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### SBIR/STTR REAUTHORIZATION ACT OF 2016

DECEMBER 20, 2016.—Ordered to be printed

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December 9), 2016

Mr. VITTER, from the Committee on Small Business and  
Entrepreneurship, submitted the following

### R E P O R T

[To accompany S. 2812]

The Committee on Small Business and Entrepreneurship, to which was referred the bill (S. 2812) to amend the Small Business Act to reauthorize and improve the Small Business Innovation Research Program and the Small Business Technology Transfer Program, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

#### I. INTRODUCTION

The “SBIR/STTR Reauthorization Act of 2016” (S. 2812) was introduced by the Ranking Member, Senator Jeanne Shaheen, for herself and Chairman Vitter, on April 18, 2016. Other cosponsors include Senators Kelly Ayotte and Ed Markey.

The “SBIR/STTR Reauthorization Act of 2016” amends the Small Business Act to make permanent the SBIR and STTR programs. It makes changes to the programs in order to increase commercialization, expand the participation of small businesses in more regions of the country, increase the participation of small businesses owned by women and minorities, reduce administrative and reporting burdens on small businesses and agencies, accelerate application reviews and disbursements of awards, and strengthen oversight and compliance.

During the markup of the bill on May 11, 2016, the Committee adopted five amendments, including an amendment by Senator

Peters to increase the participation of women and minorities and an amendment by Senators Coons and Gardner to increase the technical and business assistance to SBIR and STTR firms in order to increase the commercialization of SBIR and STTR projects. The underlying bill included a pilot program by Chairman Vitter designed to increase the participation of small businesses from states that are underrepresented in these important federal innovation programs by allowing states in a region to collaborate on outreach, as well as provide technical and business assistance. Specifically, Chairman Vitter's pilot would establish a 4-year program in which the SBA provides grants to regional, multi-state collaboratives in order to address the needs of states in the bottom 50% of the SBIR program, and make several changes to the 3% SBIR Administrative Funds Pilot Program. It was originally introduced as S. 2136 on October 6, 2015 and reported out of the Committee favorably on December 3, 2015.

The Shaheen-Vitter substitute amendment made technical changes to the allocation section to clarify that funding for the SBIR and STTR programs comes from the research, development, test, and evaluation of the Department of Defense's budget, added STTR where accidentally omitted, added a cross-agency Phase II sequential clarification, and expanded the Government Accountability Office (GAO) tracking of violations against SBIR/STTR firms by an agency or prime contractor.

The bill, as amended, was approved by roll call vote of 18–1, as part of a manager's package that included five bills: S. 2812, S. 2831, S. 2838, S. 2846 and S. 2850. Senators Vitter, Risch, Rubio, Scott, Fischer, Gardner, Ernst, Ayotte, Enzi, Shaheen, Cantwell, Cardin, Heitkamp, Markey, Booker, Coons, Hirono and Peters voted for the manager's package. Senator Paul voted against the manager's package.

## II. PURPOSE & NEED FOR LEGISLATION

The purpose of the "SBIR/STTR Reauthorization Act of 2016" is to permanently reauthorize, make current and improve the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs.

The SBIR and STTR programs need to be reauthorized because they are set to sunset on September 30, 2017. The Committee agreed it was important to act early, rather than waiting till the next Congress, in order to provide certainty and stability for the small businesses and government agencies that rely on these public-private partnerships. The small business community made clear to Congress that they did not want to repeat the damage caused during the last reauthorization, when the programs expired and limped along for three years, through a series of 14 temporary authorizations.

Despite representing only a sliver of the federal R&D budget (roughly \$2 billion of \$140 billion annually), the programs have been a huge success. The Information Technology & Innovation Foundation has said that the prominence of SBIR firms on the annual list of top 100 innovations is "a powerful indication that the SBIR program has become a key force in the innovation economy of the United States." The SBIR and STTR programs have played a role in the growth of firms that now employ thousands of Ameri-

cans across the country. In addition, the technologies developed through the SBIR and STTR programs have resulted in a good return on investment for taxpayers: Two recent studies found that for every federal dollar awarded to SBIR firms through the Air Force and Navy, \$12 to \$19 was returned to the economy.

The Committee believes that these programs need to be fully reauthorized in order to continue to stimulate America's innovation economy, to remedy the continued underrepresentation of small businesses in federal research and development, and to use small businesses to help government agencies meet national needs.

Government-industry partnerships in innovation and research have become increasingly critical to keeping our nation competitive internationally and to fulfilling the needs of the American people.<sup>1</sup> Together, SBIR and STTR form one of the largest such public-private partnerships in the nation, and they are essential to fulfilling the priority research needs of the country. Furthermore, these programs utilize the innovative capabilities of small businesses to create jobs, to stimulate local economies, and to commercialize ideas originally developed in our federal science agencies and universities. The SBIR and STTR programs also serve to increase the diversity of individuals, geographically and demographically, in federal research and development, thereby increasing competition, diversifying the government's supply base, and reducing costs. For these reasons, the programs need and deserve to be reauthorized, strengthened, and improved.

### III. DESCRIPTION OF BILL

The Shaheen-Vitter SBIR/STTR Reauthorization Act of 2016 permanently reauthorizes and strengthens the important and successful Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs.

SBIR and STTR harness the creativity and ingenuity of America's small businesses to meet the research and development (R&D) missions of our federal agencies, such as addressing threats to public health and our national security. The programs also support the growth of small, high-tech companies that create good jobs in local communities across the country and keep the United States competitive.

Under SBIR and STTR, participating federal agencies foster government-industry partnerships by making competitive awards to small firms with the best scientific proposals in response to public research and development needs. By ensuring that American entrepreneurs can compete for R&D awards, the programs tap into the ingenuity of American small businesses and enhance our ability to move technologies from the lab to the marketplace.

S. 2812 makes these programs permanent while also building in mechanisms for Congressional oversight and making significant improvements by:

- Expanding opportunities for small businesses to commercialize their technologies;

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<sup>1</sup>National Research Council, *SBIR Challenges and Opportunities*, Charles Wessner ed. (National Academies Press, 1999), p. 7.

- Increasing gradually the allocation of SBIR and STTR awards in order to make more awards and explore more innovations;
- Clarifying and increasing assistance to small businesses to protect their intellectual property;
- Strengthening state outreach and technical assistance in order to diversify the geographic distribution of awards around the country as well as increasing the participation of women and minorities;
- Enhancing oversight of the Small Business Administration and the 11 participating SBIR agencies to ensure implementation of outstanding provisions from past SBIR/STTR reauthorization bills; and,
- Implementing initiatives to reduce duplicative reporting for small businesses, speed up the review of applications, and simplify program implementation for agencies.

#### IV. HEARINGS & ROUNDTABLES

On January 28, 2016, the Committee held a hearing entitled, “Reauthorization of the SBIR/STTR Programs—The Importance of Small Business Innovation to National and Economic Security.” The purpose of the hearing was to examine the SBIR and STTR programs and discuss their effectiveness at solving technology problems for our country, especially for national security, as well as their contributions to our general economy with new firms and quality jobs. The witnesses included: Mr. Robert Smith, Director, Department of Navy SBIR/STTR Programs, Office of Naval Research; Mr. John Williams, Director of Innovation and Technology, Office of Investment and Innovation, U.S. Small Business Administration; Mr. Robert Kline-Schoder, Ph.D., President, Creare, Hanover, N.H.; Mr. Jere W. Glover, Executive Director, Small Business Technology Council, Annapolis, MD; and Mr. Roy Keller, Director, LA Technology Transfer Office, LSU Innovation Park, Louisiana Business & Technology Center, Baton Rouge, LA (invited but unable to attend due to weather).

On August 4, 2016, the Committee held a field hearing in Hawaii entitled, “Expanding Hawaii’s STEM Pipeline: Examining Opportunities to Grow Small Businesses, Entrepreneurs, and the STEM Workforce.” Witnesses included: Dr. Walter Jones, Executive Director, Office of Naval Research, Arlington, VA; Dr. Sylvia James, Director, Division of Human Resource Development, Directorate for Education and Human Resources, National Science Foundation, Arlington, VA; Ms. Jane A. Sawyer, Hawaii District Office Director, U.S. Small Business Administration; Dr. Lui Hokoana, Chancellor, Maui College, Kahului, HI; Ms. Sarah A. Jenkins, Student, Duke University, Kaunakakai, HI; Ms. Lily N. Jenkins, Student, Molokai High School, Kaunakakai, HI; Ms. Audrey S.C. Cabrera, P.E., Brown and Caldwell, Wailuku, Maui, HI; Ms. Leslie Wilkins, Vice President, Women in Technology Program Director, Maui Economic Development Board, Inc. Kihei, HI.

#### V. COMMITTEE VOTE

In compliance with rule XXVI(7)(b) of the Standing Rules of the Senate, the following vote was recorded on May 11, 2016.

A motion by the Chair to adopt the “SBIR/STTR Reauthorization Act of 2016,” as amended, as part of a manager’s package, was reported favorably with a record vote of 18–1. The following Senators voted in the affirmative: Senators Vitter, Risch, Rubio, Scott, Fischer, Gardner, Ernst, Ayotte, Enzi, Shaheen, Cantwell, Cardin, Heitkamp, Markey, Booker, Coons, Hirono and Peters voted for the manager’s package. Senator Paul voted against the manager’s package. The manager’s package included five bills: S. 2812, S. 2831, S. 2838, S. 2846 and S. 2850.

The amendments to S. 2812 that were included in the manager’s package as reported favorably include: five amendments by Senator Peters to increase the participation of women and minorities, and an amendment by Senators Coons and Gardner to increase the technical and business assistance to SBIR and STTR firms in order to increase the commercialization of SBIR and STTR projects.

#### VI. COST ESTIMATE

In compliance with rule XXVI(11)(a)(1) of the Standing Rules of the Senate, the Committee estimates the cost of the legislation will be equal to the amounts discussed in the following letter from the Congressional Budget Office.

SEPTEMBER 9, 2016.

Hon. DAVID VITTER,  
*Chairman, Committee on Small Business and Entrepreneurship,*  
*U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 2812, the SBIR and STTR Reauthorization and Improvement Act of 2016.

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

Sincerely,

KEITH HALL.

Enclosure.

S. 2812 would permanently authorize and expand the Small Business Innovation Research (SBIR) and the Small Business Technology Transfer (STTR) programs. Those programs help small businesses compete for research and development contracts. The bill also would authorize federal agencies to use a portion of their funding for research and development to cover administrative costs of the SBIR and STTR programs. S. 2812 also would direct the Small Business Association (SBA) to develop a pilot program to provide grants to establish regional collaboratives to help small businesses increase their competitiveness for awards from these programs and would authorize a variety of other activities.

Based on information from the SBA and other affected agencies, CBO estimates that implementing S. 2812 would cost \$166 million over the 2017–2021 period; such spending would be subject to appropriation. Pay-as-you-go procedures do not apply to this legislation because it would not affect direct spending or revenues.

CBO estimates that enacting S. 2812 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2027.

S. 2812 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA).

Estimated cost to the Federal Government: The estimated budgetary effect of S. 2812 is shown in the following table. The costs of this legislation fall primarily within budget functions 370 (commerce), 050 (national defense), 250 (general science, space, and technology), and 550 (health).

	By fiscal year, in millions of dollars—					
	2017	2018	2019	2020	2021	2017– 2021
INCREASES IN SPENDING SUBJECT TO APPROPRIATION						
Permanent Authorization and Expansion of the SBIR and STTR Programs:						
Estimated Authorization Level .....	0	10	10	10	10	40
Estimated Outlays .....	0	8	9	10	10	37
Regional SBIR and STTR State Collaborative Initiative Pilot Program:						
Estimated Authorization Level .....	13	16	17	20	21	87
Estimated Outlays .....	10	15	16	19	20	80
Federal and State Technology Partnership Program:						
Authorization Level .....	10	10	10	10	10	50
Estimated Outlays .....	8	9	10	10	10	47
Additional Agency Activities:						
Estimated Authorization Level .....	1	1	*	*	*	2
Estimated Outlays .....	1	1	*	*	*	2
Total Changes:						
Estimated Authorization Level .....	24	37	37	40	41	179
Estimated Outlays .....	19	33	35	39	40	166

Notes: SBIR = Small Business Innovation Research; STTR = Small Business Technology Transfer; FAST = Federal and State Technology Partnership; \* = between zero and less than \$500,000.

Basis of estimate: For this estimate, CBO assumes that the bill will be enacted near the end of fiscal year 2016, that the necessary amounts will be appropriated, and that spending will follow historical patterns.

Under current law, the SBIR program requires federal agencies with extramural budgets for research and development (R&D) that exceed \$100 million per year to set aside 3 percent of that budget for contracts with small businesses. (Extramural budgets consist of expenditures for activities not performed by agency employees.) Likewise, the STTR program requires federal agencies with extramural budgets for R&D that exceed \$1 billion per year to set aside 0.45 percent of that budget for cooperative research between small businesses and a federal laboratory or nonprofit research institution. Eleven agencies currently participate in one or both programs, including the Departments of Defense, Health and Human Services, Energy, Agriculture, and Homeland Security, as well as the National Aeronautics and Space Administration, the National Science Foundation, and the Environmental Protection Agency.

For participating agencies, the cost of those programs consists primarily of personnel and associated overhead expenses to solicit applications, prepare reports, and track outcomes. The organizational structure of the program offices varies. Some agencies have full-time staff members devoted to the SBIR and STTR programs, with other staff assisting as part of their duties; other agencies, however, have employees working part-time on the program.

*Permanent authorization and expansion of the SBIR and STTR programs*

S. 2812 would permanently authorize the SBIR and STTR programs. Under current law, both programs are scheduled to terminate at the end of fiscal year 2017. The bill would increase the amount of extramural R&D funding that each participating agency sets aside for each program, starting in fiscal year 2018. The SBA spent approximately \$10 million in 2015 to administer the two programs. On that basis, CBO estimates that it would cost the SBA \$37 million over the 2018–2021 period to coordinate with participating agencies and administer those programs.

S. 2812 also would extend, through fiscal year 2021, a pilot program that authorizes participating agencies to use up to 3 percent of the R&D amounts set aside for the SBIR program for administrative costs, rather than paying those costs from general operating funds. Under current law, the authority for that pilot program is scheduled to expire at the end of fiscal year 2017. Because the pilot program would not affect the underlying costs of administering the SBIR program, CBO estimates that extending the pilot program would have no budgetary effect.

*Regional SBIR and STTR State Collaborative Initiative Pilot program*

S. 2812 would direct the SBA to establish and operate, through fiscal year 2021, a pilot program to provide grants to research institutions and small business that collaborate to improve small businesses' chances of successfully competing for awards under the SBIR and STTR programs. The bill would authorize the SBA to use a portion of funds dedicated to those programs by each participating agency to cover its costs to administer the proposed pilot program.

Based on information from the SBA and several participating agencies about the size of their extramural R&D budgets and their respective administrative costs, CBO estimates that implementing the pilot program would cost \$80 million over the 2017–2021 period, assuming appropriation of the necessary amounts.

*Federal and State Technology Partnership Program*

S. 2812 would authorize the appropriation of \$10 million for each of fiscal years 2017 through 2021 to fund the Federal and State Technology (FAST) Partnership Program. Through that program, the SBA awards grants to support efforts by colleges and universities as well as business development centers to provide technical assistance and other support to small businesses competing for awards under the SBIR and STTR programs. Based on information from the SBA and historical trends for spending related to the FAST program, CBO estimates that implementing this provision would cost \$47 million over the 2017–2021 period, assuming appropriation of the authorized amounts.

*Other provisions*

CBO estimates that implementing a variety of other provisions of S. 2812 would involve modest costs. Those provisions would:

- Authorize grants to small businesses to support internships for recent graduates from the fields of science, tech-

nology, engineering, or math who belong to underrepresented populations;

- Require the SBA to form an interagency committee to recommend ways to improve data collection across federal agencies participating in the SBIR and STTR programs;
- Direct the SBA to make numerous changes to its policy directives for the SBIR and STTR programs; and
- Require the Government Accountability Office to complete certain reports related to the SBIR and STTR programs and federal agencies' compliance with goals for awarding contracts to small businesses.

Based on information from the SBA and other affected agencies, CBO estimates that implementing those provisions would cost a total of \$2 million over the 2017–2021 period, assuming the availability for appropriated funds.

Pay-as-you-go considerations: None.

Increase in long term direct spending and deficits: CBO estimates that enacting S. 2812 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2027.

Intergovernmental and private-sector impact: S. 2812 contains no intergovernmental or private-sector mandates as defined in UMRA. Reauthorizing the FAST program would benefit states that help develop small businesses focused on technology. States also would benefit from a pilot program established in the bill that would provide grants to multi-state collaboratives that address the needs of small businesses. Any costs to state governments, including matching contributions, would result from complying with conditions of assistance.

Previous CBO estimate: CBO has transmitted estimates for two other bills with provisions that are similar to provisions of S. 2812.

On July 15, 2016, CBO transmitted a cost estimate for S. 2136, the Improving Small Business Innovative Research and Technologies Act of 2015, as reported by the Senate Committee on Small Business and Entrepreneurship on December 3, 2015. S. 2812 would reauthorize the FAST program through 2017 and establish a one-year Regional SBIR and STTR State Collaborative Initiative Pilot Program. Our estimate of spending for those programs under S. 2812 is larger because S. 2812 would authorize them for a longer period of time.

On August 31, 2016, CBO transmitted a cost estimate for H.R. 4783, the Commercializing on Small Business Innovation Act of 2016, as reported by the House Committee on Small Business on July 25, 2016. H.R. 4783 would reauthorize the SBIR and STTR programs through fiscal year 2022, and our estimates of spending for those activities over the 2017–2021 period is the same as under S. 2812.

Estimate prepared by: Federal Costs: Stephen Rabent; Impact on State, Local, and Tribal Governments: Rachel Austin; Impact on the Private Sector: Logan Smith.

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



## VII. EVALUATION OF REGULATORY IMPACT

In compliance with rule XXVI(11)(b) of the Standing Rules of the Senate, it is the opinion of the Committee that no significant additional regulatory impact will be incurred in carrying out the provisions of this legislation. There will be no additional impact on the personal privacy of companies or individuals who utilize the services provided.

## VIII. SECTION-BY-SECTION ANALYSIS

### *Sec. 1. Short title*

Specifies the short title of the legislation as the “SBIR/STTR Reauthorization Act of 2016.”

### *Sec. 2. Table of contents*

Breaks out the six titles of the bill.

## TITLE I—REAUTHORIZATION OF PROGRAMS

### *Sec. 101. Permanency of SBIR and STTR programs*

Makes the SBIR and STTR programs permanent.

## TITLE II—ENHANCED SMALL BUSINESS ACCESS TO FEDERAL INNOVATION INVESTMENTS

### *Sec. 201. Allocation increases and transparency in base calculation*

Makes several changes to the required expenditure amounts for the SBIR and STTR programs to clarify the law, increase the percentages, and provide simplification and transparency for the base funding calculation at the Department of Defense (DoD).

Revises the law to require agencies to *obligate for expenditure* a minimum percentage each year instead of to *expend* each year. The Government Accountability Office (GAO) recommended this change in order to make clearer Congressional intent and expectations for the spending requirement, which impacts agencies like DoD that use the money over a two-year period and have a hard time demonstrating that they are complying with the allocation requirement as interpreted by the GAO.

Increases the amounts that agencies are required to allocate to the SBIR and STTR programs, in order to stimulate America’s innovation economy and to remedy the continued underrepresentation of small businesses in federal research and development.

- For the SBIR program at all non-Department of Defense agencies, the allocation increases incrementally over ten years (2018–2028) from 3.2 percent to 6 percent. The funding is based on and taken out of each agency’s extramural research and development budget.

- For the SBIR program at DoD, the allocation increases incrementally over the same period of ten years, but the funding source has been modified in order to reduce the administrative burden on the DoD, improve transparency of how DoD calculates the allocation and to increase the Department’s compliance with the allocation requirement. The baseline percentage has been adjusted accordingly. Specifically, the DoD’s allocation increases from 2.5 percent to 5 percent. The funding is based on and taken out of DoD’s

entire research and development budget, not just the extramural portion. DoD staff requested and GAO recommended changing the funding source in order to streamline the calculation process. Under current practice, DoD wastes significant staff time recalculating the extramural budget of DoD throughout the year as expenditures change. The Committee emphasizes that the new percentage does not reduce the dollars to SBIR and STTR firms; it increases them.

- For the STTR program at all agencies (non-DoD and DoD), the allocation increases incrementally over six years (2018–2024 from .45 percent to 1 percent. Similar to the SBIR program change, at DoD the funding source for the STTR program has been changed and comes out of the entire research and development budget, not just the extramural portion, in order to reduce the administrative burden on the DoD, improve transparency of how DoD calculates the allocation and to increase the Department’s compliance with the allocation requirement. Unlike the SBIR program changes, the bill does not adjust the percentages because the amounts are so small.

#### *Sec. 202. Regular oversight of award amounts*

Builds in regular Congressional review of the dollar amount of award levels. The purpose is to ensure that the dollar amounts allowed for the various phases are sufficient for the expected research and development while maintaining a balance between the size of award and the number of awards. The guidelines for size of awards reside in the SBIR and STTR policy directives, not in the *Small Business Act*.

Accordingly, this section directs the Small Business Administration (SBA) to modify the policy directives in two ways: (1) eliminate the Administration’s authority to automatically increase the award levels each year for inflation, and (2) clarify that Congress intends to review the dollar value of awards every three years.

Includes a Sense of Congress that every three years the Congress should evaluate whether to adjust the dollar amount of the award levels.

Clarifies that a sequential Phase II award is subject to the same requirements for regular Phase I and Phase II awards, which safeguard against awards that significantly exceed the guidelines. Specifically, size of awards cannot be increased by more than 50 percent of the award size guidelines. It is important to note that returning the award adjustment authority to Congress has the added value of building in regular oversight of the SBIR and STTR programs in general.

### TITLE III—COMMERCIALIZATION IMPROVEMENTS

#### *Sec. 301. Permanency of the Commercialization Pilot program for civilian agencies*

Makes the voluntary Commercialization Pilot program permanent. It also makes it faster and easier for more agencies to implement the program and therefore available to more small businesses. To make the program easier to use, this section eliminates a part of the pilot program that required agencies that wanted to opt into the program to go through an application process. Inter-

ested agencies were required to submit an application to SBA justifying the use of 10 percent of SBIR funds for maturation instead of for Phase I and Phase II projects.

The Commercialization Readiness Pilot Program for civilian agencies was established in 2011 in order to address ongoing concerns about the valley of death, which is the time between the end of a Phase II award and commercialization. Some small businesses with promising SBIR and STTR technologies needed more support to advance their development, especially in those fields with high manufacturing or regulatory costs. The program allows all non-DoD agencies to use up to 10 percent of their SBIR funding to make post Phase II awards of up to three times the regular size (up to \$3 million).

At the time Congress was contemplating creation of the program, there was concern that these very large awards would use already scarce funding for Phase I and Phase II awards, which would disproportionately adversely impact small businesses in low-participation states. To provide some safe guards, the program was structured so that agencies would need to proactively opt in through an application process. SBA could only approve an agency's application if the agency had a compelling reason to make the additional investments, thereby shifting money from earlier stage research and development in Phases I and II. Small businesses and small-business advocates have urged Congress during this reauthorization to find more ways to increase commercialization of SBIR and STTR technologies. Making the program permanent will help increase commercialization because it allows for an award after Phase II of up to \$3 million.

*Sec. 302. Enforcement of national small business goal for Federal research and development*

Modifies a provision enacted 34 years ago that requires federal agencies with research and research and development budgets of more than \$20 million to establish a goal for federal research and research and development with small businesses, not lower than what they currently do. The agencies have never established the goal and this provision enforces the statute by requiring the agencies to put in place a goal of not less than 10 percent by fiscal year 2018.

*Sec. 303. Tracking Rapid Innovation Fund awards in annual congressional report*

Modifies the requirements of the annual SBIR/STTR report from SBA to Congress to include data on commercialization through DoD's Rapid Innovation Fund (RIF) program. The information will help track the number and dollar of Rapid Innovation Fund awards that go to SBIR and STTR firms each year, as well as small businesses in general. It will also include a projection of awards that could be made if Congress were to provide a more stable funding source for the RIF program and thereby increase the commercialization of such technologies. The RIF program is set to expire in 2023. The SBIR/STTR Reauthorization Act of 2016 anticipates passage of a separate, complementary bill that would make the RIF program permanent and create a steady and larger funding stream

to further develop SBIR and STTR technologies and technologies of non-traditional contractors.

*Sec. 304. Intellectual property protection for technology development*

Clarifies, at the urging of SBIR/STTR firms, that costs for seeking intellectual property protections for SBIR/STTR technologies are allowable as indirect cost expenses. This provision is in order to address concerns that contracting and auditing agents across the agencies had been inconsistently allowing or denying cost coverage, creating severe administrative burdens for SBIR and STTR firms undergoing routine audits from the government.

Specific patent costs that may be expensed as indirect costs include, but are not limited to:

- Costs of preparing invention disclosures, reports and related documents
- Costs for searching current patents to determine potentially conflicting rights
- U.S. Patent and Trademark Office fees
- Advising on patent laws, regulations, clauses and employee agreements

Limits patent cost coverage to technologies specifically developed through SBIR and STTR program phases. Phase I is limited to an amount of not more than \$5,000. Phase II is limited to not more than \$15,000. Phase III, which does not use SBIR or STTR dollars, has no limitations.

*Sec. 305. Annual GAO audit of compliance with commercialization goals*

Replaces annual self-reporting from the agencies to Congress with an annual audit of the agencies by GAO. GAO will track implementation of outstanding key commercialization goals, such as:

- National Small Business Goal enacted in 1982—Agency by agency goal for research and development projects with small businesses
- Phase III Insertion Goals for Subcontracting enacted in 2011—Authorized the DoD to create incentives for contracting officers to transition small business technologies for contracts of \$100 million or more by:
  - Establishing goals for the transition of Phase III technologies in subcontracting plans
  - Requiring a prime contractor on such contracts to report the number and dollar contracts with small businesses for their Phase III SBIR or STTR projects
- Phase II Insertion Goals and Incentives enacted in 2011—Required the DoD to set a goal to increase the number of Phase II SBIR and STTR contracts that transition into programs of record or fielded systems.

Requires GAO to document how the agencies have complied with each of those requirements when they are implemented. Finally, as part of the report, GAO must provide a list, by agency, of small businesses that believe their technology was stolen by the government or a prime contractor, or that the Phase III preference was not exercised even though the contract was for work that derived from, extended, or completed efforts made under prior SBIR or STTR projects.

*Sec. 306. Clarifying Phase III preferences*

Clarifies that the Phase III preference for SBIR and STTR technologies includes awards through the Rapid Innovation Fund program. The Phase III preference says that agencies shall, to the greatest extent practicable, issue Phase III awards to technology related to technology, including sole source awards, to the SBIR or STTR recipients that developed the technology.

*Sec. 307. Improvements to technical and business assistance*

Modernizes the dollar amounts allowed for providing technical and business assistance to SBIR and STTR firms in order to help them succeed in commercializing their technologies. The amounts are increased from \$5,000 to \$6,500 per Phase I award and \$10,000 to \$15,000 per Phase II award.

Reduces administrative burdens on the agencies that offer business and technical assistance by eliminating the current requirement that micro-manages the disbursement of funds by year instead of by award.

Clarifies that the assistance is for not only technical assistance but also for business assistance and expands the examples of uses of the types of assistance to firms. Additional business assistance examples include assistance for selling their products, market research and intellectual property protections.

Includes an amendment from Senators Coons and Gardner that builds on the bill's business and commercialization assistance. It increases from \$15,000 to \$35,000 the maximum amount of business assistance funds for SBIR/STTR Phase II awardees, expands the list of allowable expenses to include market research and development of regulatory and manufacturing plans, clarifies and enhances language allowing awardees the ability to select local vendor or vendors of their choice to provide technical and business-related assistance services, and authorizes a change within existing program resources so there will be no additional cost to government.

TITLE IV—PROGRAM DIVERSIFICATION INITIATIVES

*Sec. 401. Regional SBIR State Collaborative Initiative Pilot program*

Establishes a pilot program in which the SBA provides grants to regional, multi-state collaboratives in order to address the needs of small business concerns in the bottom 50% of the SBIR program. Grants to each state would be up to \$300,000 for one year, and may be renewed for one extra year. The goal is to help small businesses in these states become more competitive in the proposal and selection process for awards under the SBIR and STTR program.

- This section also extends the 3% SBIR Administration Funds Pilot program from September 30, 2017, to September 30, 2021. It requires SBIR agencies that opt into the 3% Pilot to transfer 15% of that funding to the SBA for three purposes (about \$8.8 million):
  - To implement the Regional State Collaborative Initiative Pilot Program
  - To carry out the SBIR Federal and State Technology Partnership Program (FAST)

- To support the SBA's office that adds the SBIR program and the STTR program in order to deploy outreach initiatives in a coordinated and streamlined way.

Extends the authorization of the FAST program for four years, through September 30, 2021, to make it uniform with the authorizations of the related programs—the 3% Administrative Funds Pilot and the new Collaborative Pilot.

*Sec. 402. Federal and State Technology Partnership program*

Brings the Federal and State Technology Partnership (FAST) program into sync with the Regional SBIR State Collaborative Initiative Pilot Program by reauthorizing the FAST program through September 30, 2021. Updating the sunset not only puts the FAST program on the same schedule as the Regional SBIR State Collaborative Pilot, but it also adds another provision in law that requires Congress to regularly review the SBIR and STTR programs. The FAST program was created in 2000 to strengthen the technological competitiveness of small businesses in all 50 states by providing competitive matching grants to states to help them support the SBIR and STTR programs. The goal was to address concerns that awards were concentrated in only a few states, and the Committee was looking for a way to increase participation without imposing quotas, which would have undermined making awards based on the merits of the proposals. The program is mostly used by the state technology transfer directors, with the strongest interest from rural states which have traditionally been in the lower tier of states in terms of SBIR/STTR awards and total dollars.

TITLE V—OVERSIGHT AND SIMPLIFICATION

*Sec. 501. Data modernization summit*

Uses the Interagency Policy Committee, made up of the SBA, the SBIR/STTR program managers and agency IT experts, to resolve within one year a way to reduce and make more uniform the paperwork and data collection from SBIR and STTR firms. This responds to concerns heard by the Committee that small businesses face unnecessary burdens when providing agencies and the SBA with information, especially for the commercialization index.

*Sec. 502. Implementation of outstanding reauthorization provisions*

Addresses concerns that agencies have not implemented key outstanding provisions of the 2011 Reauthorization Act, and that SBA has a backlog of annual reports to Congress. If the agencies and SBA do not implement those provisions or clear out the report backlog, they will not be able to use their 3% administration dollars. This holds harmless the portion of the 3% administrative funds that go to the SBA to run the Regional SBIR State Collaborative Initiative Pilot Program and the FAST program.

*Sec. 503. Strengthening of the requirement to shorten the application review and decision time*

Clarifies a requirement from the 2011 reauthorization act that required most agencies to reduce their application review and decision time to 90 days. There was an exemption for the HHS and NSF that allowed them up to one year for a decision. USDA has

requested the same exemption. This section instead gives USDA more time but not one year. Going forward, the goal would be for USDA and NSF to get their review time to six months, and the HHS to ten months from one year.

*Sec. 504. Continued GAO oversight of allocation compliance and accuracy in funding base calculations*

Directs GAO, through fiscal year 2019, to continue its annual audit of the agencies' compliance with the allocation amounts. Adds a date to determine whether the change in the base funding for the Department of Defense improves transparency for figuring out if the agency is complying with the allocation requirements, reduces the burden of calculating the allocations, and whether the change improves DoD's compliance with the allocation requirements.

TITLE VI—PARTICIPATION BY WOMEN AND MINORITIES

*Sec. 601. SBA coordination on increasing outreach for women and minority-owned businesses*

Amendment by Senator Peters that makes it an explicit duty for SBA to increase outreach and awards to women and minority-owned businesses, in coordination with agencies.

*Sec. 602. Federal agency outreach requirements for women and minority-owned businesses*

Amendment by Senator Peters that makes SBIR outreach requirements consistent with STTR outreach requirements by including women and minority-owned businesses.

*Sec. 603. STTR policy directive modification*

Amendment by Senator Peters that makes the STTR policy directives consistent with the SBIR policy directives regarding outreach to women and minorities.

*Sec. 604. Interagency SBIR/STTR policy committee*

Amendment by Senator Peters that builds on the SBIR/STTR Interagency Policy Committee's requirements to review outreach efforts to women and minorities with a requirement to meet at least twice a year.

*Sec. 605. Diversity and STEM workforce development pilot program*

Amendment by Senator Peters that establishes a STEM Workforce Development Pilot Program for women and minorities to intern at SBIR and STTR firms.

TITLE VII—TECHNICAL CHANGES

*Sec. 701. Uniform reference to the Department of Health and Human Service*

Makes universal the reference to NIH as HHS.

*Sec. 702. Flexibility for Phase II award*

Clarifies a provision from the 2011 reauthorization that eliminated all invitations to Phase II awards. This now provides flexi-

bility so that agencies can invite firms to Phase II but cannot exclude firms from competing.

