsection shall be made or entered into, as applicable, on a competitive basis.

“(B) MATCHING REQUIREMENTS.—

“(i) IN GENERAL.—The non-Federal share of the cost of an activity (other than a planning activity) carried out using an award or under a cooperative agreement under this subsection shall be—

“(I) except as provided in clause (iii), 35 cents for each Federal dollar, in the case of a recipient that will serve small business concerns located in 1 of the 18 States receiving the fewest Phase I SBIR awards;

“(II) except as provided in clause (ii) or (iii), 1 dollar for each Federal dollar, in the case of a recipient that will serve small business concerns located in 1 of the 16 States receiving the greatest number of Phase I SBIR awards; and

“(III) except as provided in clause (ii) or (iii), 50 cents for each Federal dollar, in the case of a recipient that will serve small business concerns located in a State that is not described in subclause (I) or (II) that is receiving Phase I SBIR awards.

“(ii) LOW-INCOME AREAS.—The non-Federal share of the cost of the activity carried out using an award or under a cooperative agreement under this subsection shall be 35 cents for each Federal dollar that will be directly allocated by a recipient described in clause (i) to serve small business concerns located in a qualified census tract, as that term is defined in section 42(d)(5)(B)(ii)(I) of the Internal Revenue Code of 1986. Federal dollars not so allocated by that recipient shall be subject to the matching requirements of clause (i).

“(iii) RURAL AREAS.—

“(I) IN GENERAL.—Except as provided in subclause (II), the non-Federal share of the cost of the activity carried out using an award or under a cooperative agreement under this subsection shall be 35 cents for each Federal dollar that will be directly allocated by a recipient described in clause (i) to serve small business concerns located in a rural area.

“(II) ENHANCED RURAL AWARDS.—For a recipient located in a rural area that is located in a State described in clause (i)(I), the non-Federal share of the cost of the activity carried out using an award or under a cooperative agreement under this subsection shall be 15 cents for each Federal dollar that will be directly allocated by a recipient described in clause (i) to serve small business concerns located in the rural area.

“(III) DEFINITION OF RURAL AREA.—In this clause, the term ‘rural area’ has the meaning given that term in section 1393(a)(2) of the Internal Revenue Code of 1986.

“(iv) TYPES OF FUNDING.—The non-Federal share of the cost of an activity carried out

by a recipient shall be comprised of not less than 50 percent cash and not more than 50 percent of indirect costs and in-kind contributions, except that no such costs or contributions may be derived from funds from any other Federal program.

“(v) RANKINGS.—For the first full fiscal year after the date of enactment of the SBIR/STTR Reauthorization Act of 2011, and each fiscal year thereafter, based on the statistics for the most recent full fiscal year for which the Administrator has compiled statistics, the Administrator shall reevaluate the ranking of each State for purposes of clause (i).

“(C) DURATION.—Awards may be made or cooperative agreements entered into under this subsection for multiple years, not to exceed 5 years in total.

“(6) ANNUAL REPORTS.—The Administrator shall submit an annual report to the Committee on Small Business of the Senate and the Committee on Science and the Committee on Small Business of the House of Representatives regarding—

“(A) the number and amount of awards provided and cooperative agreements entered into under the FAST program during the preceding year;

“(B) a list of recipients under this subsection, including their location and the activities being performed with the awards made or under the cooperative agreements entered into; and

“(C) the Mentoring Networks and the mentoring database, as provided for under section 34, including—

“(i) the status of the inclusion of mentoring information in the database required by subsection (k); and

“(ii) the status of the implementation and description of the usage of the Mentoring Networks.

“(7) PROGRAM LEVELS.—

“(A) IN GENERAL.—There is authorized to be appropriated to carry out the FAST program, including Mentoring Networks, under this subsection and section 34, \$15,000,000 for each of fiscal years 2011 through 2016.

“(B) MENTORING DATABASE.—Of the total amount made available under subparagraph (A) for fiscal years 2011 through 2016, a reasonable amount, not to exceed a total of \$500,000, may be used by the Administration to carry out section 34(d).

“(8) TERMINATION.—The authority to carry out the FAST program under this subsection shall terminate on September 30, 2016.”.

(b) TECHNICAL AND CONFORMING AMENDMENTS.—The Small Business Act (15 U.S.C. 631 et seq.) is amended—

(1) by striking section 34 (15 U.S.C. 657d);

(2) by redesignating sections 35 through 43 as sections 34 through 42, respectively;

(3) in section 9(k)(1)(D) (15 U.S.C. 638(k)(1)(D)), by striking “section 35(d)” and inserting “section 34(d)”;

(4) in section 34 (15 U.S.C. 657e), as so redesignated—

(A) in subsection (c)(1), by striking “section 34(c)(1)(E)(ii)” and inserting “section 9(s)(3)(A)(v)(II)”;

(B) by striking “section 34” each place it appears and inserting “section 9(s)”; and

(C) by adding at the end the following:

“(e) DEFINITIONS.—In this section, the following definitions apply:

“(1) BUSINESS ADVICE AND COUNSELING.—The term ‘business advice and counseling’ means providing advice and assistance on matters described in subsection (c)(2)(B) to small business concerns to guide them through the SBIR and STTR program process, from application to award and successful completion of each phase of the program.

“(2) FAST PROGRAM.—The term ‘FAST program’ means the Federal and State Technology Partnership Program established under section 9(s).

“(3) MENTOR.—The term ‘mentor’ means an individual described in subsection (c)(2).

“(4) MENTORING NETWORK.—The term ‘Mentoring Network’ means an association, organization, coalition, or other entity (including an individual) that meets the requirements of subsection (c).

“(5) RECIPIENT.—The term ‘recipient’ means a person that receives an award or becomes party to a cooperative agreement under this section.

“(6) SBIR PROGRAM.—The term ‘SBIR program’ has the same meaning as in section 9(e)(4).

“(7) STATE.—The term ‘State’ means each of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa.

“(8) STTR PROGRAM.—The term ‘STTR program’ has the same meaning as in section 9(e)(6).”;

(5) in section 36(d) (15 U.S.C. 657i(d)), as so redesignated, by striking “section 43” and inserting “section 42”;

(6) in section 39(d) (15 U.S.C. 657l(d)), as so redesignated, by striking “section 43” and inserting “section 42”; and

(7) in section 40(b) (15 U.S.C. 657m(b)), as so redesignated, by striking “section 43” and inserting “section 42”.

**SEC. 202. SBIR-STEM WORKFORCE DEVELOPMENT GRANT PILOT PROGRAM.**

“(a) PILOT PROGRAM ESTABLISHED.—From amounts made available to carry out this section, the Administrator shall establish a SBIR-STEM Workforce Development Grant Pilot Program to encourage the business community to provide workforce development opportunities for college students, in the fields of science, technology, engineering, and math (in this section referred to as “STEM college students”), particularly those that are socially and economically disadvantaged individuals, from rural areas, or from areas with high unemployment, as determined by the Administrator, by providing a SBIR bonus grant.

“(b) ELIGIBLE ENTITIES DEFINED.—In this section the term “eligible entity” means a grantee receiving a grant under the SBIR Program on the date of the bonus grant under subsection (a) that provides an internship program for STEM college students.

“(c) AWARDS.—An eligible entity shall receive a bonus grant equal to 10 percent of either a Phase I or Phase II grant, as applicable, with a total award maximum of not more than \$10,000 per year.

“(d) EVALUATION.—Following the fourth year of funding under this section, the Administrator shall submit to Congress as part of the report under section 9(b)(7) of the Small Business Act (15 U.S.C. 638(b)(7)) the results of the SBIR-STEM Workforce Development Grant Pilot Program.

“(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

- 【(1) \$1,000,000 for fiscal year 2012;
- 【(2) \$1,000,000 for fiscal year 2013;
- 【(3) \$1,000,000 for fiscal year 2014;
- 【(4) \$1,000,000 for fiscal year 2015; and
- 【(5) \$1,000,000 for fiscal year 2016.】

**SEC. [203]202. TECHNICAL ASSISTANCE FOR AWARDEES.**

Section 9(q) of the Small Business Act (15 U.S.C. 638(q)) is amended—

(1) in paragraph (1)—  
 (A) by inserting “or STTR program” after “SBIR program”; and

(B) by striking “SBIR projects” and inserting “SBIR or STTR projects”;

(2) in paragraph (2), by striking “3 years” and inserting “5 years”; and

(3) in paragraph (3)—

(A) in subparagraph (A)—

(i) by inserting “or STTR” after “SBIR”; and

(ii) by striking “\$4,000” and inserting “\$5,000”;

(B) by striking subparagraph (B) and inserting the following:

“(B) PHASE II.—A Federal agency described in paragraph (1) may—

“(i) provide to the recipient of a Phase II SBIR or STTR award, through a vendor selected under paragraph (2), the services described in paragraph (1), in an amount equal to not more than \$5,000 per year; or

“(ii) authorize the recipient of a Phase II SBIR or STTR award to purchase the services described in paragraph (1), in an amount equal to not more than \$5,000 per year, which shall be in addition to the amount of the recipient’s award.”; and

(C) by adding at the end the following:

“(C) FLEXIBILITY.—In carrying out subparagraphs (A) and (B), each Federal agency shall provide the allowable amounts to a recipient that meets the eligibility requirements under the applicable subparagraph, if the recipient requests to seek technical assistance from an individual or entity other than the vendor selected under paragraph (2) by the Federal agency.

“(D) LIMITATION.—A Federal agency may not—

(i) use the amounts authorized under subparagraph (A) or (B) unless the vendor selected under paragraph (2) provides the technical assistance to the recipient; or

(ii) enter a contract with a vendor under paragraph (2) under which the amount provided for technical assistance is based on total number of Phase I or Phase II awards.”.

**SEC. [204]203. COMMERCIALIZATION READINESS PROGRAM AT DEPARTMENT OF DEFENSE.**

(a) IN GENERAL.—Section 9(y) of the Small Business Act (15 U.S.C. 638(y)) is amended—

(1) in the subsection heading, by striking “PILOT” and inserting “READINESS”;

(2) by striking “Pilot” each place that term appears and inserting “Readiness”;

(3) in paragraph (1)—

(A) by inserting “or Small Business Technology Transfer Program” after “Small Business Innovation Research Program”; and

(B) by adding at the end the following: “The authority to create and administer a Commercialization Readiness Program under this subsection may not be construed to eliminate or replace any other SBIR program or STTR program that enhances the insertion or transition of SBIR or STTR technologies, including any such program in effect on the date of enactment of the National Defense Authorization Act for Fiscal Year 2006 (Public Law 109-163; 119 Stat. 3136).”;

(4) in paragraph (2), by inserting “or Small Business Technology Transfer Program” after “Small Business Innovation Research Program”;

(5) by striking paragraphs (5) and (6); and

(6) by inserting after paragraph (4) the following:

“(5) INSERTION INCENTIVES.—For any contract with a value of not less than \$100,000,000, the Secretary of Defense is authorized to—

“(A) establish goals for the transition of Phase III technologies in subcontracting plans; and

“(B) require a prime contractor on such a contract to report the number and dollar amount of contracts entered into by that prime contractor for Phase III SBIR or STTR projects.

“(6) GOAL FOR SBIR AND STTR TECHNOLOGY INSERTION.—The Secretary of Defense shall—

“(A) set a goal to increase the number of Phase II SBIR contracts and the number of Phase II STTR contracts awarded by that Secretary that lead to technology transition into programs of record or fielded systems;

“(B) use incentives in effect on the date of enactment of the SBIR/STTR Reauthorization Act of 2011, or create new incentives, to encourage agency program managers and prime contractors to meet the goal under subparagraph (A); and

“(C) include in the annual report to Congress the percentage of contracts described in subparagraph (A) awarded by that Secretary, and information on the ongoing status of projects funded through the Commercialization Readiness Program and efforts to transition these technologies into programs of record or fielded systems.”.

(b) TECHNICAL AND CONFORMING AMENDMENT.—Section 9(i)(1) of the Small Business Act (15 U.S.C. 638(i)(1)) is amended by inserting “(including awards under subsection (y))” after “the number of awards”.

**SEC. [205]204. COMMERCIALIZATION READINESS PILOT PROGRAM FOR CIVILIAN AGENCIES.**

Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

“(ff) PILOT PROGRAM.—

“(1) AUTHORIZATION.—The head of each covered Federal agency may allocate not more than 10 percent of the funds allocated to the SBIR program and the STTR program of the covered Federal agency—

“(A) for awards for technology development, testing, and evaluation of SBIR and STTR Phase II technologies; or

“(B) to support the progress of research or research and development conducted under the SBIR or STTR programs to Phase III.

“(2) APPLICATION BY FEDERAL AGENCY.—

“(A) IN GENERAL.—A covered Federal agency may not establish a pilot program unless the covered Federal agency makes a written application to the Administrator, not later than 90 days before to the first day of the fiscal year in which the pilot program is to be established, that describes a compelling reason that additional investment in SBIR or STTR technologies is necessary, including unusually high regulatory, systems integration, or other costs relating to development or manufacturing of identifiable, highly promising small business technologies or a class of such technologies expected to substantially advance the mission of the agency.

“(B) DETERMINATION.—The Administrator shall—

“(i) make a determination regarding an application submitted under subparagraph (A) not later than 30 days before the first day of the fiscal year for which the application is submitted;

“(ii) publish the determination in the Federal Register; and

“(iii) make a copy of the determination and any related materials available to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business of the House of Representatives.

“(3) MAXIMUM AMOUNT OF AWARD.—The head of a covered Federal agency may not make an award under a pilot program in excess of 3 times the dollar amounts generally established for Phase II awards under subsection (j)(2)(D) or (p)(2)(B)(ix).

“(4) REGISTRATION.—Any applicant that receives an award under a pilot program shall register with the Administrator in a registry that is available to the public.

“(5) REPORT.—The head of each covered Federal agency shall include in the annual report of the covered Federal agency to the

Administrator an analysis of the various activities considered for inclusion in the pilot program of the covered Federal agency and a statement of the reasons why each activity considered was included or not included, as the case may be.

“(6) TERMINATION.—The authority to establish a pilot program under this section expires at the end of fiscal year 2014.

“(7) DEFINITIONS.—In this subsection—

“(A) the term ‘covered Federal agency’—

“(i) means a Federal agency participating in the SBIR program or the STTR program; and

“(ii) does not include the Department of Defense; and

“(B) the term ‘pilot program’ means the program established under paragraph (1).”.

#### SEC. [206]205. ACCELERATING CURES.

(a) IN GENERAL.—The Small Business Act (15 U.S.C. 631 et seq.) is amended by inserting after section 42, as redesignated by section 201 of this Act, the following:

#### “SEC. 43. SMALL BUSINESS INNOVATION RESEARCH PROGRAM.

“(a) NIH CURES PILOT.—

“(1) ESTABLISHMENT.—An independent advisory board shall be established at the National Academy of Sciences (in this section referred to as the ‘advisory board’) to conduct periodic evaluations of the SBIR program (as that term is defined in section 9) of each of the National Institutes of Health (referred to in this section as the ‘NIH’) institutes and centers for the purpose of improving the management of the SBIR program through data-driven assessment.

“(2) MEMBERSHIP.—

“(A) IN GENERAL.—The advisory board shall consist of—

“(i) the Director of the NIH;

“(ii) the Director of the SBIR program of the NIH;

“(iii) senior NIH agency managers, selected by the Director of NIH;

“(iv) industry experts, selected by the Council of the National Academy of Sciences in consultation with the Associate Administrator for Technology of the Administration and the Director of the Office of Science and Technology Policy; and

“(v) owners or operators of small business concerns that have received an award under the SBIR program of the NIH, selected by the Associate Administrator for Technology of the Administration.

“(B) NUMBER OF MEMBERS.—The total number of members selected under clauses (iii), (iv), and (v) of subparagraph (A) shall not exceed 10.

“(C) EQUAL REPRESENTATION.—The total number of members of the advisory board selected under clauses (i), (ii), (iii), and (iv) of subparagraph (A) shall be equal to the number of members of the advisory board selected under subparagraph (A)(v).

“(b) ADDRESSING DATA GAPS.—In order to enhance the evidence-base guiding SBIR program decisions and changes, the Director of the SBIR program of the NIH shall address the gaps and deficiencies in the data collection concerns identified in the 2007 report of the National Academy of Science entitled ‘An Assessment of the Small Business Innovation Research Program at the NIH’.

“(c) PILOT PROGRAM.—

“(1) IN GENERAL.—The Director of the SBIR program of the NIH may initiate a pilot program, under a formal mechanism for designing, implementing, and evaluating pilot programs, to spur innovation and to test new strategies that may enhance the development of cures and therapies.

“(2) CONSIDERATIONS.—The Director of the SBIR program of the NIH may consider conducting a pilot program to include individuals with successful SBIR program experi-

ence in study sections, hiring individuals with small business development experience for staff positions, separating the commercial and scientific review processes, and examining the impact of the trend toward larger awards on the overall program.

“(d) REPORT TO CONGRESS.—The Director of the NIH shall submit an annual report to Congress and the advisory board on the activities of the SBIR program of the NIH under this section.

“(e) SBIR GRANTS AND CONTRACTS.—

“(1) IN GENERAL.—In awarding grants and contracts under the SBIR program of the NIH each SBIR program manager shall emphasize applications that identify products, processes, technologies, and services that may enhance the development of cures and therapies.

“(2) EXAMINATION OF COMMERCIALIZATION AND OTHER METRICS.—The advisory board shall evaluate the implementation of the requirement under paragraph (1) by examining increased commercialization and other metrics, to be determined and collected by the SBIR program of the NIH.

“(3) PHASE I AND II.—To the greatest extent practicable, the Director of the SBIR program of the NIH shall reduce the time period between Phase I and Phase II funding of grants and contracts under the SBIR program of the NIH to 90 days.

“(f) LIMIT.—Not more than a total of 1 percent of the extramural budget (as defined in section 9 of the Small Business Act (15 U.S.C. 638)) of the NIH for research or research and development may be used for the pilot program under subsection (c) and to carry out subsection (e).”.

(b) PROSPECTIVE REPEAL.—Effective 5 years after the date of enactment of this Act, the Small Business Act (15 U.S.C. 631 et seq.) is amended—

(1) by striking section 43, as added by subsection (a); and

(2) by redesignating sections 44 and 45 as sections 43 and 44, respectively.

#### SEC. [207]206. FEDERAL AGENCY ENGAGEMENT WITH SBIR AND STTR AWARDDES THAT HAVE BEEN AWARDED MULTIPLE PHASE I AWARDS BUT HAVE NOT BEEN AWARDED PHASE II AWARDS.

Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

“(gg) REQUIREMENTS RELATING TO FEDERAL AGENCY ENGAGEMENT WITH CERTAIN PHASE I SBIR AND STTR AWARDDES.—

“(1) DEFINITION.—In this subsection, the term ‘covered awardee’ means a small business concern that—

“(A) has received multiple Phase I awards over multiple years, as determined by the head of a Federal agency, under the SBIR program or the STTR program of the Federal agency; and

“(B) has not received a Phase II award—

“(i) under the SBIR program or STTR program, as the case may be, of the Federal agency described in subparagraph (A); or

“(ii) relating to a Phase I award described in subparagraph (A) under the SBIR program or the STTR program of another Federal agency.

“(2) PERFORMANCE MEASURES.—The head of each Federal agency that participates in the SBIR program or the STTR program shall develop performance measures for any covered awardee relating to commercializing research or research and development activities under the SBIR program or the STTR program of the Federal agency.”.

#### SEC. [208]207. CLARIFYING THE DEFINITION OF “PHASE III”.

(a) PHASE III AWARDS.—Section 9(e) of the Small Business Act (15 U.S.C. 638(e)) is amended—

(1) in paragraph (4)(C), in the matter preceding clause (i), by inserting “for work that derives from, extends, or completes efforts made under prior funding agreements under the SBIR program” after “phase”;

(2) in paragraph (6)(C), in the matter preceding clause (i), by inserting “for work that derives from, extends, or completes efforts made under prior funding agreements under the STTR program” after “phase”;

(3) in paragraph (8), by striking “and” at the end;

(4) in paragraph (9), by striking the period at the end and inserting a semicolon; and

(5) by adding at the end the following:

“(10) the term ‘commercialization’ means—

“(A) the process of developing products, processes, technologies, or services; and

“(B) the production and delivery of products, processes, technologies, or services for sale (whether by the originating party or by others) to or use by the Federal Government or commercial markets.”.

(b) TECHNICAL AND CONFORMING AMENDMENTS.—The Small Business Act (15 U.S.C. 631 et seq.) is amended—

(1) in section 9 (15 U.S.C. 638)—

(A) in subsection (e)—

(i) in paragraph (4)(C)(ii), by striking “scientific review criteria” and inserting “merit-based selection procedures”;

(ii) in paragraph (9), by striking “the second or the third phase” and inserting “Phase II or Phase III”; and

(iii) by adding at the end the following:

“(11) the term ‘Phase I’ means—

“(A) with respect to the SBIR program, the first phase described in paragraph (4)(A); and

“(B) with respect to the STTR program, the first phase described in paragraph (6)(A);

“(12) the term ‘Phase II’ means—

“(A) with respect to the SBIR program, the second phase described in paragraph (4)(B); and

“(B) with respect to the STTR program, the second phase described in paragraph (6)(B); and

“(13) the term ‘Phase III’ means—

“(A) with respect to the SBIR program, the third phase described in paragraph (4)(C); and

“(B) with respect to the STTR program, the third phase described in paragraph (6)(C).”.

(B) in subsection (j)—

(i) in paragraph (1)(B), by striking “phase two” and inserting “Phase II”;

(ii) in paragraph (2)—

(I) in subparagraph (B)—

(aa) by striking “the third phase” each place it appears and inserting “Phase III”; and

(bb) by striking “the second phase” and inserting “Phase II”;

(II) in subparagraph (D)—

(aa) by striking “the first phase” and inserting “Phase I”; and

(bb) by striking “the second phase” and inserting “Phase II”;

(III) in subparagraph (F), by striking “the third phase” and inserting “Phase III”;

(IV) in subparagraph (G)—

(aa) by striking “the first phase” and inserting “Phase I”; and

(bb) by striking “the second phase” and inserting “Phase II”; and

(V) in subparagraph (H)—

(aa) by striking “the first phase” and inserting “Phase I”;

(bb) by striking “second phase” each place it appears and inserting “Phase II”; and

(cc) by striking “third phase” and inserting “Phase III”; and

(iii) in paragraph (3)—

(I) in subparagraph (A)—

(aa) by striking “the first phase (as described in subsection (e)(4)(A))” and inserting “Phase I”;

(bb) by striking “the second phase (as described in subsection (e)(4)(B))” and inserting “Phase II”; and

(cc) by striking “the third phase (as described in subsection (e)(4)(C))” and inserting “Phase III”; and

(II) in subparagraph (B), by striking “second phase” and inserting “Phase II”;

(C) in subsection (k)—

(i) by striking “first phase” each place it appears and inserting “Phase I”; and

(ii) by striking “second phase” each place it appears and inserting “Phase II”;

(D) in subsection (l)(2)—

(i) by striking “the first phase” and inserting “Phase I”; and

(ii) by striking “the second phase” and inserting “Phase II”;

(E) in subsection (o)(13)—

(i) in subparagraph (B), by striking “second phase” and inserting “Phase II”; and

(ii) in subparagraph (C), by striking “third phase” and inserting “Phase III”;

(F) in subsection (p)—

(i) in paragraph (2)(B)—

(I) in clause (vi)—

(aa) by striking “the second phase” and inserting “Phase II”; and

(bb) by striking “the third phase” and inserting “Phase III”; and

(II) in clause (ix)—

(aa) by striking “the first phase” and inserting “Phase I”; and

(bb) by striking “the second phase” and inserting “Phase II”; and

(i) in paragraph (3)—

(I) by striking “the first phase (as described in subsection (e)(6)(A))” and inserting “Phase I”;

(II) by striking “the second phase (as described in subsection (e)(6)(B))” and inserting “Phase II”; and

(III) by striking “the third phase (as described in subsection (e)(6)(A))” and inserting “Phase III”;

(G) in subsection (q)(3)—

(i) in subparagraph (A)—

(I) in the subparagraph heading, by striking “FIRST PHASE” and inserting “PHASE I”; and

(II) by striking “first phase” and inserting “Phase I”; and

(ii) in subparagraph (B)—

(I) in the subparagraph heading, by striking “SECOND PHASE” and inserting “PHASE II”; and

(II) by striking “second phase” and inserting “Phase II”;

(H) in subsection (r)—

(i) in the subsection heading, by striking “THIRD PHASE” and inserting “PHASE III”;

(ii) in paragraph (1)—

(I) in the first sentence—

(aa) by striking “for the second phase” and inserting “for Phase II”;

(bb) by striking “third phase” and inserting “Phase III”; and

(cc) by striking “second phase period” and inserting “Phase II period”; and

(II) in the second sentence—

(aa) by striking “second phase” and inserting “Phase II”; and

(bb) by striking “third phase” and inserting “Phase III”; and

(iii) in paragraph (2), by striking “third phase” and inserting “Phase III”; and

(I) in subsection (u)(2)(B), by striking “the first phase” and inserting “Phase I”; and

(2) in section 34(c)(2)(B)(vii) (15 U.S.C. 657e(c)(2)(B)(vii)), as redesignated by section 201 of this Act, by striking “third phase” and inserting “Phase III”.

**SEC. [209]208. SHORTENED PERIOD FOR FINAL DECISIONS ON PROPOSALS AND APPLICATIONS.**

(a) IN GENERAL.—Section 9 of the Small Business Act (15 U.S.C. 638) is amended—

(1) in subsection (g)(4)—

(A) by inserting “(A)” after “(4)”;

(B) by adding “and” after the semicolon at the end; and

(C) by adding at the end the following:

“(B) make a final decision on each proposal submitted under the SBIR program—

“(i) not later than 90 days after the date on which the solicitation closes; or

“(ii) if the Administrator authorizes an extension for a solicitation, not later than 180 days after the date on which the solicitation closes;”; and

(2) in subsection (o)(4)—

(A) by inserting “(A)” after “(4)”;

(B) by adding “and” after the semicolon at the end; and

(C) by adding at the end the following:

“(B) make a final decision on each proposal submitted under the STTR program—

“(i) not later than 90 days after the date on which the solicitation closes; or

“(ii) if the Administrator authorizes an extension for a solicitation, not later than 180 days after the date on which the solicitation closes;”.

(b) NIH PEER REVIEW PROCESS.—

(1) IN GENERAL.—Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

“(hh) NIH PEER REVIEW PROCESS.—The Director of the National Institutes of Health may make an award under the SBIR program or the STTR program of the National Institutes of Health if the application for the award has undergone technical and scientific peer review under section 492 of the Public Health Service Act (42 U.S.C. 289a).”.

(2) TECHNICAL AND CONFORMING AMENDMENTS.—Section 105 of the National Institutes of Health Reform Act of 2006 (42 U.S.C. 284n) is amended—

(A) in subsection (a)(3)—

(i) by striking “A grant” and inserting “Except as provided in section 9(hh) of the Small Business Act (15 U.S.C. 638(hh)), a grant”; and

(ii) by striking “section 402(k)” and all that follows through “(Act)” and inserting “section 402(l) of such Act”; and

(B) in subsection (b)(5)—

(i) by striking “A grant” and inserting “Except as provided in section 9(hh) of the Small Business Act (15 U.S.C. 638(hh)), a grant”; and

(ii) by striking “section 402(k)” and all that follows through “(Act)” and inserting “section 402(l) of such Act”.

**TITLE III—OVERSIGHT AND EVALUATION**

**SEC. 301. STREAMLINING ANNUAL EVALUATION REQUIREMENTS.**

Section 9(b) of the Small Business Act (15 U.S.C. 638(b)), as amended by section 102 of this Act, is amended—

(1) in paragraph (7)—

(A) by striking “STTR programs, including the data” and inserting the following:

“STTR programs, including—

“(A) the data”;

(B) by striking “(g)(10), (o)(9), and (o)(15), the number” and all that follows through “under each of the SBIR and STTR programs, and a description” and inserting the following: “(g)(8) and (o)(9); and

“(B) the number of proposals received from, and the number and total amount of awards to, HUBZone small business concerns and firms with venture capital investment (including those majority-owned by multiple venture capital operating companies) under each of the SBIR and STTR programs;

“(C) a description of the extent to which each Federal agency is increasing outreach and awards to firms owned and controlled by women and social or economically disadvantaged individuals under each of the SBIR and STTR programs;

“(D) general information about the implementation of, and compliance with the allocation of funds required under, subsection (cc) for firms owned in majority part by venture capital operating companies and participating in the SBIR program;

“(E) a detailed description of appeals of Phase III awards and notices of noncompliance with the SBIR Policy Directive and the STTR Policy Directive filed by the Administrator with Federal agencies; and

“(F) a description”; and

(2) by inserting after paragraph (7) the following:

“(8) to coordinate the implementation of electronic databases at each of the Federal agencies participating in the SBIR program or the STTR program, including the technical ability of the participating agencies to electronically share data;”.

**SEC. 302. DATA COLLECTION FROM AGENCIES FOR SBIR.**

Section 9(g) of the Small Business Act (15 U.S.C. 638(g)) is amended—

(1) by striking paragraph (10);

(2) by redesignating paragraphs (8) and (9) as paragraphs (9) and (10), respectively; and

(3) by inserting after paragraph (7) the following:

“(8) collect annually, and maintain in a common format in accordance with the simplified reporting requirements under subsection (v), such information from awardees as is necessary to assess the SBIR program, including information necessary to maintain the database described in subsection (k), including—

“(A) whether an awardee—

“(i) has venture capital or is majority-owned by multiple venture capital operating companies, and, if so—

“(I) the amount of venture capital that the awardee has received as of the date of the award; and

“(II) the amount of additional capital that the awardee has invested in the SBIR technology;

“(ii) has an investor that—

“(I) is an individual who is not a citizen of the United States or a lawful permanent resident of the United States, and if so, the name of any such individual; or

“(II) is a person that is not an individual and is not organized under the laws of a State or the United States, and if so the name of any such person;

“(iii) is owned by a woman or has a woman as a principal investigator;

“(iv) is owned by a socially or economically disadvantaged individual or has a socially or economically disadvantaged individual as a principal investigator;

“(v) received assistance under the FAST program under section 34, as in effect on the day before the date of enactment of the SBIR/STTR Reauthorization Act of 2011, or the outreach program under subsection (s);

“(vi) is a faculty member or a student of an institution of higher education, as that term is defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001); or

“(vii) is located in a State described in subsection (u)(3); and

“(B) a justification statement from the agency, if an awardee receives an award in an amount that is more than the award guidelines under this section;”.

**SEC. 303. DATA COLLECTION FROM AGENCIES FOR STTR.**

Section 9(o) of the Small Business Act (15 U.S.C. 638(o)) is amended by striking paragraph (9) and inserting the following:

“(9) collect annually, and maintain in a common format in accordance with the simplified reporting requirements under subsection (v), such information from applicants and awardees as is necessary to assess the



STTR program outputs and outcomes, including information necessary to maintain the database described in subsection (k), including—

“(A) whether an applicant or awardee—  
“(i) has venture capital or is majority-owned by multiple venture capital operating companies, and, if so—

“(I) the amount of venture capital that the applicant or awardee has received as of the date of the application or award, as applicable; and

“(II) the amount of additional capital that the applicant or awardee has invested in the SBIR technology;

“(ii) has an investor that—

“(I) is an individual who is not a citizen of the United States or a lawful permanent resident of the United States, and if so, the name of any such individual; or

“(II) is a person that is not an individual and is not organized under the laws of a State or the United States, and if so the name of any such person;

“(iii) is owned by a woman or has a woman as a principal investigator;

“(iv) is owned by a socially or economically disadvantaged individual or has a socially or economically disadvantaged individual as a principal investigator;

“(v) received assistance under the FAST program under section 34 or the outreach program under subsection (s);

“(vi) is a faculty member or a student of an institution of higher education, as that term is defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001); or

“(vii) is located in a State in which the total value of contracts awarded to small business concerns under all STTR programs is less than the total value of contracts awarded to small business concerns in a majority of other States, as determined by the Administrator in biennial fiscal years, beginning with fiscal year 2008, based on the most recent statistics compiled by the Administrator; and

“(B) if an awardee receives an award in an amount that is more than the award guidelines under this section, a statement from the agency that justifies the award amount;”.

#### SEC. 304. PUBLIC DATABASE.

Section 9(k)(1) of the Small Business Act (15 U.S.C. 638(k)(1)) is amended—

(1) in subparagraph (D), by striking “and” at the end;

(2) in subparagraph (E), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(F) for each small business concern that has received a Phase I or Phase II SBIR or STTR award from a Federal agency, whether the small business concern—

“(i) has venture capital and, if so, whether the small business concern is registered as majority-owned by multiple venture capital operating companies as required under subsection (cc)(4);

“(ii) is owned by a woman or has a woman as a principal investigator;

“(iii) is owned by a socially or economically disadvantaged individual or has a socially or economically disadvantaged individual as a principal investigator;

“(iv) received assistance under the FAST program under section 34, as in effect on the day before the date of enactment of the SBIR/STTR Reauthorization Act of 2011, or the outreach program under subsection (s); or

“(v) is owned by a faculty member or a student of an institution of higher education, as that term is defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).”.

#### SEC. 305. GOVERNMENT DATABASE.

Section 9(k) of the Small Business Act (15 U.S.C. 638(k)) is amended—

(1) in paragraph (2)—

(A) in the matter preceding subparagraph (A), by striking “Not later” and all that follows through “Act of 2000” and inserting “Not later than 90 days after the date of enactment of the SBIR/STTR Reauthorization Act of 2011”;  
(B) by striking subparagraph (C);

(C) by redesignating subparagraphs (A) and (B) as subparagraphs (B) and (C), respectively;

(D) by inserting before subparagraph (B), as so redesignated, the following:

“(A) contains, for each small business concern that applies for, submits a proposal for, or receives an award under Phase I or Phase II of the SBIR program or the STTR program—

“(i) the name, size, and location, and an identifying number assigned by the Administration of the small business concern;

“(ii) an abstract of the project;

“(iii) the specific aims of the project;

“(iv) the number of employees of the small business concern;

“(v) the names of key individuals that will carry out the project;

“(vi) the percentage of effort each individual described in clause (iv) will contribute to the project;

“(vii) whether the small business concern is majority-owned by multiple venture capital operating companies; and

“(viii) the Federal agency to which the application is made, and contact information for the person or office within the Federal agency that is responsible for reviewing applications and making awards under the SBIR program or the STTR program;”;

(E) by redesignating subparagraphs (D), and (E) as subparagraphs (E) and (F), respectively;

(F) by inserting after subparagraph (C), as so redesignated, the following:

“(D) includes, for each awardee—

“(i) the name, size, location, and any identifying number assigned to the awardee by the Administrator;

“(ii) whether the awardee has venture capital, and, if so—

“(I) the amount of venture capital as of the date of the award;

“(II) the percentage of ownership of the awardee held by a venture capital operating company, including whether the awardee is majority-owned by multiple venture capital operating companies; and

“(III) the amount of additional capital that the awardee has invested in the SBIR technology, which information shall be collected on an annual basis;

“(iii) the names and locations of any affiliates of the awardee;

“(iv) the number of employees of the awardee;

“(v) the number of employees of the affiliates of the awardee; and

“(vi) the names of, and the percentage of ownership of the awardee held by—

“(I) any individual who is not a citizen of the United States or a lawful permanent resident of the United States; or

“(II) any person that is not an individual and is not organized under the laws of a State or the United States;”;

(G) in subparagraph (E), as so redesignated, by striking “and” at the end;

(H) in subparagraph (F), as so redesignated, by striking the period at the end and inserting “; and”; and

(I) by adding at the end the following:

“(G) includes a timely and accurate list of any individual or small business concern that has participated in the SBIR program or STTR program that has committed fraud,

waste, or abuse relating to the SBIR program or STTR program.”; and

(2) in paragraph (3), by adding at the end the following:

“(C) GOVERNMENT DATABASE.—Not later than 60 days after the date established by a Federal agency for submitting applications or proposals for a Phase I or Phase II award under the SBIR program or STTR program, the head of the Federal agency shall submit to the Administrator the data required under paragraph (2) with respect to each small business concern that applies or submits a proposal for the Phase I or Phase II award.”.

#### SEC. 306. ACCURACY IN FUNDING BASE CALCULATIONS.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and every year thereafter until the date that is 5 years after the date of enactment of this Act, the Comptroller General of the United States shall—

(1) conduct a fiscal and management audit of the SBIR program and the STTR program for the applicable period to—

(A) determine whether Federal agencies comply with the expenditure amount requirements under subsections (f)(1) and (n)(1) of section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act;

(B) assess the extent of compliance with the requirements of section 9(i)(2) of the Small Business Act (15 U.S.C. 638(i)(2)) by Federal agencies participating in the SBIR program or the STTR program and the Administration;

(C) assess whether it would be more consistent and effective to base the amount of the allocations under the SBIR program and the STTR program on a percentage of the research and development budget of a Federal agency, rather than the extramural budget of the Federal agency; and

(D) determine the portion of the extramural research or research and development budget of a Federal agency that each Federal agency spends for administrative purposes relating to the SBIR program or STTR program, and for what specific purposes, including the portion, if any, of such budget the Federal agency spends for salaries and expenses, travel to visit applicants, outreach events, marketing, and technical assistance; and

(2) submit a report to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business of the House of Representatives regarding the audit conducted under paragraph (1), including the assessments required under subparagraphs (B) and (C), and the determination made under subparagraph (D) of paragraph (1).

(b) DEFINITION OF APPLICABLE PERIOD.—In this section, the term “applicable period” means—

(1) for the first report submitted under this section, the period beginning on October 1, 2005, and ending on September 30 of the last full fiscal year before the date of enactment of this Act for which information is available; and

(2) for the second and each subsequent report submitted under this section, the period—

(A) beginning on October 1 of the first fiscal year after the end of the most recent full fiscal year relating to which a report under this section was submitted; and

(B) ending on September 30 of the last full fiscal year before the date of the report.

#### SEC. 307. CONTINUED EVALUATION BY THE NATIONAL ACADEMY OF SCIENCES.

Section 108 of the Small Business Reauthorization Act of 2000 (15 U.S.C. 638 note) is amended by adding at the end the following:

“(e) EXTENSIONS AND ENHANCEMENTS OF AUTHORITY.—

“(1) IN GENERAL.—Not later than 6 months after the date of enactment of the SBIR/STTR Reauthorization Act of 2011, the head of each agency described in subsection (a), in consultation with the Small Business Administration, shall cooperatively enter into an agreement with the National Academy of Sciences for the National Research Council to, not later than 4 years after the date of enactment of the SBIR/STTR Reauthorization Act of 2011, and every 4 years thereafter—

“(A) continue the most recent study under this section relating to—

“(i) the issues described in subparagraphs (A), (B), (C), and (E) of subsection (a)(1); and

“(ii) the effectiveness of the government and public databases described in section 9(k) of the Small Business Act (15 U.S.C. 638(k)) in reducing vulnerabilities of the SBIR program and the STTR program to fraud, waste, and abuse, particularly with respect to Federal agencies funding duplicative proposals and business concerns falsifying information in proposals;

“(B) make recommendations with respect to the issues described in subparagraph (A)(ii) and subparagraphs (A), (D), and (E) of subsection (a)(2); and

“(C) estimate, to the extent practicable, the number of jobs created by the SBIR program or STTR program of the agency.

“(2) CONSULTATION.—An agreement under paragraph (1) shall require the National Research Council to ensure there is participation by and consultation with the small business community, the Administration, and other interested parties as described in subsection (b).

“(3) REPORTING.—An agreement under paragraph (1) shall require that not later than 4 years after the date of enactment of the SBIR/STTR Reauthorization Act of 2011, and every 4 years thereafter, the National Research Council shall submit to the head of the agency entering into the agreement, the Committee on Small Business and Entrepreneurship of the Senate, and the Committee on Small Business of the House of Representatives a report regarding the study conducted under paragraph (1) and containing the recommendations described in paragraph (1).”

#### SEC. 308. TECHNOLOGY INSERTION REPORTING REQUIREMENTS.

Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

“(i) PHASE III REPORTING.—The annual SBIR or STTR report to Congress by the Administration under subsection (b)(7) shall include, for each Phase III award made by the Federal agency—

“(1) the name of the agency or component of the agency or the non-Federal source of capital making the Phase III award;

“(2) the name of the small business concern or individual receiving the Phase III award; and

“(3) the dollar amount of the Phase III award.”

#### SEC. 309. INTELLECTUAL PROPERTY PROTECTIONS.

(a) IN GENERAL.—The Comptroller General of the United States shall conduct a study of the SBIR program to assess whether—

(1) Federal agencies comply with the data rights protections for SBIR awardees and the technologies of SBIR awardees under section 9 of the Small Business Act (15 U.S.C. 638);

(2) the laws and policy directives intended to clarify the scope of data rights, including in prototypes and mentor-protégé relationships and agreements with Federal laboratories, are sufficient to protect SBIR awardees; and

(3) there is an effective grievance tracking process for SBIR awardees who have griev-

ances against a Federal agency regarding data rights and a process for resolving those grievances.

(b) REPORT.—Not later than 18 months after the date of enactment of this Act, the Comptroller General shall submit to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business of the House of Representatives a report regarding the study conducted under subsection (a).

#### SEC. 310. OBTAINING CONSENT FROM SBIR AND STTR APPLICANTS TO RELEASE CONTACT INFORMATION TO ECONOMIC DEVELOPMENT ORGANIZATIONS.

Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

“(j) CONSENT TO RELEASE CONTACT INFORMATION TO ORGANIZATIONS.—

“(1) ENABLING CONCERN TO GIVE CONSENT.—Each Federal agency required by this section to conduct an SBIR program or an STTR program shall enable a small business concern that is an SBIR applicant or an STTR applicant to indicate to the Federal agency whether the Federal agency has the consent of the concern to—

“(A) identify the concern to appropriate local and State-level economic development organizations as an SBIR applicant or an STTR applicant; and

“(B) release the contact information of the concern to such organizations.

“(2) RULES.—The Administrator shall establish rules to implement this subsection. The rules shall include a requirement that a Federal agency include in the SBIR and STTR application a provision through which the applicant can indicate consent for purposes of paragraph (1).”

#### SEC. 311. PILOT TO ALLOW FUNDING FOR ADMINISTRATIVE, OVERSIGHT, AND CONTRACT PROCESSING COSTS.

(a) IN GENERAL.—Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

“(kk) ASSISTANCE FOR ADMINISTRATIVE, OVERSIGHT, AND CONTRACT PROCESSING COSTS.—

“(1) IN GENERAL.—Subject to paragraph (2), for the 3 full fiscal years beginning after the date of enactment of this subsection, the Administrator shall allow each Federal agency required to conduct an SBIR program to use not more than 3 percent of the funds allocated to the SBIR program of the Federal agency for—

“(A) the administration of the SBIR program or the STTR program of the Federal agency;

“(B) the provision of outreach and technical assistance relating to the SBIR program or STTR program of the Federal agency, including technical assistance site visits and personnel interviews;

“(C) the implementation of commercialization and outreach initiatives that were not in effect on the date of enactment of this subsection;

“(D) carrying out the program under subsection (y);

“(E) activities relating to oversight and congressional reporting, including the waste, fraud, and abuse prevention activities described in section 313(a)(1)(B)(ii) of the SBIR/STTR Reauthorization Act of 2011;

“(F) targeted reviews of recipients of awards under the SBIR program or STTR program of the Federal agency that the head of the Federal agency determines are at high risk for fraud, waste, or abuse, to ensure compliance with requirements of the SBIR program or STTR program, respectively;

“(G) the implementation of oversight and quality control measures, including

verification of reports and invoices and cost reviews;

“(H) carrying out subsection (cc);

“(I) carrying out subsection (ff);

“(J) contract processing costs relating to the SBIR program or STTR program of the Federal agency; and

“(K) funding for additional personnel and assistance with application reviews.

“(2) PERFORMANCE CRITERIA.—A Federal agency may not use funds as authorized under paragraph (1) until after the effective date of performance criteria, which the Administrator shall establish, to measure any benefits of using funds as authorized under paragraph (1) and to assess continuation of the authority under paragraph (1).

“(3) RULES.—Not later than 180 days after the date of enactment of this subsection, the Administrator shall issue rules to carry out this subsection.”

(b) TECHNICAL AND CONFORMING AMENDMENTS.—

(1) IN GENERAL.—Section 9 of the Small Business Act (15 U.S.C. 638) is amended—

(A) in subsection (f)(2)(A), as so designated by section 103(2) of this Act, by striking “shall not” and all that follows through “make available for the purpose” and inserting “shall not make available for the purpose”; and

(B) in subsection (y), as amended by section [204] 203—

(i) by striking paragraph (4);

(ii) by redesignating paragraphs (5) and (6) as paragraphs (4) and (5), respectively.

(2) TRANSITIONAL RULE.—Notwithstanding the amendments made by paragraph (1), subsection (f)(2)(A) and (y)(4) of section 9 of the Small Business Act (15 U.S.C. 638), as in effect on the day before the date of enactment of this Act, shall continue to apply to each Federal agency until the effective date of the performance criteria established by the Administrator under subsection (kk)(2) of section 9 of the Small Business Act, as added by subsection (a).

(3) PROSPECTIVE REPEAL.—Effective on the first day of the fourth full fiscal year following the date of enactment of this Act, section 9 of the Small Business Act (15 U.S.C. 638), as amended by paragraph (1) of this section, is amended—

(A) in subsection (f)(2)(A), by striking “shall not make available for the purpose” and inserting the following: “shall not—

“(i) use any of its SBIR budget established pursuant to paragraph (1) for the purpose of funding administrative costs of the program, including costs associated with salaries and expenses; or

“(ii) make available for the purpose”; and

(B) in subsection (y)—

(i) by redesignating paragraphs (4) and (5) as paragraphs (5) and (6), respectively; and

(ii) by inserting after paragraph (3) the following:

“(4) FUNDING.—

“(A) IN GENERAL.—The Secretary of Defense and each Secretary of a military department may use not more than an amount equal to 1 percent of the funds available to the Department of Defense or the military department pursuant to the Small Business Innovation Research Program for payment of expenses incurred to administer the Commercialization Pilot Program under this subsection.

“(B) LIMITATIONS.—The funds described in subparagraph (A)—

“(i) shall not be subject to the limitations on the use of funds in subsection (f)(2); and

“(ii) shall not be used to make Phase III awards.”

**SEC. 312. GAO STUDY WITH RESPECT TO VENTURE CAPITAL OPERATING COMPANY INVOLVEMENT.**

Not later than 3 years after the date of enactment of this Act, and every 3 years thereafter, the Comptroller General of the United States shall—

(1) conduct a study of the impact of requirements relating to venture capital operating company involvement under section 9(cc) of the Small Business Act, as added by section 108 of this Act; and

(2) submit to Congress a report regarding the study conducted under paragraph (1).

**SEC. 313. REDUCING VULNERABILITY OF SBIR AND STTR PROGRAMS TO FRAUD, WASTE, AND ABUSE.**

(A) FRAUD, WASTE, AND ABUSE PREVENTION.—

(1) GUIDELINES FOR FRAUD, WASTE, AND ABUSE PREVENTION.—

(A) AMENDMENTS REQUIRED.—Not later than 90 days after the date of enactment of this Act, the Administrator shall amend the SBIR Policy Directive and the STTR Policy Directive to include measures to prevent fraud, waste, and abuse in the SBIR program and the STTR program.

(B) CONTENT OF AMENDMENTS.—The amendments required under subparagraph (A) shall include—

(i) definitions or descriptions of fraud, waste, and abuse;

(ii) a requirement that the Inspectors General of each Federal agency that participates in the SBIR program or the STTR program cooperate to—

(I) establish fraud detection indicators;

(II) review regulations and operating procedures of the Federal agencies;

(III) coordinate information sharing between the Federal agencies; and

(IV) improve the education and training of, and outreach to—

(aa) administrators of the SBIR program and the STTR program of each Federal agency;

(bb) applicants to the SBIR program or the STTR program; and

(cc) recipients of awards under the SBIR program or the STTR program;

(iii) guidelines for the monitoring and oversight of applicants to and recipients of awards under the SBIR program or the STTR program; and

(iv) a requirement that each Federal agency that participates in the SBIR program or STTR program include the telephone number of the hotline established under paragraph (2)—

(I) on the Web site of the Federal agency; and

(II) in any solicitation or notice of funding opportunity issued by the Federal agency for the SBIR program or the STTR program.

(2) FRAUD, WASTE, AND ABUSE PREVENTION HOTLINE.—

(A) HOTLINE ESTABLISHED.—The Administrator shall establish a telephone hotline that allows individuals to report fraud, waste, and abuse in the SBIR program or STTR program.

(B) PUBLICATION.—The Administrator shall include the telephone number for the hotline established under subparagraph (A) on the Web site of the Administration.

(b) STUDY AND REPORT.—

(1) STUDY.—Not later than 1 year after the date of enactment of this Act, and every 3 years thereafter, the Comptroller General of the United States shall—

(A) conduct a study that evaluates—

(i) the implementation by each Federal agency that participates in the SBIR program or the STTR program of the amendments to the SBIR Policy Directive and the STTR Policy Directive made pursuant to subsection (a);

(ii) the effectiveness of the management information system of each Federal agency that participates in the SBIR program or STTR program in identifying duplicative SBIR and STTR projects;

(iii) the effectiveness of the risk management strategies of each Federal agency that participates in the SBIR program or STTR program in identifying areas of the SBIR program or the STTR program that are at high risk for fraud;

(iv) technological tools that may be used to detect patterns of behavior that may indicate fraud by applicants to the SBIR program or the STTR program;

(v) the success of each Federal agency that participates in the SBIR program or STTR program in reducing fraud, waste, and abuse in the SBIR program or the STTR program of the Federal agency; and

(vi) the extent to which the Inspector General of each Federal agency that participates in the SBIR program or STTR program effectively conducts investigations of individuals alleged to have submitted false claims or violated Federal law relating to fraud, conflicts of interest, bribery, gratuity, or other misconduct; and

(B) submit to the Committee on Small Business and Entrepreneurship of the Senate, the Committee on Small Business of the House of Representatives, and the head of each Federal agency that participates in the SBIR program or STTR program a report on the results of the study conducted under subparagraph (A).

**SEC. 314. INTERAGENCY POLICY COMMITTEE.**

(a) ESTABLISHMENT.—The Director of the Office of Science and Technology Policy (in this section referred to as the “Director”), in conjunction with the Administrator, shall establish an Interagency SBIR/STTR Policy Committee (in this section referred to as the “Committee”) comprised of 1 representative from each Federal agency with an SBIR program or an STTR program and 1 representative of the Office of Management and Budget.

(b) COCHAIRPERSONS.—The Director and the Administrator shall serve as cochairpersons of the Committee.

(c) DUTIES.—The Committee shall review, and make policy recommendations on ways to improve the effectiveness and efficiency of, the SBIR program and the STTR program, including—

(1) reviewing the effectiveness of the public and government databases described in section 9(k) of the Small Business Act (15 U.S.C. 638(k));

(2) identifying—

(A) best practices for commercialization assistance by Federal agencies that have significant potential to be employed by other Federal agencies; and

(B) proposals by Federal agencies for initiatives to address challenges for small business concerns in obtaining funding after a Phase II award ends and before commercialization; and

(3) developing and incorporating a standard evaluation framework to enable systematic assessment of the SBIR program and STTR program, including through improved tracking of awards and outcomes and development of performance measures for the SBIR program and STTR program of each Federal agency.

(d) REPORTS.—The Committee shall submit to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Science and Technology and the Committee on Small Business of the House of Representatives—

(1) a report on the review by and recommendations of the Committee under subsection (c)(1) not later than 1 year after the date of enactment of this Act;

(2) a report on the review by and recommendations of the Committee under subsection (c)(2) not later than 18 months after the date of enactment of this Act; and

(3) a report on the review by and recommendations of the Committee under subsection (c)(3) not later than 2 years after the date of enactment of this Act.

**SEC. 315. SIMPLIFIED PAPERWORK REQUIREMENTS.**

Section 9(v) of the Small Business Act (15 U.S.C. 638(v)) is amended—

(1) in the subsection heading, by striking “SIMPLIFIED REPORTING REQUIREMENTS” and inserting “REDUCING PAPERWORK AND COMPLIANCE BURDEN”; and

(2) by striking “The Administrator” and inserting the following:

“(1) STANDARDIZATION OF REPORTING REQUIREMENTS.—The Administrator”; and

(3) by adding at the end the following:

“(2) SIMPLIFICATION OF APPLICATION AND AWARD PROCESS.—Not later than one year after the date of enactment of this paragraph, and after a period of public comment, the Administrator shall issue regulations or guidelines, taking into consideration the unique needs of each Federal agency, to ensure that each Federal agency required to carry out an SBIR program or STTR program simplifies and standardizes the program proposal, selection, contracting, compliance, and audit procedures for the SBIR program or STTR program of the Federal agency (including procedures relating to overhead rates for applicants and documentation requirements) to reduce the paperwork and regulatory compliance burden on small business concerns applying to and participating in the SBIR program or STTR program.”.

**TITLE IV—POLICY DIRECTIVES**

**SEC. 401. CONFORMING AMENDMENTS TO THE SBIR AND THE STTR POLICY DIRECTIVES.**

(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Administrator shall promulgate amendments to the SBIR Policy Directive and the STTR Policy Directive to conform such directives to this Act and the amendments made by this Act.

(b) PUBLISHING SBIR POLICY DIRECTIVE AND THE STTR POLICY DIRECTIVE IN THE FEDERAL REGISTER.—Not later than 180 days after the date of enactment of this Act, the Administrator shall publish the amended SBIR Policy Directive and the amended STTR Policy Directive in the Federal Register.

**TITLE V—OTHER PROVISIONS**

**SEC. 501. RESEARCH TOPICS AND PROGRAM DIVERSIFICATION.**

(a) SBIR PROGRAM.—Section 9(g) of the Small Business Act (15 U.S.C. 638(g)) is amended—

(1) in paragraph (3)—

(A) in the matter preceding subparagraph (A), by striking “broad research topics and to topics that further 1 or more critical technologies” and inserting “applications to the Federal agency for support of projects relating to nanotechnology, rare diseases, security, energy, transportation, or improving the security and quality of the water supply of the United States, and the efficiency of water delivery systems and usage patterns in the United States (including the territories of the United States) through the use of technology (to the extent that the projects relate to the mission of the Federal agency), broad research topics, and topics that further 1 or more critical technologies or research priorities”; and

(B) in subparagraph (A), by striking “or” at the end; and

(C) by adding at the end the following: “(C) the National Academy of Sciences, in the final report issued by the ‘America’s Energy Future: Technology Opportunities,

Risks, and Tradeoffs' project, and in any subsequent report by the National Academy of Sciences on sustainability, energy, or alternative fuels;

"(D) the National Institutes of Health, in the annual report on the rare diseases research activities of the National Institutes of Health for fiscal year 2005, and in any subsequent report by the National Institutes of Health on rare diseases research activities;

"(E) the National Academy of Sciences, in the final report issued by the 'Transit Research and Development: Federal Role in the National Program' project and the report entitled 'Transportation Research, Development and Technology Strategic Plan (2006–2010)' issued by the Research and Innovative Technology Administration of the Department of Transportation, and in any subsequent report issued by the National Academy of Sciences or the Department of Transportation on transportation and infrastructure; or

"(F) the national nanotechnology strategic plan required under section 2(c)(4) of the 21st Century Nanotechnology Research and Development Act (15 U.S.C. 7501(c)(4)) and in any report issued by the National Science and Technology Council Committee on Technology that focuses on areas of nanotechnology identified in such plan;" and

(2) by adding after paragraph (12), as added by section 111(a) of this Act, the following:

"(13) encourage applications under the SBIR program (to the extent that the projects relate to the mission of the Federal agency)—

"(A) from small business concerns in geographic areas underrepresented in the SBIR program or located in rural areas (as defined in section 1393(a)(2) of the Internal Revenue Code of 1986);

"(B) small business concerns owned and controlled by women;

"(C) small business concerns owned and controlled by veterans;

"(D) small business concerns owned and controlled by Native Americans; and

"(E) small business concerns located in a geographic area with an unemployment rate that exceed the national unemployment rate, based on the most recently available monthly publications of the Bureau of Labor Statistics of the Department of Labor."

(b) STTR PROGRAM.—Section 9(o) of the Small Business Act (15 U.S.C. 638(o)), as amended by section 111(b) of this Act, is amended—

(1) in paragraph (3)—

(A) in the matter preceding subparagraph (A), by striking "broad research topics and to topics that further 1 or more critical technologies" and inserting "applications to the Federal agency for support of projects relating to nanotechnology, security, energy, rare diseases, transportation, or improving the security and quality of the water supply of the United States (to the extent that the projects relate to the mission of the Federal agency), broad research topics, and topics that further 1 or more critical technologies or research priorities";

(B) in subparagraph (A), by striking "or" at the end; and

(C) by adding at the end the following:

"(C) the National Academy of Sciences, in the final report issued by the 'America's Energy Future: Technology Opportunities, Risks, and Tradeoffs' project, and in any subsequent report by the National Academy of Sciences on sustainability, energy, or alternative fuels;

"(D) the National Institutes of Health, in the annual report on the rare diseases research activities of the National Institutes of Health for fiscal year 2005, and in any subsequent report by the National Institutes of Health on rare diseases research activities;

"(E) the National Academy of Sciences, in the final report issued by the 'Transit Research and Development: Federal Role in the National Program' project and the report entitled 'Transportation Research, Development and Technology Strategic Plan (2006–2010)' issued by the Research and Innovative Technology Administration of the Department of Transportation, and in any subsequent report issued by the National Academy of Sciences or the Department of Transportation on transportation and infrastructure; or

"(F) the national nanotechnology strategic plan required under section 2(c)(4) of the 21st Century Nanotechnology Research and Development Act (15 U.S.C. 7501(c)(4)) and in any report issued by the National Science and Technology Council Committee on Technology that focuses on areas of nanotechnology identified in such plan;"

(2) in paragraph (15), by striking "and" at the end;

(3) in paragraph (16), by striking the period at the end and inserting "; and"; and

(4) by adding at the end the following:

"(17) encourage applications under the STTR program (to the extent that the projects relate to the mission of the Federal agency)—

"(A) from small business concerns in geographic areas underrepresented in the STTR program or located in rural areas (as defined in section 1393(a)(2) of the Internal Revenue Code of 1986);

"(B) small business concerns owned and controlled by women;

"(C) small business concerns owned and controlled by veterans;

"(D) small business concerns owned and controlled by Native Americans; and

"(E) small business concerns located in a geographic area with an unemployment rate that exceed the national unemployment rate, based on the most recently available monthly publications of the Bureau of Labor Statistics of the Department of Labor."

(c) RESEARCH AND DEVELOPMENT FOCUS.—Section 9(x) of the Small Business Act (15 U.S.C. 638(x)) is amended—

(1) by striking paragraph (2); and

(2) by redesignating paragraph (3) as paragraph (2).

#### SEC. 502. REPORT ON SBIR AND STTR PROGRAM GOALS.

Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

"(1) ANNUAL REPORT ON SBIR AND STTR PROGRAM GOALS.—

"(1) DEVELOPMENT OF METRICS.—The head of each Federal agency required to participate in the SBIR program or the STTR program shall develop metrics to evaluate the effectiveness, and the benefit to the people of the United States, of the SBIR program and the STTR program of the Federal agency that—

"(A) are science-based and statistically driven;

"(B) reflect the mission of the Federal agency; and

"(C) include factors relating to the economic impact of the programs.

"(2) EVALUATION.—The head of each Federal agency described in paragraph (1) shall conduct an annual evaluation using the metrics developed under paragraph (1) of—

"(A) the SBIR program and the STTR program of the Federal agency; and

"(B) the benefits to the people of the United States of the SBIR program and the STTR program of the Federal agency.

"(3) REPORT.—

"(A) IN GENERAL.—The head of each Federal agency described in paragraph (1) shall submit to the appropriate committees of Congress and the Administrator an annual

report describing in detail the results of an evaluation conducted under paragraph (2).

"(B) PUBLIC AVAILABILITY OF REPORT.—The head of each Federal agency described in paragraph (1) shall make each report submitted under subparagraph (A) available to the public online.

"(C) DEFINITION.—In this paragraph, the term 'appropriate committees of Congress' means—

"(i) the Committee on Small Business and Entrepreneurship of the Senate; and

"(ii) the Committee on Small Business and the Committee on Science and Technology of the House of Representatives."

#### SEC. 503. COMPETITIVE SELECTION PROCEDURES FOR SBIR AND STTR PROGRAMS.

Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this Act, is amended by adding at the end the following:

"(mm) COMPETITIVE SELECTION PROCEDURES FOR SBIR AND STTR PROGRAMS.—All funds awarded, appropriated, or otherwise made available in accordance with subsection (f) or (n) must be awarded pursuant to competitive and merit-based selection procedures."

Ms. LANDRIEU. Madam President, I ask unanimous consent that in proceeding to the consideration of S. 493 there be a period of debate until noon. The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

Ms. LANDRIEU. Madam President, I appreciate the cooperation of both leaders to help us get to the floor this morning for a debate on this very important piece of legislation and one that we have actually and, unfortunately, struggled with for the last two Congresses.

The Acting President pro tempore knows, as a member of the Small Business Committee and as a Senator from New Hampshire, how important this piece of legislation is as we continue to fight—and that is what the word is, "fight"—to create jobs right here at home in America, not just on Wall Street, not just in the fancy places, but on Main Street in our hometowns all over America.

Senator SNOWE and I are on the Senate floor today together, happily, to talk about a bill into which she has put a tremendous amount of time and effort before as the chair of the committee. I serve as the chair of the committee, and she is my very able ranking member. Together our staffs have worked very closely for a long period of time to try to fashion the compromise that is before the Senate today.

I thank the 84, I believe, Members of the Senate who voted for cloture last night. I know the rules of the Senate are strange, still, to many Americans. But we cannot operate without unanimous consent. So it takes an extra special level of cooperation. While we did not get everyone last night to go on the record, we did get the prerequisite number—above 60—to move to this debate. I am hoping our amendment process can be very smooth, that we stay focused on small business-related amendments, that we work in good faith, and, hopefully, in the next couple of days we can get this bill off the floor because this is a job creator.

One of the Senators was here earlier this morning talking about creating an atmosphere for job growth and development. Tax codes do some of that, Federal investments in infrastructure do that, investments in education do that. But one other thing that does it is fashioning Federal programs that work for the job creators of America, and that is what the SBIR Program does and the STTR Program does. It is the Federal Government's largest research and development investment program for small businesses. It was created actually 30 years ago, and the idea developed from one of our outstanding Federal workers.

Roland Tibbetts was a staffer at the National Science Foundation. He took the lead in 1976 in directing a greater and more significant share of the research and development budget of the National Science Foundation and directed it to small business in a new innovation program.

Why did he do this? He did it because from his position, directing a very established and strong research component, he saw the Federal Government giving most of its awards to large businesses. I think—although I have not spoken to him personally; but I most certainly intend to because he has testified before former committees—I am imagining he probably had a heart for actually wanting to find cures for some diseases and realized that not all of that technology and innovation rested with the large companies; that, in fact, there might be small pharmaceutical companies or brilliant scientists in Maine or in New Hampshire or in Louisiana who had discovered or had the potential to discover something that could be transformative. So this staffer said: Let's set aside or direct a small portion, but an important portion, to small businesses. That is how this program began.

I am so pleased with this funding, which only government can do. Only government can do this. There are certain things the private sector does well. They do venture capital when an idea has been proven or when the potential has clearly been established or when the potential is at least clearly established in the mind of one or two individuals—such as the guy who created Facebook or Bill Gates with Microsoft. But mostly great ideas need early, patient capital—very risky, but when it hits, it hits big.

That is what this program does. It sets aside 2.5 to 3 percent of all the research and development budgets of all the Federal agencies ranging from the Department of Defense, which is about \$1 billion that would be contributed to this program, down to the smaller agencies, which have maybe up to a couple million dollars in their research budgets. But out of that very pilot-like initiative back in 1976, that was focused on discovering, funding, and evaluating the initial highest risk, most cost-cutting exploratory research that is necessary to achieve significant

technological innovations and breakthroughs, this program was created.

Let me share with you what a gentleman who testified before our committee—we have had several hearings on this particular program, and no program is perfect. Let me begin with this: This program is not perfect. But we are perfecting it as we bring this bill to you. We have looked at its weaknesses. We have tried in our reauthorization to correct those, to firm those up. But the gentleman who is actually probably the leading expert on this program, Dr. Wessner, of the National Research Council, recently testified before our committee. He said:

An important point to keep in mind is [that] you can have really good ideas that die. They will die because they do not have funding.

Not because they do not have potential but because they do not have funding. I would add to this, particularly in this time of recession and tightening back on capital and the closing down of credit card lending: If you think it is normally tough for entrepreneurs and innovators and discoverers and inventors to get capital, it has been a very rocky road in the last year or two. So he said these ideas just die.

He said:

SBIR brings capital to transform those ideas into innovations. You are not done then . . . but that gets you the innovation and product development and the start of the uptake. . . . The rest of the world thinks this is the greatest thing since sliced bread. . . . The rest of the world is copying it, putting it on steroids, while we are debating it.

That is the point I want to make. We have debated the reauthorization of this legislation for 6 years. The time has come to stop the debate, pass the bill, and recognize this is a world model. No program is perfect. But the wisdom and the importance of setting aside a small portion of the research and development programs of all the Federal agencies, and then to train our workforce and our managers to look out, seek, and find some of the interesting technologies that could be created and grow into big businesses is very forward thinking, and we should be very grateful to Roland Tibbetts and the Senators and Representatives who started this program.

Senator Warren Rudman took this idea, saw this pilot program, and made it a national program. We have him and others to thank for the jobs, the businesses that have been created.

Let me give you one example. The founder of Qualcomm came and testified before our committee. Qualcomm is a very famous business. It developed a lot of technologies that made wireless communications possible. It started 25 years ago in the den of its founder, Dr. Jacobs. He testified before the committee and said basically Qualcomm was just at one time, 25 years ago, an exciting new idea. It was not a company. It was not a business. He and 35 of his colleagues consulted and talked about the new technologies

they were seeing. They got an SBIR grant of \$150,000, and then they were subsequently awarded, because they developed the idea, to \$1.5 million. They got another grant, which are the limits of the program. This program has limits. You have to test your idea, and then you come back for phase II funding.

Well, Qualcomm now employs 17,500 people. They are operating in 22 countries. They paid more in taxes last year to local, State, and Federal governments than 50 percent of the cost of this entire program. So that is one success story. That is what I mean when I say: When it hits, it hits big.

Now, not every company will turn into Qualcomm. But without programs like this, there is what they call a valley of death. There are ideas that are created out of the minds and hearts of Americans who have been well educated, raised to believe that dreams come true, and are encouraged to risk. We are natural risk takers. We have these ideas and these innovations. But what happens is, if there is not that important, early funding to develop that kind of science and technology, in large measure some of these ideas just fall into the valley of death. We are going to catch them. That is what this bill does. It is what it attempts to do.

So as it has grown and developed—and we have reauthorized it over the years—there have been some important changes and improvements.

I am going to recognize the ranking member, but I want to finish up in just a few minutes.

In 1980, the White House Conference on Small Business echoed these sentiments, recognized the value of the program. The end result of the recommendation was this program, as I said, first authored by Senator Warren Rudman. It had 84 cosponsors, 8 of whom are still serving in the Senate: Senator BAUCUS, Senator COCHRAN, Senator GRASSLEY, Senator HATCH, Senator INOUE, Senator LEAHY, Senator LEVIN, and Senator LUGAR. They all were original sponsors of this bill. I hope they are proud. In their careers they have sponsored many bills. I hope they are proud of this one because it has done its job and it has helped America to continue to honor our entrepreneurs and our inventors.

As I mentioned, Senator Rudman, a Republican from New Hampshire, and once a member of our committee, was the Senate champion for the creation of the SBIR and STTR Programs. He was a true statesman—a man of vision with regard to the importance of technology to our economy. I wish to quote him as we begin this debate:

The issue addressed in Senate bill 881—

The bill at the time—

is one which plays an underlying role in the ability of this Nation to maintain its security to achieve energy independence, increase productivity, and preserve the quality of life we all enjoy. Our national strength and confidence in these areas depend upon maintaining a leading role in technological superiority.

That is what he said in his opening statement at the Senate Subcommittee on Innovation and Technology on June 30, 1981.

Senator SNOWE was in the House at the time. She was a Congresswoman when President Reagan signed this legislation, creating it in 1982. She quoted from President Reagan. I know she will probably remember this and I think it is worth repeating:

Our nation is blessed with two important qualities that are often missing in other societies, our spirit of entrepreneurship and our capacity for invention and innovation. These two elements are combined in the small businesses that dot our land.

I am proud to bring this bill to the floor. It has had extraordinarily positive and noble champions since its beginning. As I said, no program is perfect, but we have tried in this reauthorization to look at the places where the program is weak and strengthen it. I will go through some of those details in the latter part of the afternoon. But for an overview this morning, I wanted to give more of a historical context of this bill, and to thank the Members for moving so quickly at our request to the bill.

I look forward to the debate. I hope Members will be responsible in offering their amendments. I know the time for debate on the floor is precious. We wish to limit debate to be focused around the principles, at least, and the details of this bill as best we can so we can get this program reauthorized. Then we can continue to be the leaders in cutting-edge innovation, and the Federal Government can do its part—an important part—that venture capitalists can't do, big banks don't want to do, investment bankers aren't made to do, and small community banks don't do in this kind of lending. Only patient, directed capital can give that boost over the valley of death and create that bridge so small businesses and our scientists and engineers can walk over it safely.

I wish to recognize at this time my ranking member and thank her for her support of this legislation from its beginning and her championship to this day.

For clarification purposes, the time until noon will be for debate only and no amendments until after lunch.

I yield to Senator SNOWE.

The PRESIDING OFFICER (Mr. TESTER). The Senator from Maine.

Ms. SNOWE. Mr. President, first I wish to commend the Chair of the Small Business Committee. She has done an extraordinary job in bringing this legislation to the floor in a bipartisan fashion, which I think is so essential to ensuring the passage of this legislation which, suffice it to say, has been long overdue. It has been on a long journey since 2008 in terms of extensions and reextensions, but we have never been able to accomplish a reauthorization for a variety of reasons which I will explain later in my statement. But I do wish to congratulate

the Chair for working mightily on both sides of the aisle and in the committee, accommodating bipartisanship by allowing the new members of the committee—particularly on our side of the aisle where we have five new members of the committee—who were not able to have the opportunity to review this legislation as new Members of the Senate because we had passed this unanimously in the last session of Congress. So she did hold a hearing and a markup to accommodate those views and give them a chance to review this legislation as well as to amend it in the committee. I know some of the Members will have amendments they will offer on the floor as well. So I wish to thank the Chair for accommodating those various issues and the members of the committee as they attempted their new duties as members of the Small Business Committee.

I also wish to thank the Chair for working through these issues diligently, because these are two critical programs, as she indicated in her opening statement, that are crucial to small businesses, but also important to innovation in America.

Reauthorizing both the SBIR and the STTR Programs represents a profound opportunity for us to reaffirm the truth in the optimistic vision of America that indeed it is small businesses that are going to make the contributions not only for job creation but through their innovation and inventions, as the Chair mentioned, with President Reagan's comments many years ago. That is why I am very excited about reauthorizing these programs, which foster an environment of innovative entrepreneurship by directing more than \$2 billion annually in Federal research and development funding to the Nation's small firms most likely to create jobs and commercialize their products.

Small businesses are our Nation's job generators, employing more than half of all private-sector employees and creating 64 percent of the net new jobs over the past 15 years. They also represent 99.7 percent of all employer firms. Furthermore, small businesses are our Nation's most effective innovators, producing roughly 13 times more patents per employee than large firms—patents which are at least two times as likely to be among the top 1 percent of high-impact patents. Recipients of both of these programs have produced more than 85,000 patents and have generated millions of well-paying jobs across all 50 States. It is crucial, then, that both of these programs—one of the strongest examples of a successful public-private partnership—be a key part of our job creation agenda.

The SBIR program got its start at the National Science Foundation back in 1976 following growing concerns that small businesses were not receiving an adequate share of Federal research and development funding despite their prominent role in innovation. It was officially established in law as part of

the Small Business Innovation Development Act of 1982. As the Chair indicated, I was an original cosponsor in the House—hopefully that is not dating myself too much—which set four goals for the program: stimulate technological innovation; use small business to meet Federal R&D funds; foster and encourage participation by minority and disadvantaged persons in the technological innovation; and increase private-sector commercialization of innovation derived from Federal R&D.

The STTR program was established in 1992 to complement the SBIR program by stimulating partnerships between small businesses and nonprofit research institutions such as universities and research laboratories. Together, these vital job creation programs have provided small firms with over \$28 billion during their lifespans.

These programs have been front and center in improving our Nation's capacity to be innovative. According to a report by the Information Technology and Innovation Foundation, SBIR-backed firms have been responsible for roughly 25 percent of the Nation's most crucial innovations over the past decade—"a powerful indication that the SBIR program has become a key force in the innovation economy of the United States."

Furthermore, a comprehensive 2008 National Academy of Sciences study of the SBIR program noted that more than 20 percent of companies responding to their survey noted they were founded entirely, or at least in part, because of a prospective SBIR award, and a full two-thirds said the projects they performed would not have taken place without the funding. Just under half of the projects pursued in the SBIR program reached the marketplace, bringing countless new innovations to our everyday lives. Additionally, the study noted that over one-third of the companies awarded SBIR funding participate in the program for the first time each year, thus . . . "encouraging innovation across a broad spectrum of firms." It concludes that SBIR is "sound in concept and effective in practice."

In fact, there is a wide range of remarkable success stories associated with the SBIR program, including Qualcomm, which the Chair mentioned, which is a remarkable story. Qualcomm received roughly \$1.5 billion in SBIR grants to pursue several innovative programs and develop breakthrough technologies. Now it employs 17,500 individuals worldwide with an annual revenue of \$11 billion. In fiscal year 2010 alone, Qualcomm paid \$1.4 billion in Federal, State, and local taxes—a significant return on investment.

Another example of SBIR's success is LASIK eye surgery. The company behind the technology for the procedure received SBIR awards from both NASA and the Department of Defense. In the 1980s, NASA awarded funding for a project developing technology for

docking of space vehicles to satellites by pointing laser beams. This concept was then applied to develop LASIK, which corrects vision problems.

The technology that went into the Sonicare electronic toothbrush was funded by an SBIR award. According to NIH, which made the award, SBIR funding allowed the firm that developed the technology to create a \$300 million business, employing over 500 individuals.

In my home State of Maine, Tex Tech Industries has researched and developed high-tech textiles that are used in body armor for U.S. troops and bullet-proof vests for public safety personnel. Tex Tech also developed a fire-resistant material to be used as the primary fire barrier in the seating cabins of new commercial aircraft.

Additionally, BioSciCon in Maryland is responsible for the MarkPap system, which is a diagnostic device that tests for cervical cancer and can be used as a research tool to improve cervical cancer screening.

Other companies such as Symantec, which makes antivirus software for computers, and Genzyme, one of the world's leading biotechnology firms, all received SBIR funding at some point during their formative years. Some of these firms are now household names; others are still small businesses with a plethora of novel ideas.

As these examples demonstrate, SBIR funding has helped small businesses nationwide develop incredible breakthrough technologies for a whole host of applications. These are innovations we use in our everyday lives, that help strengthen our national defense, improve our health, and boost our competitiveness. Regrettably the SBIR program expired in September 2008 and has been subject to a series of 10 short-term, temporary extensions since then, plaguing the programs with uncertainty and potentially dissuading some of our Nation's most promising firms from participating in them. This is legislation that our committee has worked to have signed into law for nearly 6 years—since the time, in fact, when I was chair of the committee. Indeed, we passed legislation out of the Small Business Committee unanimously in 2006 to preempt this stalemate by making improvements to the program and doubling the SBIR allocation from 2.5 percent to 5 percent over 5 years, and doubling the STTR allocation immediately.

Last Congress, with our Chair, we once again passed legislation out of our committee unanimously which was very similar to the bill we reported out in the previous Congress. Specifically, it maintained the allocation increases spread out incrementally that had been developed in the previous Congress as a compromise, as well as the 18-and-8 compromise on the venture capital issue. This time, the full Senate passed the legislation unanimously and sent it to the House of Representatives, where the bill sat.

The legislation we are debating today is very similar to the bill we passed out unanimously 3 months ago. But we have already wasted too much time over the past several years, and it is now vitally critical that we act now and pass this legislation to provide these crucial innovation initiatives with certainty for the future. As the U.S. Chamber of Commerce has noted:

[E]ven though this important program for the small business has a proven track record of success, its full potential has been held hostage by a series of short-term reauthorizations which has created uncertainty for SBIR program managers and limitations for potential small business grant recipients.

As in the previous two Congresses, our legislation increases the allocation for SBIR from 2.5 percent of an agency's extramural research and development to 3.5 percent for over 10 years, and doubles the STTR allocations from 0.3 to 0.6 percent over 5 years. This means the Federal Government can make more awards to a greater number of small businesses out of its existing research and development budget. It would also codify increased award sizes of \$150,000 for phase I and \$1 million for phase II in the SBIR program, and apply those levels to the STTR program as well to adjust for inflation. The last statutory increase in award sizes for the SBIR program was 19 years ago as part of the 1992 reauthorization.

It is critical that we bring the program into the 21st century to acknowledge the growing costs of quality research.

Furthermore, in December, Chair LANDRIEU and I sent a letter to SBA Administrator Karen Mills stating that rooting out fraud and abuse in the agency's program will be our committee's first priority this Congress. To that end, this bill includes stringent oversight and fraud prevention measures, requiring inspectors general of participating Federal agencies to establish fraud detection measures.

In a similar vein, the legislation includes a series of data-collection provisions that we worked on with Senator COBURN to ensure we have a better base of information to use when considering future policy changes to the programs and engaging in necessary oversight.

This reauthorization act contains an unprecedented compromise on the venture capital issue which has long bogged down any serious progress in reauthorizing these valuable programs. It would make firms majority owned by multiple venture capital companies eligible for up to 25 percent of SBIR funds at the National Institute of Health, National Science Foundation, and Department of Energy, and up to 15 percent of the funds at the remaining agencies. My longstanding guiding principle on reauthorization of these programs has been simple: These are small business programs, not big business programs or venture capital programs. I have worked closely with Chair LANDRIEU to ensure changes we make to these pro-

grams keep it squarely as a small business program. The unprecedented landmark compromise on the venture capital issue passes this test. Our compromise has the backing of diverse stakeholders, from the U.S. Chamber of Commerce, NFIB, Small Business Technology Council, to the Biotechnology Industry Organization, the National Venture Capital Association, and a whole host of other organizations, as we can see on this chart.

It is critical to note that funding for both of these programs is meant to serve as early-stage seed capital for eligible small businesses. In general, venture capital companies invest in firms that are further along in their development and commercialization, and they focus on larger investments that are easier to manage than is normally appropriate for many small, innovative technology firms. Nonetheless, particularly for firms in the biotechnology industry, venture capital investment is essentially a necessity to commercialize their technology.

Here is what some of the groups endorsing our legislation have to say about the compromise we arrived at. Mr. President, I ask unanimous consent to have printed in the RECORD letters of support we have received regarding this legislation, as well as the report from the Information Technology and Innovation Foundation I referenced earlier.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

CHAMBER OF COMMERCE OF THE  
UNITED STATES OF AMERICA,  
Washington, DC, March 8, 2011.

Hon. MARY L. LANDRIEU,  
Chairwoman, Committee on Small Business and  
Entrepreneurship, U.S. Senate, Washington,  
DC.

Hon. OLYMPIA J. SNOWE,  
Ranking Member, Committee on Small Business  
and Entrepreneurship, U.S. Senate, Wash-  
ington, DC.

DEAR CHAIRWOMAN LANDRIEU AND RANKING MEMBER SNOWE: The U.S. Chamber of Commerce, the world's largest business federation representing the interests of more than three million businesses and organizations of every size, sector, and region, strongly supports S. 493, the "SBIR/STTR Reauthorization Act of 2011," which, if enacted into law, would unleash the innovative talents of our nation's entrepreneurs to help create jobs and revive the economy.

The Small Business Innovative Research Program (SBIR) serves as an important avenue by which agencies harness the creativity and ingenuity of small business to meet specific research and development needs of the Federal government. In effect, this program requires federal agencies with a certain level of research dollars to give a small percentage of those dollars to small businesses through a competitive grant process.

Even though this important program for small business has a proven track record of success, its full potential has been held hostage by a series of short-term reauthorizations which has created uncertainty for SBIR program managers and limitations for potential small business grant recipients. This landmark compromise bill, if passed into law, would unlock the door for entry for businesses that acquire equity funding

through venture capital firms without diminishing the programs effectiveness for traditional small businesses, thus setting the stage for a robust and revitalized SBIR program.

Ninety-six percent of the Chamber's members are small businesses with fewer than one-hundred employees. On behalf of our smaller members, we thank you for introducing the "SBIR/STTR Reauthorization Act of 2011" and look forward to working with you to expeditiously pass it into law.

Sincerely,

R. BRUCE JOSTEN.

CONNECT,

Washington, DC, March 8, 2011.

Hon. MARY LANDRIEU,  
Hon. OLYMPIA SNOWE,

U.S. Senate, Small Business and Entrepreneurship Committee, Russell Senate Office Building, Washington, DC.

DEAR CHAIR LANDRIEU AND RANKING MEMBER SNOWE: As the Committee meets to markup S. 493—the SBIR/STTR Reauthorization Act of 2011, I write to introduce you to CONNECT and to encourage the Committee's support of S. 493 since the bill will have a positive impact in the formation of start-up technology companies. The formation of such companies will create jobs and help rejuvenate the American economy. We appreciate your strong and consistent leadership in shepherding previous versions of this reauthorization through the Committee and the Senate floor.

CONNECT is an innovation accelerator with the mission to assist entrepreneurs in their efforts to propel creative ideas and emerging technologies to the marketplace. As a regional innovation development organization, our commercialization efforts in Southern California span the spectrum of technologies from IT, wireless health, software, clean energy, environmental, life sciences/biotech, defense and security, and sports/action technologies. Over the last 25 years, CONNECT's commercialization capacity-building model has helped over 2,000 start-ups and has been replicated in numerous U.S. cities, states and regions, as well as overseas.

From our experience, CONNECT knows that the Small Business Innovation Research and Small Business Technology Transfer programs can be advantageous to start-up formation, thus CONNECT's interest in S. 493 is profound. Because acquiring funding through traditional lending sources continues to prove difficult in today's tight credit market, SBIR/STTR grants provide tech start-up companies another viable chance to compete for early-stage funding.

We recognize the delicate balance that S. 493 strikes related to the issue of venture-backed applicants and are grateful for the efforts made to reach an agreement. However, we encourage the Committee to explore a more robust approach that would increase the percentage of funds available to VC-backed applicants because such applicants provide extra value to the American taxpayer. Given that venture capital firms conduct extensive due diligence reviews before investing, venture-backed applicants have already demonstrated a strong business plan by which to break into an industry sector. In this time when the federal dollar needs to return revenues to the Treasury, allowing for more VC-backed applicants increases the likelihood that SBIR/STTR funds will create new jobs and grow companies in a way that will generate new tax revenue.

The Committee is right on point in proposing to increase award amounts and adding new data collection, reporting requirements, and performance metrics to ensure the SBIR/STTR missions are being upheld.

Although the SBIR program allocation increase of 1% is critically important, such allocation presents another opportunity for the Committee to explore a more robust expansion. Because the 1% increase is spread evenly over 10 years, further adjusting the increase would give stakeholders plenty of notice to plan accordingly.

As the bill moves to the floor, we'd like to suggest one new proposal that could be added to a Manager's Amendment. We continue to hear that one of the major costs that start-ups face are the legal costs to secure intellectual property rights through the patent and trademark application process. Because IP is indispensable for a start-up's growth, the Committee should consider allowing a percentage of Phase I awards (possibly up to one third) to be directed toward IP acquisition.

Again, thank you for your work to advance the cause of SBIR/STTR reauthorization. We are ready to assist you, your staff, and other Committee members as the bill moves onto the Senate floor.

Best wishes,

TIMOTHY TARDIBONO,  
Director of Public Policy.

DAWNBREAKER®

Rochester, New York, March 8, 2011.

Hon. MARY L. LANDRIEU,

Chairwoman, U.S. Senate, Committee on Small Business and Entrepreneurship, Russell Senate Office Bldg., Washington, DC.

Hon. OLYMPIA J. SNOWE,

Ranking Member, U.S. Senate, Committee on Small Business and Entrepreneurship, Russell Senate Office Bldg., Washington, DC.

DEAR CHAIRWOMAN LANDRIEU AND RANKING MEMBER SNOWE: I am writing to express my support for S. 493, the "SBIR and STTR Reauthorization Act of 2011." In 2008, the National Research Council completed a comprehensive assessment of the SBIR program and found the program to be, "sound in concept and effective in practice." Reflecting the sentiment of the NRC study, S. 493 preserves the program's concept and improves its effectiveness.

This legislation ensures the economic engine of our nation—small businesses—will have access to a larger share of federal research funding. This is timely and necessary given the fragile state of our economy. These programs play a critical role in our innovation ecosystem by providing important competitively awarded seed funding for promising innovative ideas. With proper nurturing, these ideas will grow into engines of economic growth and the solutions for tomorrow's most pressing technological challenges.

Dawnbreaker is a small women-owned business and we have had the great fortune to work side-by-side with more than 3,000 SBIR recipients since 1992. We consistently hear from SBIR awardees about the need for increased award levels so they can further the maturation of their technologies; more efficient program management across the agencies; and, the need for additional commercialization support—this bill remedies these concerns and accomplishes a lot more.

S. 493 ensures that our nation's most important small business research and development program will continue while operating more efficiently. Dawnbreaker supports S. 493, and we thank you both for your efforts to see this deserving program reauthorized and improved.

Sincerely,

JENNY C. SERVO,  
President.

SMALL BUSINESS CALIFORNIA,  
San Francisco, CA, March 8, 2011.

Hon. MARY LANDRIEU,  
Dirksen Senate Office Building,  
Washington, DC.

DEAR SENATOR LANDRIEU: Small Business California supports greater private sector participation in the market for Federal Research and Development, and especially increased engagement of small businesses through open, merit-based, and competitive bidding.

The R&D dollars spent at small business deliver outsized returns. As of 2005, the Small Business Innovation Research (SBIR) program has created over 87,000 patents. Overhead rates at many small companies are 1/2 to 1/3rd of the administrative costs typical of larger organizations.

The employment of scientists and engineers at small companies has grown rapidly over the last 20 years, now accounting for more than 50% of scientists and engineers in the United States. Nothing could be more critical to the competitiveness of the United States than to open the Federal marketplace to participation by the fastest growing and the most productive sector of the economy, America's small businesses.

Small Business California is therefore pleased to support S. 493 to reauthorize the highly successful SBIR program.

Sincerely,

SCOTT HAUGE,  
President.

NATIONAL DEFENSE INDUSTRIAL  
ASSOCIATION,  
Arlington, VA, March 8, 2011.

Hon. MARY L. LANDRIEU,  
United States Senate, Senate Committee on Small Business and Entrepreneurship, Washington, DC.

DEAR MADAM CHAIRWOMAN: On behalf of the 1,743 corporate members and over 87,755 individual members of the National Defense Industrial Association (NDIA), I am writing to express our support for S. 493, the SBIR/STTR Reauthorization Act of 2011.

Small business represents about two thirds of NDIA's total membership and we regard the SBIR program as the nation's most viable tool in leveraging small business resources that employ about half of the U.S. workforce. American small businesses currently employ more than half of all U.S. scientists and engineers, yet have access to less than five percent of government research and development funds. One critical access point to those funds is the SBIR Program. SBIR awards have led to important developments in technologies that directly supported our war fighters.

As I have previously testified before Congress, NDIA has a laser focus on American competitiveness in a global defense industry that increasingly challenges our members for primacy. We have therefore concluded that small business resources offer our defense industry the competitive advantages needed in these especially difficult economic times.

Madam Chairwoman, NDIA and its member companies support S. 493 and urge the Senate to consider this bill as promptly as possible. We thank you for your leadership and commitment to work in support of small businesses.

If NDIA can be of any further assistance, please feel free to have a member of your staff contact Mr. Peter Steffes, Vice President Government Policy for NDIA.

Sincerely and respectfully,  
LAWRENCE P. FARRELL, JR.,  
Lt. General, USAF (Ret),  
President and CEO.



THE NEW ENGLAND  
INNOVATION ALLIANCE,  
March 7, 2011.

Hon. MARY L. LANDRIEU,  
*Chair, Committee on Small Business & Entrepreneurship, United States Senate, Washington, DC.*

DEAR SENATOR LANDRIEU: The New England Innovation Alliance represents scores of small high technology businesses with a vital interest in the SBIR and STTR programs. We know that you understand how important this program is in creating advanced technologies, products and jobs. However, SBIR and STTR have been operating under ten continuing resolutions since 2008. It is scheduled to expire on May 31, 2011. This uncertainty has adversely affected small business and the SBIR/STTR program, and it needs to be reauthorized immediately.

It should be noted that NEIA companies have worked closely with university researchers across the country, providing over \$50M in subcontracts to more than 60 universities over the past five years. We believe that small high tech companies and the SBIR/STTR program provide the ideal bridge from academia to the marketplace, while providing future employment to tens of thousands of science and engineering graduates.

The New England Innovation Alliance supports the passage of Senate Bill S. 493.

Respectfully,

ROBERT F. WEISS,  
*Chairman.*

NATIONAL VENTURE  
CAPITAL ASSOCIATION,  
March 8, 2011.

Hon. MARY L. LANDRIEU,  
*Chairwoman, Senate Small Business Committee, U.S. Senate, Russell Senate Office Building, Washington, DC.*

Hon. OLYMPIA J. SNOWE,  
*Ranking Minority Member, Senate Small Business Committee, U.S. Senate, Russell Senate Office Building, Washington, DC.*

DEAR SENATORS LANDRIEU AND SNOWE: On behalf of the National Venture Capital Association (NVCA) and its members, I am writing in support of Senate passage of S. 493, the SBIR/STTR Reauthorization Act of 2011, which reauthorizes the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. This legislation represents a fair compromise to ensure that America's most innovative small businesses can once again have access to existing government incentives to grow jobs by commercializing new discoveries.

In particular, NVCA supports the bill's provisions allowing greater access to SBIR funds for majority owned venture-backed small businesses and fixing the affiliation rules to ensure these companies will be able to once again participate in the program. Many small businesses that are developing truly disruptive innovations rely on venture capital investment to help bring breakthrough products to market and grow U.S. jobs. The legislation will correct a regulatory interpretation made by SBA in 2003 which revoked the eligibility of many venture-backed companies from participating in the program. This compromise will help to ensure that small U.S. venture-backed companies have increased access to capital for meritorious cutting-edge early-stage research.

At a time when our country needs to build new businesses, the venture capital industry believes that the best use of government dollars is to leverage public/private partnerships and we are committed to working with the government to bring a steady stream of innovation and economic value to market. S. 493 is a positive step forward to allow ven-

ture-backed companies to have a fair chance to thrive under the SBIR program alongside non-venture-backed counterparts. Doing so will only strengthen the future success of the program.

For these reasons, I hope the Senate will move quickly and pass S. 493, the SBIR/STTR Reauthorization Act of 2011, and work with the House on an appropriate compromise prior to the May 31, 2011 reauthorization deadline.

Sincerely,

MARK G. HEESEN,  
*President.*

SMALL BUSINESS  
TECHNOLOGY COUNCIL,  
March 7, 2011.

Hon. MARY LANDRIEU,  
*U.S. Senate, Dirksen Senate Office Building, Washington, DC.*

DEAR SENATOR LANDRIEU: As the nation's largest tech-oriented small business organization representing diverse industries, the Small Business Technology Council (SBTC) would like to express its support on behalf of its members for S. 493, "The SBIR/STTR Reauthorization Act of 2011". This bipartisan legislation is the result of years of negotiations and compromise between both parties and the many organizations that have a stake in this program. It is thanks to the hard work and leadership of yourself and Ranking Member Snowe that an agreement between those stakeholders was finally reached.

The Small Business Innovation Research (SBIR) Program is one of the most successful innovation programs in the country, providing technology-oriented small businesses with seed-stage R&D funding that they otherwise would not have access to. It has been praised by multiple studies from the National Academies of Science, and has inspired similar programs in foreign countries such as the UK, Japan, South Korea, and the Netherlands. Not only does this program spur technological innovation and entrepreneurship, it helps create high-tech jobs, and does so without increasing Federal spending.

This program is currently under its 10th continuing resolution, and is set to expire on May 31, 2011. While most agree this is a good program that deserves to be reauthorized, disputes over what should be in the reauthorization legislation and proposed changes to the program have held it up until now. Those disputes have finally been resolved, and the current legislation is supported by all stakeholders. It has been over two years since the last reauthorization period ended, and after years of uncertainty and short-term continuing resolutions, the SBTC asks all Senators to support S. 493, and urges the swift passage of this important legislation.

Sincerely,

JERE W. GLOVER,  
*Executive Director.*

BIOTECHNOLOGY  
INDUSTRY ORGANIZATION,  
Washington, DC, March 7, 2011.

Hon. MARY LANDRIEU,  
*Chair, U.S. Senate Committee on Small Business and Entrepreneurship, Russell Senate Office Building, Washington, DC.*

Hon. OLYMPIA SNOWE,  
*Ranking Member, U.S. Senate Committee on Small Business and Entrepreneurship, Russell Senate Office Building, Washington, DC.*

DEAR CHAIR LANDRIEU AND RANKING MEMBER SNOWE: On behalf of the Biotechnology Industry Organization (BIO) and our more than 1,100 biotechnology companies, academic institutions, state biotechnology centers and related organizations, I am writing in support of S. 493, legislation to reauthor-

ize the Small Business Innovation Research (SBIR) and Small Business Technology Transfer Program (STTR) programs. This bill represents a balanced approach to ensure that America's most innovative small businesses can access existing incentives to grow jobs by commercializing new discoveries. As such, I commend you for your introduction of S. 493 and I urge the committee to favorably report the legislation to the full Senate for prompt consideration.

In particular, I am writing in support of the bill's provisions allowing greater access to SBIR funds for small businesses reliant upon venture capital financing. Small biotechnology, medical device and other life sciences firms increasingly rely on venture capital investments to fund research and development. The legislation will correct a regulatory interpretation made by SBA in 2003 which revoked the eligibility of many venture capital-reliant small companies from participating in the SBIR and STTR programs over the last several years. This provision will ensure that many of America's most innovative small businesses are not excluded simply because of how they raise capital and can once again compete in the SBIR and STTR programs based on scientific merit. The legislation will help to ensure that small, U.S. biotech companies have increased access to capital for meritorious cutting-edge, early-stage research.

Small biotechnology companies face the constant challenge of raising sufficient capital to fund biomedical research. This funding shortage is most acute for research projects at the earliest stages, exactly the point at which SBIR funds can be most productive in fostering science and innovation. By filling this market gap, SBIR funds have helped small biotechnology companies continue lines of medical research that might otherwise go unfunded. The legislation will increase access to critical, early-stage sources of funding for small businesses, including small biotechnology firms, thus facilitating economic growth, job creation, new breakthrough therapies for patients in need, and American economic competitiveness in the global economy. This is exactly the intent of the SBIR program, as created in 1982.

S. 493 represents a compromise to ensure that America's small businesses remain at the forefront of global innovation. While the legislation does not give any single interested party in the debate over reauthorization all that it might want, the legislation creates a framework that will help move the process forward and will hopefully ensure that SBIR reauthorization is enacted into law this year. The bill recognizes that the Small Business Innovation Research (SBIR) Program—last reauthorized in 2000—plays an important role in the development of new breakthrough therapies to improve human health, and must be updated to reflect the new realities facing America's small businesses in the 21st Century.

For these reasons, I urge the committee to favorably discharge S. 493 so that it can be passed promptly by the Senate.

Sincerely,

JAMES C. GREENWOOD,  
*President and CEO.*

WHERE DO INNOVATIONS COME FROM? TRANSFORMATIONS IN THE U.S. NATIONAL INNOVATION SYSTEM, 1970-2006

(By Fred Block and Matthew R. Keller)

How should the United States craft policies that effectively spur technological innovation? With increasing competitive challenges from other nations, particularly in technology and innovation-based sectors

once thought to be largely immune from foreign competition, there is increasing interest in crafting policies to help spur innovation. But if innovation policies are to be effective, it's critical that they be based on an accurate understanding of the U.S. innovation system—in particular, an understanding of where U.S. innovations come from. This report does this by analyzing the sources of award-winning innovations over the past few decades. It finds that the sources of these innovations have changed in two key ways. First, large firms acting on their own account for a much smaller share of award-winning innovations, while innovations stemming from collaborations with spin-offs from universities and federal laboratories make up a much larger share. Second, the number of innovations that are federally funded has increased dramatically. These findings suggest that the U.S. innovation system has become much more collaborative in nature. Federal innovation policy needs to reflect this fact.

#### ANALYSIS OF DATA ON FUNDING OF INNOVATIONS

The growing weight of public institutions as the source of U.S. innovations that win R&D 100 Awards and the growing role of interorganizational collaboration in U.S. innovations are suggestive that public funding has become steadily more important to the U.S. innovation process in recent years. Nevertheless, it is necessary to probe a bit further, because the U.S. firms coded as "private" are sometimes recipients of federal funding—sometimes for the precise R&D activity that wins the award.

Back in the 1970s, for example, some of the laboratories of the Fortune 500 firms that were frequent R&D 100 Award winners received substantial amounts of direct federal funding. And in the more recent period, there has been a proliferation of programs through which government agencies support private sector R&D. An example of the latter is the growing importance of Small Business Innovation Research (SBIR) firms among the award winners.

The SBIR program, established in the 1980s, is one of the most important mechanisms through which the federal government supports smaller innovative firms, including the firms that we have labeled as supported spinoffs. The SBIR program is a set-aside program: all government agencies that finance a large amount of R&D must set aside 2.5 percent of their R&D budgets for projects that originate with small businesses. The program awards up to \$750,000 in no strings support for projects in Phase I and up to \$1.5 million for Phase II projects that have shown significant progress in meeting the initial objectives. Some of the SBIR firms have now been in existence for 20 or more years, and at least one has grown to become a Fortune 500 firm.

Figure 6 shows the total number of past and present SBIR winners among winners of R&D 100 Awards.

The results show that these SBIR-nurtured firms consistently account for a quarter of all U.S. R&D 100 Award winners—a powerful indication that the SBIR program has become a key force in the innovation economy of the United States.

Figure 7 shows a more comprehensive measure of the role of federal financing of R&D 100 Award winners in the United States in 1975 and in 2006. The bottom part of the bar graph for each year shows the number of award-winning innovations from public sector entities in the United States that rely heavily on federal funding. As indicated earlier, the number of award-winning innovations from public sector entities increased dramatically from 14 in 1975 to 61 in 2006.

The top part of the bar graph for each year in Figure 7 shows the number of Fortune 500 and "other" U.S. firms that received at least 1 percent of their revenues from the federal government. The 1 percent screen picks up both large defense contractors and firms that have received substantial federal grants to support their R&D efforts. In 1975, 23 innovations that won R&D 100 Awards were developed by private firms in the United States that received at least 1 percent of their revenues from federal support. Prominent among these firms was General Electric, which developed nine of the award-winning innovations that year.

There is evidence that in 2006, the federal government directly funded three of the five private collaborations in the United States that produced innovations that received R&D 100 Awards. Of the 20 "other firms" that won awards in 2006, 13 had federal support above the 1 percent threshold and we were able to link the federal money directly to the specific innovation that received the award. Hence, 16 of these "private" innovations count as federally funded. The overall result in Figure 7 is that the number of federally funded innovations rises from 41 in 1975 to 77 in 2006.

In 2006, only 11 of the U.S. entities that produced award-winning innovations were not beneficiaries of federal funding. And even among this group of 11, there were some ambiguous cases. Dow Automotive won an R&D 100 Award for its work in developing an adhesive used with composite auto parts that was installed in Volkswagen cars. But a few years earlier, Dow had been a beneficiary of a substantial grant from the Advanced Technology Program in the Department of Commerce that was designed to accelerate the use of composites in automobiles. Two other winning firms—Brion Tech and MMR Technologies—were recent spinoffs from Stanford University, but since the firms had not received federal support, they were not coded as "supported spinoff"; however, it is likely that the professors behind the companies received federal research grants while at Stanford. Finally, we were unable to ascertain whether any of those remaining firms received research support from federal laboratories.

In short, Figure 7 probably understates the magnitude of the expansion in federal funding for innovations in the United States that R&D 100 Awards between 1975 and 2006. After all, in 1975, we counted innovations as federally funded even if support was not going to the specific unit of the firm that was working on a particular innovation. For 2006, however, a demonstration of federal support required showing that the federal funds were going to the same unit that was responsible for the particular technology that won the award.

The fundamental point is that even in the period that Fortune 500 corporations dominated the U.S. innovation process, they drew heavily on federal funding support. If one is looking for a golden age in which the private sector did most of the innovating on its own with federal help, one has to go back to the era before World War II. Nevertheless, over the last 40 years, the R&D 100 Awards indicate a dramatic increase in the federal government's centrality to the innovation economy in the United States. In the earlier period, U.S. technology policies were almost entirely monopolized by the military and space programs. More recently, a wide range of federal agencies that are not part of the Department of Defense are involved in supporting private sector R&D initiatives. Key agencies now include the Department of Commerce, Department of Energy, National Institutes of Health, Department of Agriculture, National Science Foundation, and

Department of Homeland Security. In addition, over the last 20 years, state governments have become much more involved in technology policy, with many, if not all states funding technology-based economic development activities. To the extent that state programs help small firms or university and federal lab innovations, their role would not be picked up in this analysis.

#### DISCUSSION

Back in 1887, Thomas Edison built an invention factory that has long been seen as the inspiration for the rise of the corporate research labs established by large U.S. firms during the 20th century. Our analysis suggests that although large corporations in the United States emulated Edison's model for decades, this pattern became much weaker after the corporate reorganizations of the 1970s and 1980s. Thus, the "era of Edison" did not last the full century.

It is not clear why the relative role of Fortune 500 companies in the U.S. innovation system has declined. We can hypothesize three factors. First, it seems likely that big corporations facing relentless pressures from the financial markets have been forced to cut back on expenditures that do not immediately strengthen the bottom line. In some cases, corporate cutbacks have meant eliminating laboratories altogether; in other cases, such cutbacks have meant reducing expenditures on early stage technology development that is often both expensive and risky and is more likely to lead to the kind of radical breakthroughs that win awards like the ones analyzed here.

A second factor that may be involved in the decline in Fortune 500 companies in the U.S. innovation system is that several factors, including the rise of computers and the Internet, have made it much easier for small firms to enter markets previously dominated by large firms. Many technologies today require less capital-intensive production processes (e.g., software), making it possible for small firms to innovate the technologies for which they received R&D 100 Awards. In other industries (e.g., biopharmaceuticals), small, innovative companies can contract out manufacturing (e.g., of new drugs). Because small and mid-sized firms can now better compete in product markets, they have dramatically increased their R&D investments. In fact, while the ratio of R&D investments to U.S. gross domestic product more than doubled between 1980 and 2000, almost all of that increase was due to increased R&D investments by small and mid-sized firms with fewer than 5,000 employees. Moreover, large firm R&D may now be more focused on improving existing product lines, as opposed to generating radically new innovations.

The third factor that may have contributed to the decline of Fortune 500 companies dynamic is a change in the employment preferences of scientists and engineers. As the employment landscape has shifted, it seems quite possible that many talented scientists and engineers have voted with their feet and have left work in corporate labs in favor of work at government labs, university labs, or smaller firms. More research is necessary to tease out the causes.

But returning to the history of the Edison lab suggests a longer term and more structural explanation for the recent shifts in the U.S. innovation system that we have uncovered. Revisionist scholars have discovered that Edison's laboratory actually operated differently from the corporate labs of the 20th century. It is true that Edison assembled a team of scientists and engineers that had built up considerable expertise in working with electrical devices—but Edison's team divided its time between internal

projects and external projects. The Edison laboratory did extensive contract work for other firms, helping them develop solutions to particular problems that their industry faced. Edison's employees worked closely with employees with technical knowledge from those other firms.

The argument by revisionist historians is that the extraordinary productivity of the Edison labs was a result of the systematic interaction between Edison's team and other groups of experts with very specific types of knowledge. When U.S. corporations sought to emulate Edison's model in the 20th century, though, they built elaborate laboratories that tended to cut their in-house technologists off from these systematic encounters with experts in other organizations. This choice fit with the model of the corporation that was exemplified by Henry Ford's decision to produce his own steel at the River Rouge plant. The idea was that bringing these activities, including R&D, fully in-house maximized management's ability to deploy the organization's resources.

What we have found in the United States at the end of the 20th century, though, is basically a return to Edison's model—with successful research organizations; public, or private, developing a highly productive mix of internal and external projects. There appear to be an increasing number of private sector research laboratories that combine their own internal projects—often funded with federal money—with contracted research for other firms. Some of their innovations show up as a winners of R&D 100 Awards.

#### CONCLUSION

These findings suggest that the U.S. federal government's role in fostering innovation—both in terms of organizational, auspices and funding—across the U.S. economy has significantly expanded in the last several decades. But the federal government's role is not to act as the agent of centrally planned technological change.

In Chalmers Johnson's classic account of the Japanese model of industrial policy, he shows how government officials, working at the Ministry of Trade and Industry, operated as both coordinators and financiers for the conquest by Japanese firms of new markets. Japanese government officials were implementing a shared plan that linked investments in particular technologies with specific business strategies to win in particular markets—both domestically and internationally. That strategy may have allowed Japan to catch up the leading nations in an array of industries, but it did not and does not fit the new innovation environment where cutting-edge innovation produced in a new collaborative and dispersed models is the key to success. It is for that reason that many other nations have shifted their innovation policies to be less directed.

In the United States, there is no central plan for innovation, and different federal agencies engage in support for new technologies often in direct competition with other agencies. The federal government had created a decentralized network of publicly funded laboratories where technologists will have incentives to work with private firms and find ways to turn their discoveries into commercial products. Moreover, an alphabet soup of different federal programs provides agencies with opportunities to help fund some of these more compelling technological possibilities, just as there has been increasing support, at both the federal and state levels, for industry-university research collaboration.

Complementing these decentralized efforts are, more targeted federal government programs that are designed to accelerate

progress across specific technological barriers. Today, for example, the Advanced Research Projects Agency in the Department of Defense is prioritizing support for computer scientists to find ways to overcome the obstacles to creating ever more powerful microchips for computers. It is also helping biological scientists find ways to accelerate the production of large batches of vaccine, which would be useful to protect the population both against biological weapons and a global pandemic of a deadly influenza. For these targeted efforts, officials in these government offices decide to renew grant support to one research group because it has made progress, withhold it from another research group that appears to be heading towards a dead end, and encourage connections with still another research group—working on a seemingly unrelated problem—because they suspect that the third group's findings might have relevance for solving the targeted problem.

Both types of U.S. government innovation initiatives—decentralized and targeted—are increasingly described with the language of venture capital. Private sector venture capitalists, such as the famous firms in Silicon Valley, have an open door policy for scientists and engineers who have a bright idea for a new business. Of every hundred pitches they hear, they might decide to invest in 20 with the idea that if even one or two of the 20 are successful, then they make vast amounts of money that they can recycle into new rounds of initial investments. But the key assumption behind venture capital is that even after careful screening, most of these new business ventures will fail. Some won't be able to develop the promised technology, some won't find a market for their particular innovation, and some won't be able to build an organization capable of exploiting the market. Nevertheless, the enormous gains from the small percentage of winners are more than enough to cover the bases from the others.

Many U.S. government officials, now use the same rhetoric. They know that most new startups begun by scientists and engineers at universities or government laboratories will fail, but the minority that succeed will create jobs and advance new technologies. With the decentralized approach, they may provide support to several hundred firms with the idea that 20 to 50 might actually flourish. With the more targeted efforts, they realize that in each funding cycle, only a minority of the researchers will make any significant headway on the key problems. But the idea is that over time, a few incremental advances will eventually set the stage for the big breakthrough that they are looking for.

The largest federal government program that fits this venture capital model is the Small Business Innovation Research (SBIR) program. In 2004, the SBIR program gave out more than \$2 billion for some 6,300 separate research projects. The success of programs such as SBIR helps to explain what is perhaps the most surprising turn in federal innovation policy of the last decade.

Starting with the Central Intelligence Agency (CIA) in 1999, a number of government agencies have now set up their own venture capital operations. The CIA's venture capital arm, In-Q-Tel, maintains its own Website and lists 90 recent startup firms in which it has invested. Congress provided a \$500 million initial fund, and just as with private sector venture capital, the idea is that the initial fund will be replenished and expanded as In-Q-Tel sells its stake in those firms that have been successful. The Department of the Army has followed the CIA model, and the Department of Energy has partnered with Battelle—the large nonprofit

organization that manages several of the department's labs—which has now created its own not-for-profit venture capital arm with an emphasis on supporting startup firms that originated in the laboratories.

Although this explicit turn towards venture capital by U.S. government agencies is understandable, it will not, by itself, solve what we see as the main weaknesses in the current system of federal support for innovation in the United States. In our view, the system of federal support for innovation has enormous strengths, but it also suffers from three major, interconnected weaknesses. First, the system carries decentralization to an unproductive extreme. Under current arrangements, it is entirely possible that five different government agencies might be supporting 30 different teams of technologists working on an identical problem without a full awareness of the duplication of efforts. This situation is a particular problem if different groups are unable to learn from each other in a timely fashion. Second, because the importance of the federal role in fostering innovation is not widely recognized, federal programs in support of innovation lack the broad public support that would be commensurate with their economic importance. Third, the budgetary support for the current system is inadequate and uncertain. Funding for more collaborative research and commercialization efforts are relatively limited, and total federal levels of R&D spending have been declining in real terms since 2003. These declines put the entire U.S. innovation system at risk.

This analysis has shown a dramatic shift in the locus of innovation in the U.S. economy that has occurred over the last three decades. We hope these findings spur a broad debate about the changing role of the federal government in our national innovation system.

Ms. SNOWE. Mr. President, the Biotechnology Industry Organization noted:

[t]his bill represents a balanced approach to ensure that America's most innovative small businesses can access existing incentives to grow jobs by commercializing new discoveries.

The U.S. Chamber of Commerce said:

[t]his landmark compromise bill, if passed into law, would unlock the door for entry for businesses that acquire equity funding through venture capital firms without diminishing the programs effectiveness for traditional small businesses, thus setting the stage for a robust and revitalized SBIR program.

That is really our goal—a modern program that recognizes the reality of today's innovative small businesses and provides the appropriate environment in which they can flourish.

Given the nature of the compromise we have reached—from increasing allocations over a number of years to allowing limited participation by majority-owned venture capital firms—we must allow time for these provisions to take shape and enhance these programs. That is why our legislation reauthorizes these measures for 8 years, through 2019. Indeed, the past two reauthorizations of the SBIR program have been for 8 years each—in 1992 and 2000—as was the last reauthorization for the STTR program in 2001.

This long-term reauthorization will allow more small businesses to access this funding without the fear of constant interruptions based on whims of

whether Congress will extend these programs for an indefinite period of time. Indeed, a company's life cycle in either of these programs is by nature a multiyear process—a phase I award will last 6 months, while a phase II award will last for 2 years. That timeframe does not include the time it takes for businesses to apply for funding and await a decision, as well as the time between three phases waiting for new solicitations from agencies.

It will also allow the Government Accountability Office to effectively study the venture capital compromise over time to see if it is serving its intended purpose of allowing promising small businesses to utilize these resources. We include a provision in the bill mandating that the GAO issue a report on the subject 3 years after enactment and every 3 years thereafter. By reducing the length of the reauthorization, we would be allowing this delicate compromise to be relitigated immediately without the benefit of studying its impact, and we would effectively negate any modicum of certainty provided in the pending legislation.

Finally, on the matter of procedure, I am very pleased the majority leader has indicated he will be allowing an open amendment process to this legislation. That is also important as well as necessary for working through these issues and others that are critical to our consideration.

Mr. President, I thank you for the consideration, but I most especially thank the chair of the Small Business Committee for providing the kind of leadership that has been so essential to bringing this legislation forward. After 10 reauthorizations and for about 6 years in the process, to bring it to this point will be critical for the innovation that is so essential to creating new products and to also creating new jobs we desperately need in our economy.

Ms. LANDRIEU. Mr. President, I thank Senator SNOWE. I could not have a better partner on this committee. Her expertise is noted and admired among the Members. She has served as a member of this committee—often times its chair—for many years. I appreciate her help and the help of her staff as well.

In the 10 minutes we have left, I wish to add a couple of specifics of the compromise Senator SNOWE has outlined.

It is true that this program has been sputtering along on very uncertain terrain because of every 3-month or 6-month reauthorization hastily put forward because there has been no agreement on a few of the details. We finally reached an agreement on some of those details, the largest of which had to do with the percentage of awards that could be given or funded to companies that are owned by venture capitalists.

This program was started as a small business program. Senator SNOWE and I feel very strongly and the same to try to keep it as a small business entrepreneurial program but to obviously recognize the changes and opportunities

for capital presented by some venture capitalists. That has been the subject of the largest piece of negotiation. I am happy to say we have letters of support from the Bay Area Innovation Alliance, the BioDistrict from New Orleans, just to name one, the Biotechnology Council. They are all very supportive of this compromise.

Mr. President, I ask unanimous consent to have printed in the RECORD these letters of support.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

Hon. MARY L. LANDRIEU,  
*Committee on Small Business & Entrepreneurship, U.S. Senate, Washington, DC.*

Subject: Senate Bill S. 493

DEAR SENATOR LANDRIEU: The Bay Area Innovation Alliance, representing more than 60 technology companies in the San Francisco Bay Area who participate extensively in the SBIR/STTR programs, is pleased to support compromise legislation for SBIR reauthorization.

We urge a timely passage of Senate Bill S. 493.

Sincerely,

CHRISTOPHER WHITE,  
*Bay Area Innovation Alliance,*

BIODISTRICT NEW ORLEANS,  
*New Orleans, LA, March 9, 2011.*

Hon. MARY LANDRIEU,  
*Chair, Senate Committee on Small Business and Entrepreneurship, U.S. Senate, Washington, DC.*

DEAR CHAIRWOMAN LANDRIEU: BioDistrict New Orleans is pleased to support your compromise Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs reauthorization legislation. Rebuilding the New Orleans economy around the biotech, digital media and other knowledge-based industries is our #1 priority.

As you know, SBIR is the nation's largest source of early-stage research and development funding. Providing more than 50,000+ patents since its inception, SBIR has successfully harnessed the proven innovative power of small, technology-based businesses to meet the nation's technology needs, and New Orleans needs to become a center of such activity.

Unfortunately, the reauthorization of this demonstrably effective program has been beset by various tribulations, court interpretations and special interests. This has led to nine short-term reauthorizations since 2008. These repeated, temporary extensions have wreaked havoc on agencies' ability to make strategic decisions in regard to the programs. The uncertain future of the program has also deterred potential participants and investors.

Thankfully, S.B. 493 allows for increased venture-capital participation but retains the small-business integrity of the program. This bill has been endorsed by the Biotechnology Industry Organization and the Small Business Technology Council, the nation's largest tech-oriented small business organization from diverse industries.

The BioDistrict also fully supports this legislation and urges its swift adoption. We wish to thank you for your unflagging and indispensable efforts to protect the small-business focus of the SBIR and STTR programs and achieve this balanced and fair compromise reauthorization package.

Sincerely,

BONITA A. ROBERTSON,  
*Special Counsel.*

NATIONAL SMALL BUSINESS  
ASSOCIATION,

*Washington, DC, March 7, 2011.*

Hon. MARY LANDRIEU,  
*U.S. Senate,*  
*Washington, DC.*  
Hon. OLYMPIA SNOWE,  
*U.S. Senate,*  
*Washington, DC.*

DEAR CHAIRWOMAN LANDRIEU AND RANKING MEMBER SNOWE: The National Small Business Association is pleased to support the SBIR/STTR Reauthorization Act of 2011 (S. 493). Reaching 150,000 small-business owners across the nation, NSBA is the country's oldest small-business advocacy organization and a longtime supporter of the Small Business Innovation Research, SBIR, program.

As you both know, the SBIR program is the nation's largest source of early-stage research and development funding. Providing more than 50,000 patents since its inception, SBIR has successfully harnessed the proven innovative power of small, technology-based businesses to meet the nation's technology needs. On average, SBIR generates seven new patents per day—which is far more than all U.S. universities combined, at less than one-twelfth their level of federal research and development funding.

Unfortunately, the reauthorization of this demonstrably-effective program has been beset by various tribulations. This has led to ten short-term reauthorizations since 2008. These repeated, temporary extensions have wreaked havoc on agencies' ability to make strategic decisions in regard to the programs. The uncertain future of the program also has deterred potential participants and investors.

Thankfully, a compromise reauthorization package—which allows for increased venture-capital participation but retains the small-business integrity of the program—has been forged. This compromise has been endorsed by the Biotechnology Industry Organization, the National Venture Capital Association, and the Small Business Technology Council, the nation's largest tech-oriented small business organization from diverse industries.

NSBA also fully supports S. 493 and urges its swift adoption. NSBA thanks you both for your unflagging and indispensable efforts to protect the small-business focus of the SBIR and STTR programs and achieve this balanced and fair compromise reauthorization package.

Sincerely,

TODD O. MCCracken,  
*President.*

SMALLER BUSINESS ASSOCIATION  
OF NEW ENGLAND,  
*Waltham, MA, March 8, 2011.*

U.S. Senator MARY LANDRIEU,  
*Chairman, Senate Small Business & Entrepreneurship, Russell Building, Washington, DC.*

DEAR SENATOR LANDRIEU: The Smaller Business Association of New England fully supports S. 493, which reauthorizes the Small Business Research Innovation program for the next eight years. Life sciences, defense, high technology and the energy sectors in Massachusetts have been tremendous beneficiaries of the SBIR/STTR programs averaging almost one quarter of a billion dollars per year. This research and development engine has spawned new revolutionary products that have been utilized in an innovative way by the military and commercial markets.

The proposed incremental increases in the SBIR/STTR formulas will only enhance the technology readiness of the program and will provide incentives for further innovation.

We think your compromise on the sticky venture capital issue is an equitable one,

particularly if it is inextricably linked to the increase in the SBIR formula from 2.5 percent to 3.5 percent. Secondly, the increased-size limits on Phase I and Phase II and allowance of sequential phasing from I to II appears to be reasonable and permits program flexibility for both the agency and recipient.

In summary, we think you and your staff have crafted an excellent compromise in order to satisfy divergent interests and most importantly, preserve the integrity of the SBIR/STTR programs. Please let us know if there is anything else SBANE can do to facilitate Senate 493. Thank you very much.

Sincerely,

ROBERT A. BAKER,  
*President.*

V-LABS, INC.  
Covington, LA, March 8, 2011.

Senator MARY LANDRIEU,  
U.S. Senate Building,  
Washington, DC.

DEAR SENATOR LANDRIEU: I am writing to give my support for SBIR/STTR Reauthorization Bill (S. 493). I am also a supporter of Senator Landrieu as a Louisiana resident. She has worked tirelessly for the business community in Louisiana. I have a small high tech company in Covington LA and have received several SBIR grants that enabled us to do research that we could not have afforded. I have worked many years in support of the development of biotechnology in Louisiana.

I am Councilor of the Division of Small Chemical Businesses, SCHB, of the American Chemical Society. The SBIR/STTR program is very important to our members. We offer symposia to our membership at national and regional meeting to share the opportunities of the SBIR/STTR program. The Division supports reauthorization of the SBIR/STTR program.

I have campaigned for support of the program by the American Chemical Society, ACS, for a number of years. The American Chemical Society has 163,000 members; it is the largest scientific society in the world. The support of the program was announced by the ACS Board of Directors in December, 2010 in a position statement, "A Competitive U.S. Business Climate: The Role of Chemistry", on creating new U.S. based science jobs. The complete publication is on the ACS webpage under policy, [www.acs.org/policy](http://www.acs.org/policy). The last paragraph of this statement reads: "Recommendations: Small Business and Entrepreneurship—ACS supports policies that foster the growth of small research and development businesses and encourage entrepreneurship: Expanding funding for the Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR), and Small Business Investment Companies (SBIC) programs and reforming these programs to make direct research funding for small businesses more easily available. Providing incentives for larger companies to expand investments in start-up research and development businesses"

I thank you for your work as well as the Committee on Small Business in introducing this bill S. 493 for the Reauthorization of the SBIR/STTR program.

Yours truly,

SHARON V. VERCELLOTTI,  
*President.*

Ms. LANDRIEU. Mr. President, CON-NECT, which is out of the University of California, is another important player in this particular field, and Dawnbreaker, a commercialization company. They were part of helping us forge this important compromise.

I also note that the guidelines of the awards have been raised in the first

stage from \$100,000 to \$150,000 and from \$750,000 to \$1 million for phase II and allows for sequential phase II awards—another important change.

I particularly thank Senator COBURN for agreeing to an 8-year extension. We think, for a program such as this which is dealing with technologies that sometimes take years to develop, that can be very promising, but it takes some planning, it takes patience. This is not a program that lends itself readily to 2- to 4-year reauthorizations. That is too much uncertainty for a program such as this. Maybe other programs in the Federal Government should go through 4-year and 5-year authorizations. Both Senator SNOWE and I pressed for a longer time. Senator COBURN is somewhat reluctant, but we are very grateful that he and others stepped up and said 8 years would be a good compromise in that way. We are grateful. This will be a very important authorization because it will set the direction for the next 8 years for our Federal agencies.

We have also made an important change—and I am very pleased about this because I think you can have the greatest programs in the world, but if you are not focused on quality, if you are not focused on exchanging best practices, if you are not focused on good management of those programs, even some of the best intentions fall apart or the taxpayers' money is wasted. We do not want to see that happen here. So we have set aside a small portion for administration, which was recommended by this study of oversight, so that the managers in each of these departments can be better trained to actually identify promising technologies, make sure they are requesting in the right areas the kinds of technologies they are looking for, and receive that information in a more professional way. That is an important component of this compromise—the 3-percent allocation for administration and oversight.

As I said, it reauthorizes it for 8 years, and the arrangement between venture capital and small businesses—that kind of capsulizes the major changes.

I do wish to recognize Senator ROCKEFELLER's amendment that he put on in the 111th Congress which is a policy directive against waste, fraud, and abuse. Senator ROCKEFELLER has been very helpful in this regard. His amendment, along with others, requires inspectors general in participating Federal agencies to establish fraud-detection measures, coordinate fraud information sharing between agencies, and provide fraud prevention related to education and training of the administration.

In addition to all of this, it actually gets even better because Senator SNOWE and I have figured out a way to reduce the cost from the last Congress to this Congress from \$229 million over 5 years to \$150 million. We are being as efficient with taxpayers' dollars as we

can, strengthening administration and fraud detection, giving a longer lead time and runway for some of these technologies.

Again, we think this is a model program in the world. We do not think, we know that because of the research and review that has been done of this program and from what we hear from other countries. They wonder: How does your system work? This is one important aspect. The government does have a role to play—not the most significant role potentially but a portion of one of the most significant roles to play in promoting entrepreneurship, creativity, innovations, and expanding the number of patents that are issued in the United States by providing programs that give an open door, access, and level playing field to the smallest businesses in America to give them a chance to compete against some of the big guys. That is really what this is all about.

Mr. President, let me see if the ranking member has anything else to add. We have a few minutes left. She may have one or two points to add as we close out before the lunch period.

Ms. SNOWE. Mr. President, I thank the chairman. The points she raised are very critical because of the contributions these programs have made to our economy, most especially because much of the innovation that occurs in America comes from small businesses. In fact, this report by the Information and Innovation Technology Foundation underscores this point, that the innovations coming from big companies is actually on the decline. We really do depend on the entrepreneurial spirit of small businesses to create the kind of innovation we require in America if we are going to be on the vanguard of change and vanguard of technologies and which is so crucial in moving forward as a nation.

The SBIR program in particular has played a very crucial role in that regard. I think this report truly does emphasize the degree to which it has played a paramount role over the years since the program was created in 1982. It certainly has had an extraordinary history in that regard.

We talk about a lot of programs that we underwrite at the Federal level, but I can say this is a good use of taxpayers' dollars when we are thinking about how we maximize taxpayers' dollars within the Federal agencies that are now utilizing these programs, of which we have 11 different agencies that are setting aside the research and development funds specifically to ensure that small business has an allocation among the research and development dollars so they get their fair share because that is from where the innovation is derived in the final analysis. That certainly has been the indication of the many results we have achieved due to these programs, and that is what makes them outstanding in that regard.

You can draw a cause and effect. Certainly, there is a correlation between

the effectiveness of these programs among the agencies that award them to small businesses that then become the true laboratories for the innovation. That transformation, as this report indicated, has been central to the types of technologies that have emerged over the last three decades.

We want to continue to advance these programs because they are undeniably beneficial and well worth the investments that are made by these agencies because of their required set-asides for these programs and to ensure that small businesses are part of the research and development funding that is in the billions of dollars at the Federal level, if you look at the collective budgets of just these 11 agencies. We want to make sure small businesses are key to our technological growth and, therefore, having these types of programs becomes a major force in developing our innovative economy, as this report indicated recently.

Again, I wish to thank the Chair for her efforts in that regard.

Ms. LANDRIEU. Mr. President, I thank Ranking Member SNOWE and, according to the previous agreement, I think we are going to move to a quorum call at this point. Within a short period of time, I think the leadership is going to lay down two amendments and then, after lunch, of course, we will be open to consider others. We are hoping they will be limited to the subject matter before us, but it is an open debate on this bill.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The bill clerk proceeded to call the roll.

Mr. REID. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. REID. Mr. President, I ask unanimous consent that the committee-reported amendments be agreed to en bloc; the motions to reconsider be considered made and laid upon the table en bloc; the amended version of S. 493 be considered original text for the purposes of further amendment; that Senator NELSON of Nebraska then be recognized to offer an amendment to S. 493; that following the reporting of the Nelson amendment, the amendment be set aside and the Republican leader be recognized to offer a first-degree amendment to the bill; and following the reporting of the McConnell amendment, the Republican leader be recognized for up to 5 minutes for debate only relative to his amendment; that following the Republican leader's remarks, the Senate resume consideration of the Nelson amendment and Senator NELSON be recognized for up to 10 minutes for debate only relative to his amendment.

Mr. President, I ask unanimous consent this be modified to allow the Republican leader to speak for whatever time he needs.

The PRESIDING OFFICER. Without objection, it is so ordered.

(The committee-reported amendments were agreed to en bloc.)

The PRESIDING OFFICER. The Senator from Nebraska.

AMENDMENT NO. 182

Mr. NELSON of Nebraska. Mr. President, I ask unanimous consent to call up the amendment I just sent to the desk.

The PRESIDING OFFICER. The clerk will report.

The bill clerk read as follows:

The Senator from Nebraska [Mr. NELSON] proposes an amendment No. 182.

Mr. NELSON of Nebraska. Mr. President, I ask unanimous consent to dispense with further reading of the amendment.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

At the appropriate place, insert the following:

It is the sense of the Senate that it supports reducing its budget by at least 5 percent. The Senate has made the findings that:

Finding that, Congress must pursue comprehensive deficit reduction,

Finding that, the nation is deeply involved in military action on two fronts

Finding that, Admiral Mullen has noted the most significant threat to national security is the national debt

Finding that, the nation is in fragile recovery from an economic downturn that has spanned two administrations

Finding that, the offices and agencies that serve Members of Congress must be reduced along with the rest of the budget

Finding that, in order to address the Nation's fiscal crisis, the Senate should lead by example and reduce its own legislative budget

It is the sense of the Senate, that it should lead by example and reduce the budget of the Senate by at least 5 percent.

AMENDMENT NO. 183

The PRESIDING OFFICER. The Republican leader.

Mr. MCCONNELL. Mr. President, with gas prices on the rise, Americans want to know what Washington is going to do about it. So let me provide a little update: The White House has responded by locking up domestic energy supplies and pushing an energy tax that will drive gas prices up even higher and Democrats in Congress aren't doing anything at all.

So we have a total disconnect right now between Democrats in Washington when it comes to gas prices. Both the White House and Democrats in Congress are acting as if they haven't seen a nightly newscast or driven by a gas station in weeks.

Senator INHOFE, Senator MURKOWSKI, and Senator BARRASSO have done a terrific job of raising the alarm on the administration's efforts to lock up domestic energy, even as it continues to push costly new regulations at the Environmental Protection Agency. I wish to commend them for their efforts on this most important and timely issue. They have shown how American families are getting a double whammy right now. Refiners would pass the costs related to these regulations on to consumers, and the White House's efforts

to lock up domestic energy production puts even more pressure on gas prices.

If you are just tuning in, let's review what the White House has been up to on that front: They have resisted our push for American production offshore, onshore and in Alaska and the jobs that go along with it. They have canceled existing drilling permits and the jobs that come with them. They have needlessly delayed offshore leases, which even former President Clinton has referred to as ridiculous. They have imposed a moratorium on oil and gas drilling, which amounts to a moratorium on domestic energy-related jobs. They have proposed a tax on domestic energy production that might be called a "minivan tax." Now they are trying to impose a backdoor national energy tax through the EPA.

It is a strange way to respond to rising gas prices. But it is perfectly consistent with the current Energy Secretary's previously stated desire to get gas prices in the United States up to where they are in Europe.

These new regulations would destroy jobs at a time when Americans need them the most, and they would be especially devastating for States such as Kentucky and other coal States. EPA regulations resulting in dramatic energy price increases would jeopardize the livelihoods of the 18,000 miners in Kentucky and the additional 200,000 jobs that depend on coal production and the low cost of electricity that Kentuckians enjoy.

They would raise the price of everything from electricity, gasoline, fertilizer, to the food we eat, and that is why farmers, builders, manufacturers, small businesses, and the U.S. Chamber of Commerce oppose them and support an effort to stop them.

But the White House is determined to get its way, and that is why they are attempting to do through regulation what they couldn't do through legislation regardless of whether the American people want it. In my view, it is an insult to the millions of Americans who are already struggling to make ends meet and to find a job.

Fourteen million Americans are looking for work, gas prices are approaching \$4 a gallon, and the Obama administration wants unelected and unaccountable bureaucrats to impose new regulations that will destroy even more jobs and drive gas prices even higher.

If you want proof that common sense is taking a backseat to ideology in the White House, look no further: This plan is bad for jobs and bad for the economy and it must be stopped. That is why, at the end of my remarks, I will be introducing an amendment to block it.

In an effort to prevent the administration from adding yet another burdensome, job-destroying regulation through the backdoor, we will have a vote on whether, at a time of rising gas prices and growing concern about the scope of government, we should allow

the White House to impose new energy regulations through the EPA.

This vote is needed because the White House appears ready to advance its goal by any means possible, regardless of our economy or the will of the people. That is why it is my hope we will vote to stop this power grab in its tracks.

I wish to, in particular, give credit to Senator INHOFE. This is legislation he has introduced and has been promoting. It is exactly the same legislation that is moving over in the House of Representatives, and it is time the Senate took a stand on this measure as well.

Mr. President, I believe there is an amendment pending.

The PRESIDING OFFICER. There is.

Mr. MCCONNELL. Mr. President, I ask unanimous consent that the pending amendment be temporarily set aside, and I send an amendment to the desk.

The PRESIDING OFFICER. The clerk will report.

The bill clerk read as follows:

The Senator from Kentucky [Mr. MCCONNELL] proposes an amendment No. 183.

Mr. MCCONNELL. Mr. President, I ask unanimous consent that the reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

(Purpose: To prohibit the Administrator of the Environmental Protection Agency from promulgating any regulation concerning, taking action relating to, or taking into consideration the emission of a greenhouse gas to address climate change) At the end, add the following:

#### TITLE VI—ENERGY TAX PREVENTION

##### SEC. 601. SHORT TITLE.

This title may be cited as the “Energy Tax Prevention Act of 2011”.

##### SEC. 602. NO REGULATION OF EMISSIONS OF GREENHOUSE GASES.

(a) IN GENERAL.—Title III of the Clean Air Act (42 U.S.C. 7601 et seq.) is amended by adding at the end the following:

##### “SEC. 330. NO REGULATION OF EMISSIONS OF GREENHOUSE GASES.

“(a) DEFINITION.—In this section, the term ‘greenhouse gas’ means any of the following:

- “(1) Water vapor.
- “(2) Carbon dioxide.
- “(3) Methane.
- “(4) Nitrous oxide.
- “(5) Sulfur hexafluoride.
- “(6) Hydrofluorocarbons.
- “(7) Perfluorocarbons.

“(8) Any other substance subject to, or proposed to be subject to, regulation, action, or consideration under this Act to address climate change.

“(b) LIMITATION ON AGENCY ACTION.—

“(1) LIMITATION.—

“(A) IN GENERAL.—The Administrator may not, under this Act, promulgate any regulation concerning, take action relating to, or take into consideration the emission of a greenhouse gas to address climate change.

“(B) AIR POLLUTANT DEFINITION.—The definition of the term ‘air pollutant’ in section 302(g) does not include a greenhouse gas. Notwithstanding the previous sentence, such definition may include a greenhouse gas for purposes of addressing concerns other than climate change.

“(2) EXCEPTIONS.—Paragraph (1) does not prohibit the following:

“(A) Notwithstanding paragraph (4)(B), implementation and enforcement of the rule entitled ‘Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards’ (75 Fed. Reg. 25324 (May 7, 2010) and without further revision) and finalization, implementation, enforcement, and revision of the proposed rule entitled ‘Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles’ published at 75 Fed. Reg. 74152 (November 30, 2010).

“(B) Implementation and enforcement of section 211(o).

“(C) Statutorily authorized Federal research, development, and demonstration programs addressing climate change.

“(D) Implementation and enforcement of title VI to the extent such implementation or enforcement only involves one or more class I or class II substances (as such terms are defined in section 601).

“(E) Implementation and enforcement of section 821 (42 U.S.C. 7651k note) of Public Law 101-549 (commonly referred to as the ‘Clean Air Act Amendments of 1990’).

“(3) INAPPLICABILITY OF PROVISIONS.—Nothing listed in paragraph (2) shall cause a greenhouse gas to be subject to part C of title I (relating to prevention of significant deterioration of air quality) or considered an air pollutant for purposes of title V (relating to air permits).

“(4) CERTAIN PRIOR AGENCY ACTIONS.—The following rules, and actions (including any supplement or revision to such rules and actions) are repealed and shall have no legal effect:

“(A) ‘Mandatory Reporting of Greenhouse Gases’, published at 74 Fed. Reg. 56260 (October 30, 2009).

“(B) ‘Endangerment and Cause or Contribute Findings for Greenhouse Gases under section 202(a) of the Clean Air Act’ published at 74 Fed. Reg. 66496 (Dec. 15, 2009).

“(C) ‘Reconsideration of the Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs’ published at 75 Fed. Reg. 17004 (April 2, 2010) and the memorandum from Stephen L. Johnson, Environmental Protection Agency (EPA) Administrator, to EPA Regional Administrators, concerning ‘EPA’s Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program’ (Dec. 18, 2008).

“(D) ‘Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule’, published at 75 Fed. Reg. 31514 (June 3, 2010).

“(E) ‘Action To Ensure Authority To Issue Permits Under the Prevention of Significant Deterioration Program to Sources of Greenhouse Gas Emissions: Finding of Substantial Inadequacy and SIP Call’, published at 75 Fed. Reg. 77698 (December 13, 2010).

“(F) ‘Action to Ensure Authority to Issue Permits Under the Prevention of Significant Deterioration Program to Sources of Greenhouse Gas Emissions: Finding of Failure to Submit State Implementation Plan Revisions Required for Greenhouse Gases’, published at 75 Fed. Reg. 81874 (December 29, 2010).

“(G) ‘Action To Ensure Authority To Issue Permits Under the Prevention of Significant Deterioration Program to Sources of Greenhouse Gas Emissions: Federal Implementation Plan’, published at 75 Fed. Reg. 82246 (December 30, 2010).

“(H) ‘Action To Ensure Authority To Implement Title V Permitting Programs Under the Greenhouse Gas Tailoring Rule’, pub-

lished at 75 Fed. Reg. 82254 (December 30, 2010).

“(I) ‘Determinations Concerning Need for Error Correction, Partial Approval and Partial Disapproval, and Federal Implementation Plan Regarding Texas Prevention of Significant Deterioration Program’, published at 75 Fed. Reg. 82430 (December 30, 2010).

“(J) ‘Limitation of Approval of Prevention of Significant Deterioration Provisions Concerning Greenhouse Gas Emitting-Sources in State Implementation Plans; Final Rule’, published at 75 Fed. Reg. 82536 (December 30, 2010).

“(K) ‘Determinations Concerning Need for Error Correction, Partial Approval and Partial Disapproval, and Federal Implementation Plan Regarding Texas Prevention of Significant Deterioration Program; Proposed Rule’, published at 75 Fed. Reg. 82365 (December 30, 2010).

“(L) Except for action listed in paragraph (2), any other Federal action under this Act occurring before the date of enactment of this section that applies a stationary source permitting requirement or an emissions standard for a greenhouse gas to address climate change.

“(5) STATE ACTION.—

“(A) NO LIMITATION.—This section does not limit or otherwise affect the authority of a State to adopt, amend, enforce, or repeal State laws and regulations pertaining to the emission of a greenhouse gas.

“(B) EXCEPTION.—

“(i) RULE.—Notwithstanding subparagraph (A), any provision described in clause (ii)—

“(I) is not federally enforceable;

“(II) is not deemed to be a part of Federal law; and

“(III) is deemed to be stricken from the plan described in clause (ii)(I) or the program or permit described in clause (ii)(II), as applicable.

“(ii) PROVISIONS DEFINED.—For purposes of clause (i), the term ‘provision’ means any provision that—

“(I) is contained in a State implementation plan under section 110 and authorizes or requires a limitation on, or imposes a permit requirement for, the emission of a greenhouse gas to address climate change; or

“(II) is part of an operating permit program under title V, or a permit issued pursuant to title V, and authorizes or requires a limitation on the emission of a greenhouse gas to address climate change.

“(C) ACTION BY ADMINISTRATOR.—The Administrator may not approve or make federally enforceable any provision described in subparagraph (B)(i).”

##### SEC. 603. PRESERVING ONE NATIONAL STANDARD FOR AUTOMOBILES.

Section 209(b) of the Clean Air Act (42 U.S.C. 7543) is amended by adding at the end the following:

“(4) With respect to standards for emissions of greenhouse gases (as defined in section 330) for model year 2017 or any subsequent model year for new motor vehicles and new motor vehicle engines—

“(A) the Administrator may not waive application of subsection (a); and

“(B) no waiver granted prior to the date of enactment of this paragraph may be considered to waive the application of subsection (a).”

The PRESIDING OFFICER. The Senator from Nebraska.

AMENDMENT NO. 182

Mr. NELSON of Nebraska. Mr. President, I rise to speak on the amendment I have just offered dealing with cutting the Senate budget by at least 5 percent.

When I go home every weekend and I am at the grocery store or I am at a hardware store, I have people coming to me saying they are concerned about the growing deficit, they are concerned about the increasing debt, and they are asking what Congress can do, what can the Senate do, specifically, to avoid having this unsustainable growth and debt and deficit. They are concerned.

In many respects, the growth of that debt is most threatening to the national security of this country.

Mr. INHOFE. Would the Senator from Nebraska yield for a question?

Mr. NELSON of Nebraska. Sure.

Mr. INHOFE. I ask the Senator from Nebraska—the minority leader has just introduced an amendment that is pending right now, and I was going to speak on that amendment. Rather than going to another one, would the Senator yield for 3 or 4 minutes so I can at least weigh in on this amendment?

Mr. NELSON of Nebraska. Ordinarily, I would grant that request, but I have a speech at another location that should be starting about right now. So I will be brief.

Mr. INHOFE. Mr. President, I ask unanimous consent that at the conclusion of the Senator's remarks I be recognized next.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. NELSON of Nebraska. The Chairman of the Joint Chiefs of Staff, Admiral Mullen, noted that the most significant threat to our national security is in fact the national debt.

The Nation is in a fragile state of recovery, one that we hope will improve the unemployment situation in our country and will improve the overall economy. But as we look at dealing with the deficit and deficit reduction, we must in fact pursue a very important part of that reduction ourselves here within the confines of the Senate. The offices and agencies that serve the Members of Congress have to be reduced along with the rest of the budget.

In order to address the Nation's fiscal crisis I think the Senate must lead by example and reduce our own legislative budget. It is in that context I have introduced this resolution of the Senate today, a sense of the Senate that it should lead by example and reduce the budget of the Senate by at least 5 percent.

This is not something new to me. Two years ago, we held the line in the growth of the Senate budget. A year ago we cut the legislative branch budget. We are looking forward, beyond this current budget, this continuing resolution, and looking at 2012. I hope the legislative branch on a bipartisan basis—as in the past, with Senator MURKOWSKI, now with Senator HOEVEN—will be able to further reduce the legislative branch budget as we go forward on the 2012 budget that will take effect on October 1 of this year.

This is designed for us to set an example by cutting our own budgets, not

just asking other people to tighten their belts and go through the process of deficit reduction through cuts, but to lead by example and do it ourselves. Obviously there will be an opportunity to speak more at a later time. I hope that will generate some more discussion on the floor of the Senate.

I yield the floor.

The PRESIDING OFFICER. The Senator from Oklahoma.

Mr. INHOFE. Mr. President, first I thank the Senator from Nebraska for allowing me to come in immediately following his remarks.

AMENDMENT NO. 183

An amendment was just offered by the minority leader. Let me explain what this is. As the former chairman of the Environment and Public Works Committee, and now the ranking member, we have been very much concerned for a long period of time over what they are trying to do with cap-and-trade. All the way back to the Kyoto treaty and then through the five different bills that were debated on the Senate floor, we recognized the incredible cost to the American people if we were to pass cap-and-trade legislation.

The interesting thing about this is the most votes that were in the Senate at any one time in order to pass cap-and-trade were about 30. Obviously it takes a lot more than that. So what this administration did was say: All right, if you are not going to pass cap-and-trade regulation—keep in mind what that is; that would end up being the largest tax increase in the history of America on the American people—if you are not going to do it through legislation, we will do it through our regulations, through the Environmental Protection Agency.

There was an endangerment finding. The Administrator of the EPA had the endangerment finding and it was based on the IPCC flawed science, but nonetheless it was there. So they started on a route to regulate CO<sub>2</sub> through regulations. Let's stop and think about what that would be. The costs we have determined, over a period of 10-years, to take over the regulation and have in fact a type of cap-and-trade through regulation—or by regulation—would be about \$300 billion to \$400 billion a year. I did a calculation as to what that would cost the average family in the State of Oklahoma and it was about \$3,000 for each family who actually files a tax return.

You have to ask the question, what do you get if you pass this. First of all, I think most people right now are concerned with the price of gasoline at the pump. It is going up again. I suggest it is not market forces that are forcing the price up. It is nothing less than regulation. We have an administration that is doing all it can to kill fossil fuels in America. This is a chart showing—and this all happened in the last year—in the United States we have the largest recovery reserves in oil, coal, and gas of any other country. In fact, our research is right there. You can see

recovery reserves are astronomical compared to China, Iran, Canada, and some of the other countries.

The problem we have is a political problem. We are not allowed to go ahead and exploit our own reserves. It is simple supply and demand. I think there is not a person listening to us now who has not studied supply-and-demand basics back in school. If we have all this supply here, why can't we exploit the supply?

To give another illustration of what we have—this is coal reserves. We have 28 percent of all the world's coal reserves. We are exploiting right now clean coal technology, being very successful. We have, in addition to this, oil and gas reserves. But the problem we have is a political problem.

It was the Secretary of Energy, Steven Chu, who made the statement in the Wall Street Journal:

[S]omehow we have to figure out how to boost the price of gasoline in Europe.

“To boost the price of gasoline to the levels in Europe.” Right now the levels in Europe are around \$8 a gallon. That is what the administration wants us to pay. Why do they want that? They want that so we will be priced out of using fossil fuels. We are talking about oil, gas, and coal.

Right now we are faced with this. Frankly, as we speak, in this very moment over in the House of Representatives they are taking up what they call the Upton-Inhofe bill. That is the same amendment the minority leader just filed. What that does is propose the content of the Inhofe-Upton bill, which says the EPA does not have jurisdiction over controlling CO<sub>2</sub>. That should be a legislative matter. You say, Who would agree with that?

MAX BAUCUS, Democrat from Montana, said:

I do not want the EPA writing those regulations. I think it's too much power in the hands of one single agency, but rather climate change should be a matter that's essentially left to the Congress.

The Senator from Nebraska who just walked off the floor:

Controlling the levels of carbon emissions is the job of Congress. We don't need the EPA looking over Congress' shoulder telling us we're not moving fast enough.

He went on further to say:

Because the EPA regulations would be a government-directed command-and-control regime, they would raise the price of energy—

... in his State and for all the other States.

This is something I think we have talked about but there is one thing that seems to keep getting overlooked. Somebody asked me the other day, they said: Inhofe, what if you are wrong, in terms of how CO<sub>2</sub>—they are talking about catastrophic global warming. I said: It is very simple. I have a great deal of respect for the Director of the Environmental Protection Agency. She actually said—Lisa Jackson—in response to my question, live on TV, in our committee. I said:



Let's say we pass a cap-and-trade either by regulation or legislation. What do you think that is going to do in terms of the overall emissions of CO<sub>2</sub>?

Her response was, well, it wouldn't really affect them because that would only affect the United States.

I go on further and say: If we were to restrict these, and stop us from producing oil, gas, and coal in the United States, necessarily our power would be reduced. That would move it to China, to India, to Mexico, to places where they do not have these regulations and do not have restrictions on emissions. It would have the effect of actually increasing, not decreasing, CO<sub>2</sub>. Even if we are wrong on that we have to keep in mind it would not make any difference.

I know there are several others who want to talk about this. I am very excited we now have this as a pending amendment, to adopt what I refer to as the Inhofe-Upton bill. He referred to it as the Upton-Inhofe bill. It would merely take out the jurisdiction of the EPA to regulate CO<sub>2</sub>.

I would say also in the case of the Director, Lisa Jackson, when I asked the question—and this was a year ago in October, I say to my good friend from Louisiana—I said: If you are going to try to have an endangerment finding so that would allow the EPA to regulate the same as the cap-and-trade would, it has to be based on science. What science would you base it on? Her response was the United Nations IPCC. What is that? It was Climategate IPC. It happened about a year ago. It was cooked science. I remember standing at this podium in this Senate many times, talking about how they have tried to falsify the science to make people believe catastrophic global warming is going to come in as a result of CO<sub>2</sub> emissions.

I am glad this has come up. Right now we are looking at gasoline approaching \$4 a gallon. It is a supply-and-demand situation. My friend from Louisiana has a lot of gas and oil in her State. We do in my State of Oklahoma. We need to get the regulators, who are the politicians, to allow us to go ahead and exploit our own resources. Eighty-three percent right now of the Federal lands where we could be producing oil and gas is off limits.

The last thing I will say before yielding the floor is that if we were to take the recoverable oil and the recoverable gas and take away the political obstacles that are in the way, we would have enough to run this country for 90 years, in terms of the supply of oil, and for 90 years in the supply of gas, all produced here in the United States. That would mean we would not have to be reliant upon the Middle East to run this machine called America.

Let's pull away those. The way to do that is to vote in favor of this amendment and I am very excited we will have the opportunity to do that shortly.

The PRESIDING OFFICER. The Senator from Louisiana.

Ms. LANDRIEU. The Senator and Senator MCCONNELL have an amendment. There is an amendment pending. We only have a minute and a half. I wish to call to the attention of the Chair, Senator VITTER has an amendment which we will take up to discuss later this afternoon.

The PRESIDING OFFICER. The Senator from Louisiana.

AMENDMENT NO. 178

Mr. VITTER. Mr. President, I want to briefly preview an amendment, Vitter amendment No. 178, which I will formally call up this afternoon about 2:45. This is a spending amendment to get back to what I believe is the central challenge we face as a country right now, this unsustainable path we are on with regard to Federal spending and debt. This is a very simple, straightforward amendment which I think deserves and will hopefully get strong bipartisan support. It requires the Federal Government to get rid of its billions of dollars of inventory—literally billions and billions of dollars of unutilized or underutilized real property.

The Federal Real Property Council reports that the Federal Government owned or operated more than 1.1 million assets worldwide in 2007. It was worth an estimated \$1.5 trillion. But a lot of those assets, real property buildings, land, are unused or underused. According to OMB, there are about 47,000 underutilized properties, almost 19,000 completely unutilized properties. That is over 65,000 properties with an estimated value of \$83 billion that would better be diminished, sold, or demolished.

This is a commonsense way to save money in the Federal budget, to move us forward in terms of a more sustainable path on spending and debt. Obviously we need many more larger steps, but this is brought in that spirit.

I look forward to returning to the floor around 2:45 to make it formally pending and to offer some brief additional comments.

I yield the floor.

The PRESIDING OFFICER. The Senator from Louisiana.

Ms. LANDRIEU. Mr. President, according to the agreement, we are going to break now at 12:30 and take up this debate this afternoon and stay on this bill with open debate. Hopefully, it can be productive and cordial and then, hopefully, we can move to pass this important bill, the reauthorization of SBIR.

Mr. President, I ask unanimous consent that the order with respect to Senator PORTMAN be vitiated.

The PRESIDING OFFICER. Without objection, it is so ordered.

Ms. LANDRIEU. Mr. President, we will break now and come back and resume our debate at 2:15.

#### RECESS

The PRESIDING OFFICER. Under the previous order, the Senate stands in recess until 2:15 p.m.

Thereupon, at 12:30 p.m., the Senate recessed until 2:15 p.m. and reassembled when called to order by the Presiding Officer (Mr. WEBB).

The PRESIDING OFFICER. The Senator from Indiana.

#### FISCAL DISCIPLINE

Mr. COATS. Mr. President, returning to the Senate is in many ways like having a chance to relive part of one's life; yet doing so with the benefit of experience, experience that I gained in serving in this body before and also from service in the private sector. It allows one to see things differently than before.

While I can discuss with my colleagues many things that remain the same in the Senate, there is also much that has changed in our country that requires change in this institution. It is what has changed that has brought me back to the Senate. The more I witnessed what was happening to our country, the more I realized that I, like many others across the country, needed to reengage in some way or another in the task of returning our country to its basic values and time-tested principles, not the least of which is returning our Federal Government to one that ensures a healthy fiscal nation whose finances and policies promote job opportunities for its citizens.

I could not get comfortable with the fact that my generation might be the first to leave a country to our children that is in worse fiscal shape and with less opportunity than the one we had the privilege of inheriting.

When I first came to Congress in 1981, one of the first votes I had to deal with was to raise the national debt limit to just over the \$1 trillion mark. It was a tough one. Think of that. For nearly 200 years, as our country prospered and grew financially, we spent ourselves into \$1 trillion worth of debt. As a newly elected Member of the House of Representatives at that time, the last thing I wanted to do, particularly having run on a campaign of limited government and trimming the size of government and spending, was to make one of my very first votes on raising the national debt to accommodate excessive spending. But gritting my teeth and swallowing hard, I followed the request of newly elected President Ronald Reagan, who said we need to pay past bills so we can get to the job of cutting spending and cutting taxes and getting our country back on the right track economically.

It is difficult for me to comprehend that I am standing here 30 years later, and we are looking at a national debt of over \$14.5 trillion. So in just 30 years we have gone from \$1 trillion to \$14.5 trillion. I cannot comprehend that number. Very few Americans can comprehend that number. But, clearly, one thing stands out; that is, this Federal Government has grown faster and much deeper in debt than any of us could have imagined over a very short