

SMALL BUSINESS TECHNOLOGY TRANSFER PROGRAM  
REAUTHORIZATION ACT OF 2001

---

SEPTEMBER 21, 2001.—Ordered to be printed

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Mr. MANZULLO, from the Committee on Small Business,  
submitted the following

REPORT

together with

ADDITIONAL VIEWS

[To accompany H.R. 1860]

[Including cost estimate of the Congressional Budget Office]

The Committee on Small Business, to whom was referred the bill (H.R. 1860) to reauthorize 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.

The amendment is as follows:

Strike all after the enacting clause and insert the following:

**SECTION 1. SHORT TITLE.**

This Act may be cited as the “Small Business Technology Transfer Program Reauthorization Act of 2001”.

**SEC. 2. EXTENSION OF PROGRAM AND EXPENDITURE AMOUNTS.**

(a) IN GENERAL.—Section 9(n)(1) of the Small Business Act (15 U.S.C. 638(n)(1)) is amended to read as follows:

“(1) REQUIRED EXPENDITURE AMOUNTS.—

“(A) IN GENERAL.—With respect to each fiscal year through fiscal year 2009, each Federal agency that has an extramural budget for research, or research and development, in excess of \$1,000,000,000 for that fiscal year, shall expend with small business concerns not less than the percentage of that extramural budget specified in subparagraph (B), specifically in connection with STTR programs that meet the requirements of this section and any policy directives and regulations issued under this section.

“(B) EXPENDITURE AMOUNTS.—The percentage of the extramural budget required to be expended by an agency in accordance with subparagraph (A) shall be—

“(i) 0.15 percent for each fiscal year through fiscal year 2003; and

“(ii) 0.3 percent for fiscal year 2004 and each fiscal year thereafter.”.

(b) CONFORMING AMENDMENT.—Section 9 of the Small Business Act (15 U.S.C. 638) is amended in subsections (b)(4) and (e)(6), by striking “pilot” each place it appears.

**SEC. 3. INCREASE IN AUTHORIZED PHASE II AWARDS.**

(a) IN GENERAL.—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 “\$500,000” and inserting “\$750,000”; and

(2) by inserting before the semicolon at the end the following: “, and shorter or longer periods of time to be approved at the discretion of the awarding agency where appropriate for a particular project”.

(b) EFFECTIVE DATE.—The amendments made by subsection (a) shall be effective beginning in fiscal year 2004.

**SEC. 4. AGENCY OUTREACH.**

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

(1) in paragraph (12), by striking “and” at the end;

(2) in paragraph (13), by striking the period at the end and inserting a semicolon; and

(3) by adding at the end the following:

“(14) implement an outreach program to research institutions and small business concerns for the purpose of enhancing its STTR program, in conjunction with any such outreach done for purposes of the SBIR program; and”.

**SEC. 5. POLICY DIRECTIVE MODIFICATIONS.**

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

“(3) MODIFICATIONS.—Not later than 120 days after the date of enactment of this paragraph, the Administrator shall modify the policy directive issued pursuant to this subsection to clarify that the rights provided for under paragraph (2)(B)(v) apply to all Federal funding awards under this section, including the first phase (as described in subsection (e)(6)(A)), the second phase (as described in subsection (e)(6)(B)), and the third phase (as described in subsection (e)(6)(C)).”.

**SEC. 6. STTR PROGRAM DATA COLLECTION.**

(a) IN GENERAL.—Section 9(o) of the Small Business Act (15 U.S.C. 638(o)), as amended by section 4 of this Act, is amended by adding at the end the following:

“(15) collect, and maintain in a common format, in accordance with subsection (v), such information from awardees as is necessary to assess the STTR program, including information necessary to maintain the database described in subsection (k).”.

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

(1) in paragraph (1)—

(A) by inserting “or STTR” after “SBIR” each place it appears;

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

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

(D) by adding at the end the following:

“(E) with respect to assistance under the STTR program only—

“(i) whether the small business concern or the research institution initiated their collaboration on each assisted STTR project;

“(ii) whether the small business concern or the research institution originated any technology relating to the assisted STTR project;

“(iii) the length of time it took to negotiate any licensing agreement between the small business concern and the research institution under each assisted STTR project; and

“(iv) how the proceeds from the commercialization, marketing, or sale of technology resulting from each assisted STTR project were allocated (by percentage) between the small business concern and the research institution.”; and

(2) in paragraph (2)—

(A) by inserting “or an STTR program pursuant to subsection (n)(1)” after “(f)(1)”;

(B) by inserting “and STTR” after “solely for SBIR”;

(C) in subparagraph (A)(iii), by inserting “and STTR” after “SBIR”; and

(D) in subparagraph (D), by inserting “or STTR” after “SBIR”.

(c) SIMPLIFIED REPORTING REQUIREMENTS.—Section 9(v) of the Small Business Act (15 U.S.C. 638(v)) is amended by inserting “or STTR” after “SBIR” each place it appears.

(d) REPORTS TO CONGRESS.—Section 9(b)(7) of the Small Business Act (15 U.S.C. 638(b)(7)) is amended by striking “and (o)(9),” and inserting “, (o)(9), and (o)(15), the number of proposals received from, and the number and total amount of awards to, HUBZone small business concerns under each of the SBIR and STTR programs,”.

**SEC. 7. STTR PROGRAM-WIDE MODEL AGREEMENT FOR INTELLECTUAL PROPERTY RIGHTS.**

(a) DEVELOPMENT OF MODEL AGREEMENT.—Section 9 of the Small Business Act (15 U.S.C. 638) is amended by adding at the end the following new subsection:

“(w) STTR MODEL AGREEMENT FOR INTELLECTUAL PROPERTY RIGHTS.—

“(1) IN GENERAL.—The Administrator shall promulgate regulations establishing a single model agreement for use in the STTR program that allocates between small business concerns and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization.

“(2) OPPORTUNITY FOR COMMENT.—In promulgating regulations under paragraph (1), the Administrator shall provide affected agencies, small business concerns, research institutions, and other interested parties the opportunity to submit written comments.”.

(b) ADOPTION OF MODEL AGREEMENT BY FEDERAL AGENCIES.—Section 9(o)(11) of the Small Business Act (15 U.S.C. 638(o)(11)) is amended by striking “develop a model agreement not later than July 31, 1993, to be approved by the Administration,” and inserting “adopt the agreement developed by the Administrator under subsection (w) as the agency’s model agreement”.

**SEC. 8. FAST PROGRAM ASSISTANCE TO LOW-INCOME AREAS.**

(a) SELECTION CONSIDERATION.—Section 34(c)(2)(B) of the Small Business Act (15 U.S.C. 657d(c)(2)(B)) is amended—

- (1) in clause (iv) by striking “and” at the end;
- (2) in clause (v) by striking the period and inserting “; and”; and
- (3) by adding at the end the following new clause:

“(vi) whether the proposal addresses the needs of small business concerns located in 1 or more qualified census tracts, as that term is defined in section 42(d)(5)(C)(ii) of the Internal Revenue Code of 1986.”.

(b) REGULATIONS.—Section 34(c)(4) of the Small Business Act (15 U.S.C. 657d(c)(4)) is amended by adding at the end the following: “The Administrator shall promulgate regulations establishing standards for the consideration of proposals under paragraph (2), including standards regarding each of the considerations identified in paragraph (2)(B).”.

## PURPOSE

The purpose of H.R. 1860 is to amend the Small Business Act to extend the Small Business Technology Transfer (STTR) Program through the end of September, 2009. Under present law, the STTR Program will terminate on September 30, 2001. The STTR Program was created by Congress under the Small Business Research and Development Enhancement Act of 1992 and was initially authorized for three years beginning in FY1994. The program was reauthorized for one additional year in 1996 and subsequently extended for an additional four years, through the end of FY2001, by the Small Business Reauthorization Act of 1997. Besides extending the life of the program for eight additional years, H.R. 1860 makes improvements to the program similar to those made previously to the Small Business Innovative Research (SBIR) Program.

Beginning in FY2004 the percentage of the extramural budget required to be expended by agencies participating in the program increases from 0.15 percent to 0.3 percent. The permanent nature of the program is acknowledged by striking the word “pilot” as previously used to describe the program. Again, beginning in FY2004, the amount that a small business can receive for a Phase II award is increased from \$500,000 to \$750,000, in line with Phase II awards made under the SBIR Program.

Participating agencies are directed to implement an outreach program to research institutions and small business concerns for

the purpose of enhancing the STTR Program, in conjunction with any outreach done for purposes of the SBIR Program. The Administrator of the Small Business Administration is directed to modify the STTR Program policy directive to clarify that the rights to data provisions apply to all three phases of the STTR Program. The Administrator is also required to collect and maintain data in a common format necessary to fairly evaluate the successes or shortcomings of the program and to work with the participating agencies to simplify and standardize the reporting requirements for the collection of data from STTR applicants and awardees.

The provisions of the Federal and State Technology Partnership (FAST) Program are amended to require that the Administrator promulgate regulations establishing standards for the consideration of proposals for funding under the FAST Program and adds as one of the evaluation criteria whether the proposal addresses the needs of small business concerns located in one or more qualified census tracts. Reports to Congress regarding awards under the SBIR and STTR Programs are required to include information concerning the number of proposals received from, and the total of awards to, HUBZone small business concerns. The Administrator is directed to promulgate an STTR Program-wide model agreement for intellectual property rights.

#### BACKGROUND

The STTR Program is independent of the SBIR Program with which it is frequently confused. The STTR Program requires a cooperative venture between a for-profit small business and a researcher from a university, federal laboratory, or a non-profit research institution for the purpose of developing commercially viable products from ideas spawned in a laboratory environment. The STTR Program builds on the well established reputation that small businesses have for innovation and job creation to the benefit of the economy, generally, and, specifically, those who participate in the program.

The program also benefits from the vast wealth of scientific knowledge that is available in this Nation's research institutions that employ approximately one-fourth of the scientists and engineers in the United States. Together, small business concerns and the research community have proved a successful vehicle for moving ideas from academic environs to the practical, useful, commercial world to the benefit of the U.S. economy and workers.

For the Federal agency to participate in the program, it must have an extramural budget for research or research and development that exceeds \$1 billion for any fiscal year. Presently, there are five federal agencies that meet the funding requirement. They are: Department of Defense, Department of Energy, Department of Health and Human Services, National Aeronautics and Space Administration, and National Science Foundation.

No new funding is required to reauthorize the program since the program is funded as a percentage of the extramural research and development funds annually appropriated by Congress to those federal agencies meeting the funding threshold. The percentage has increased from the initial amount of no less than 0.05 percent for FY1994 to the present level of no less than 0.15 percent.

To be eligible for an STTR award a small business must have no more than 500 employees, and be independently owned and operated with its principal place of business in the United States. In addition, the small business may not be the dominant entity in the field in which the project is contained and must be primarily owned by U.S. citizens. To be eligible to participate in the program, a research entity must be a non-profit institution as defined by the Stevenson-Wyler Act of 1980 or a federally funded research and development center as determined by the National Science Foundation under the provisions of section 35(c)(1) of the Office of Federal Procurement Policy Act.

The program requires that the project be research and development conducted jointly by a small business and a research institution in which not less than 40 percent of the work is performed by the small business and that not less than 30 percent of the work is performed by the research institution. Though the venture is cooperative in nature, the small business is responsible for the overall management and control of each project.

The statute mandates that each award go through three phases. Phase I is the start-up part of a particular project and entails, as may be possible, a determination of the scientific, technical, and commercial merit of the concepts underlying a particular award. Phase II provides an opportunity to further develop the concepts to meet the objectives of the particular award. Only projects that successfully complete Phase I can be considered for funding under Phase II. Phase III is the point at which the project moves from the laboratory to commercial application or further cooperative research and development. No STTR funds may be used to pay for Phase III. The funding must come from the private sector or non-STTR federal funding.

The five federal agencies presently participating in the STTR Program determine the projects to be funded through the program. In choosing those areas to be included, the participating agencies are required to give special consideration to research topics and critical technologies identified by the National Critical Technologies Panel and the Secretary of Defense. Each participating agency selects the awardees to be funded based on proposals solicited, normally on an annual basis, by the agency.

The Small Business Act requires each participating agency to develop a model agreement, to be approved by the Administrator, for allocating between small business concerns and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development or commercialization. The five agencies in the program issued two model agreements that were approved by the Administrator, one was promulgated by the Departments of Energy and Health and Human Services and the other by the Department of Defense, the National Science Foundation, and the National Aeronautics and Space Administration. Use of the model agreements is not mandatory. Small businesses, research institutions, and the agencies may negotiate their own agreements which has led to a lack of uniformity in the protection of rights of the parties involved from agency-to-agency and from agreement-to-agreement.

To protect a small business from losing the benefit of technical data generated in the course of a project, current law provides that

the rights in data generated by a small business in the course of a STTR project shall be retained by the small businesses for a period of not less than four years. This provision authorizes a participating agency to protect technical data generated by a small business while performing under a STTR project agreement and to refrain from disclosing such data to competitors of the small business. Some doubt had been raised whether the four-year period applied to all three phases of an STTR project. The provisions of H.R. 1860 make it clear that the four-year period applies to all three phases.

The U.S. General Accounting Office recently completed a report on the STTR Program dated June 4, 2001, based on 102 projects that had received Phase II awards in fiscal years 1995 through 1997, the first three years the awards were made. Among the findings, the report states:

For the 102 partnerships that we reviewed, the companies reported that both the companies and the research institutions contributed significantly to the R&D. For example, the companies believed that both parties contributed significantly to the knowledge and/or expertise essential to the project. Furthermore, they generally believed that both parties contributed significantly in constructing or testing prototypes and in providing special equipment or facilities. However, the companies reported that, in aggregate, the companies played a substantially greater role in originating the key ideas for the R&D: in their view, they originated or were primarily responsible for originating the key ideas in 72 percent of the projects.

The companies reported a variety of results, including sales of a product, process, or service, the receipt of additional developmental funding, patents granted, and discontinuance of projects. As of April 2001, the companies reported about \$132 million in total sales and about \$53 million in additional developmental funding. About two-thirds of the projects with reported sales achieved their first sale in 1999 or 2000 and projected about \$900 million in additional sales by December 31, 2005. The companies also reported receiving 41 patents for the core technologies associated with their projects and the creation of 12 spin-off companies. Twenty-seven projects were discontinued. When asked to identify those factors that had a great role in the decision to discontinue the project, companies most frequently cited insufficient additional funding for further technical development. (U.S. General Accounting Office, Survey of Companies Receiving Small Business Technology Transfer (STTR) Phase II Awards Fiscal Years 1995–1997, Letter to the Honorable Christopher S. Bond and others, dated June 4, 2001, GAO–01–766R Small Business Technology Transfer Program).

#### COMMITTEE ACTION

##### HEARING ON REAUTHORIZATION OF STTR PROGRAM

On Wednesday, June 20, 2001, the Subcommittee on Workforce, Empowerment and Government Programs and the Subcommittee

on Rural Enterprises, Agriculture and Technology of the Committee on Small Business held a joint hearing, commencing at 3:00 p.m., to hear testimony with regard to the reauthorization of the STTR Program. The Subcommittees received the testimony of six witnesses: Mr. Maurice Swinton, Assistant Administrator, Office of Technology, U.S. Small Business Administration; Mr. Timothy Foreman, Director, Office of Small and Disadvantaged Business Utilization, Department of Defense; Dr. Walter M. Polansky, Office of Science, Department of Energy; Ms. Jo Anne Goodnight, SBIR and STTR Program Coordinator, National Institutes of Health, Department of Health and Human Services; Mr. Anthony Camarota, President, Avtec Industries, Inc., Hudson, Massachusetts; and, Mr. Richard W. Carroll, Chief Executive Officer, Digital System Resources, Inc., Fairfax, Virginia.

The hearing stressed the urgency of reauthorizing the STTR Program, the successful use of the program by Federal agencies involved, and the success of the program in bringing new technologies to the marketplace.

#### CONSIDERATION OF H.R. 1860

At 10:05 a.m. on August 1, 2001, the Committee on Small Business met to consider and report four bills, including H.R. 1860. After consideration of H.R. 1860, Chairman Manzullo asked unanimous consent that H.R. 1860 be considered as read and open for amendment at any point. Chairman Manzullo and the ranking minority Member, Ms. Velazquez, jointly offered an amendment in the nature of a substitute. There were no amendments to the amendment in the nature of a substitute. Chairman Manzullo moved that the amendment in the nature of a substitute be adopted and it was adopted unanimously by voice vote. The Chairman then moved the bill to be reported, and at 10:45 a.m., by voice vote, a quorum being present, the Committee unanimously passed H.R. 1860, as amended, and ordered it to be reported.

#### SECTION-BY-SECTION ANALYSIS

##### *Section 1. Short title*

This section establishes the short title as the “Small Business Technology Transfer Program Reauthorization Act.”

##### *Section 2. Extension of program and expenditure amounts*

Subsection (a) extends the STTR program, authorized by section 9(n) of the Small Business Act, through September 30, 2009. The percentage of extramural budget required to be expended by a participating agency annually on the program is established at 0.15 percent for each fiscal year through 2003 and is increased to 0.3 percent for fiscal year 2004 and each fiscal year thereafter. Subsection (b) strikes the word “pilot,” as it appears in section 9 of the Small Business Act, to describe the previous, trial basis of the program, and, thereby, establishes the permanent nature of the program.

##### *Section 3. Increase in authorized Phase II awards*

Subsection (a) increased from \$500,000 to \$750,000 the amount that a participating agency may generally pay for a Phase II

award. Further, the subsection permits the participating agency to shorten or lengthen the periods of Phase I and Phase II awards where appropriate for particular projects. Presently, a Phase I is a one-year award and a Phase II is a two-year award.

Subsection (b) makes the amendments contained in subsection (a), above, i.e., increasing the amount of a Phase II award and making the length of Phase I and II awards more flexible, effective beginning October 1, 2003.

#### *Section 4. Agency outreach*

This section requires that a participating agency implement an outreach program to research institutions and small businesses to increase participation and to enhance its STTR Program. Such STTR outreach program is to be undertaken in conjunction with an agency's outreach with respect to the SBIR Program.

#### *Section 5. Policy directive modification*

This section amends section 9(p) of the Small Business Act to require the Administrator of the SBA to clarify the policy directive applicable to the STTR Program to insure that it is clear that the retention by a small business of rights to data generated by a small business in the performance of an STTR project does not terminate for a period of not less than four years after the small business completes participation in a phase of the award.

#### *Section 6. STTR Program data collection*

Subsection (a) requires that SBA maintain sufficient data to effectively evaluate the STTR Program.

Subsection (b) provides for the maintenance of an electronic database of information about the STTR Program similar to the database maintained for the SBIR Program. In addition, in collecting information concerning the STTR Program, the Administrator shall provide data concerning (1) whether a small business or a research institution initiated the collaboration with respect to a particular project, (2) whether the small business or the research institution originated the technology that is the subject of a project, (3) the length of time it took to negotiate a licensing agreement between the small business and the research institution, and (4) how the proceeds from the commercialization, marketing, or sale of technology resulting from each assisted STTR project were allocated (by percentage) between the small business and the research institution.

Subsection (c) requires that the Administrator work in cooperation with the participating agencies to establish standardized reporting requirements for the collection of data from STTR applicants and awardees, taking into consideration the unique needs of each agency, and where possible permitting electronic updating to the maximum extent possible. Data collection shall be designed to minimize the burden on small businesses.

Subsection (d) requires that the Administrator in reporting to Congress annually include in such reports the number of proposals received from, and the number and total amounts of awards to HUBZone small businesses under the SBIR and STTR Programs.



*Section 7. STTR program-wide model agreement for intellectual property rights*

Subsection (a) requires the Administrator to issues regulations, after an opportunity for comment by affected agencies, small businesses, research institutions, and other interested parties, that establish one model agreement for use by all participating agencies which allocates between small businesses and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization.

Subsection (b) requires participating agencies to adopt the model agreement that the Administrator promulgates by regulation

*Section 8. FAST Program assistance to low-income areas*

Subsection (a) amends the Federal and State Technology (FAST) Partnership Program by adding a further criteria for reviewing proposals for funding under the program. The reviewers are to also consider whether the proposal addresses the needs of small businesses located in one or more HUBZones.

Subsection (b) requires the Administrator to promulgate regulations establishing the standards for consideration of FAST Program proposals, including addressing the need of small businesses located in one or more HUBZones.

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, DC, August 15, 2001.*

Hon. DONALD MANZULLO,  
*Chairman, Committee on Small Business,  
House of Representatives, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 1860, the Small Business Technology Transfer Program Reauthorization Act of 2001.

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

Sincerely,

DAN L. CRIPPEN,  
*Director.*

Enclosure.

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

*H.R. 1860.—Small Business Technology Transfer Program Reauthorization Act of 2001*

Summary: H.R. 1860 would change the expiration date of the Small Business Technology Transfer (STTR) program from 2001 to 2009. The STTR program requires federal agencies with annual appropriations for extramural research of more than \$1 billion to set aside a portion of their extramural research budget for cooperative research between small businesses and a federal laboratory or non-profit research institution. H.R. 1860 also would modify the STTR program in several ways, including a gradual increase in the percentage of extramural research funds that would be set aside for the program.

Assuming appropriation of the necessary amounts, CBO estimates that implementing H.R. 1860 would cost about \$26 million

over the 2002–2006 period. H.R. 1860 would not affect direct spending or receipts; therefore, pay-as-you-go procedures would not apply.

H.R. 1860 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA). The bill would benefit state colleges and universities that participate in the STTR program, and any related costs would be incurred voluntarily.

**Estimated cost to the Federal Government:** The estimated budgetary impact of H.R. 1860 is shown in the following table. The costs of this legislation fall within budget functions 370 (commerce and housing credit), 250 (general science, space, and technology), 050 (national defense), 270 (energy), and 550 (health).

	By fiscal year, in millions of dollars—					
	2001	2002	2003	2004	2005	2006
SPENDING SUBJECT TO APPROPRIATION						
STTR Spending Under Current Law:						
Budget Authority <sup>1</sup> .....	4	0	0	0	0	0
Estimated Outlays .....	4	1	0	0	0	0
Proposed Changes:						
Estimated Authorization Level .....	0	5	4	6	6	6
Estimated Outlays .....	0	4	4	6	6	6
STTR Spending Under H.R. 1860:						
Estimated Authorization Level .....	4	5	4	6	6	6
Estimated Outlays .....	4	5	4	6	6	6

<sup>1</sup> The 2001 level is the amount that CBO estimates was appropriated to administer the STTR program in 2001.

**Basis of estimate:** The five federal agencies that currently participate in the program are the Department of Defense, the Department of Energy, the Department of Health and Human Services, the National Aeronautics and Space Administration, and the National Science Foundation. Program oversight is conducted by the Small Business Administration (SBA). The costs of the STTR program to the participating agencies consist primarily of salaries and expenses for personnel to evaluate grant applications, associated overhead costs, printing costs, and mailing expenses. The costs associated with administering awards through the STTR program are slightly higher than administering the same awards through regular program channels.

Based on information from SBA and the participating agencies, CBO estimates that administering the STTR program will cost a total of about \$4 million this year. Therefore, CBO estimates that extending the current program through 2009 would cost these agencies approximately that amount each year, assuming appropriation of the necessary amounts.

In addition, H.R. 1860 would increase the percentage of the agencies' extramural research budgets that would be set aside for the STTR program starting in 2004. Based on information from the affected agencies, CBO expects that this provision would cause the number of applications for STTR grants to increase, thereby increasing the administrative cost of the program. Based on information from SBA and the participating agencies, CBO estimates that this expansion would cost an additional \$2 million a year during the 2004–2006 period, subject to the appropriation of the necessary funds.

Finally, H.R. 1860 would modify the STTR program in three other ways. The bill would expand the program's outreach efforts to small businesses and the research community. The legislation also would alter and expand the data that the participating agencies would have to report to SBA each year as part of its oversight responsibilities. Finally, H.R. 1860 would require SBA to issue a regulation that would establish a model legal agreement for small businesses and research institutions participating in STTR projects to delineate their intellectual property rights. Based on information from the affected agencies, CBO estimates that implementing these three provisions would cost about \$500,000 in 2002 and negligible amounts in 2003 and each year thereafter, subject to the availability of appropriated funds.

Pay-as-you-go considerations: None.

Intergovernmental and private-sector impact: H.R. 1860 contains no intergovernmental or private-sector mandates as defined in UMRA. The bill would benefit state colleges and universities that participate in the STTR program, and any related costs would be incurred voluntarily.

Previous CBO estimate: On August 2, 2001, CBO transmitted a cost estimate for S. 856, the Small Business Technology Transfer Program Reauthorization Act of 2001, as ordered reported by the Senate Committee on Small Business on July 19, 2001. S. 856 is very similar to H.R. 1860, with two exceptions. S. 856 would reauthorize the STTR program for an additional year and would not require the SBA to issue new regulations related to the intellectual property rights. Therefore, CBO estimates that the cost of implementing H.R. 1860 would be slightly higher than for S. 856 over the 2002–2006 period, but would be slightly lower over the 2002–2011 period, assuming the appropriation of the necessary amounts.

Estimate prepared by: Federal Costs: Ken Johnson. Impact on State, Local, and Tribal Governments: Susan Sieg Tompkins. Impact on the Private Sector: Cecil McPherson.

Estimate approved by: Peter H. Fontaine, Deputy Assistant Director for Budget Analysis.

#### COMMITTEE CORRESPONDENCE

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE,  
*Washington, DC, September 21, 2001.*

Hon. J. DENNIS HASTERT,  
*Speaker, Office of the Speaker,*  
*House of Representatives, Washington, DC.*

DEAR SPEAKER HASTERT: I am writing to inform you that the Committee on Science has discharged from further consideration H.R. 1860—a bill to reauthorize the Small Business Technology Transfer Program, and for other purposes. H.R. 1860 was referred to this Committee on May 16, 2001.

Sincerely,

SHERWOOD L. BOEHLERT,  
*Chairman.*

## COMMITTEE ESTIMATE OF COSTS

Pursuant to the Congressional Budget Act of 1974, the Committee estimates that the amendments to the Small Business Act contained in H.R. 1860 will not significantly increase discretionary spending or appropriations over the next eight fiscal years. Furthermore, pursuant to clause 3(d)(2)(A) of rule XIII of the Rules of the House of Representatives, the Committee estimates that implementation of H.R. 1860 will increase the administrative costs, as set forth in the Congressional Budget Office estimate.

## OVERSIGHT FINDINGS

In accordance with clause 4(c)(2) of rule X of the Rules of the House of Representatives, the Committee states that no oversight findings or recommendations have been made by the Committee on Government Reform with respect to the subject matter contained in H.R. 1860.

In accordance with clause 2(b)(1) of rule X of the Rules of the House of Representatives, the oversight findings and recommendations of the Committee on Small Business with respect to the subject matter contained in H.R. 1860 are contained in the descriptive portions of this report.

## STATEMENT OF CONSTITUTIONAL AUTHORITY

Pursuant to clause 3(d)(1) of rule XIII of the Rules of the House of Representatives, the Committee finds the authority for this legislation in Article I, Section 8, Clause 18 of the Constitution of the United States.

## CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

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

**SMALL BUSINESS ACT**

\* \* \* \* \*

SEC. 9. (a) \* \* \*

(b) It shall be the duty of the Administration, and it is hereby empowered—

(1) \* \* \*

\* \* \* \* \*

(4) to develop and maintain a source file and an information program to assure each qualified and interested small business concern the opportunity to participate in Federal agency small business innovation research programs and small business technology transfer **[pilot]** programs;

\* \* \* \* \*

(7) to report not less than annually to the Committee on Small Business of the Senate, and to the Committee on Science and the Committee on Small Business of the House of Representatives, on the SBIR and STTR programs of the Federal

agencies and the Administration's information and monitoring efforts related to the SBIR and STTR programs, including the data on output and outcomes collected pursuant to subsections (g)(10) **[and (o)(9), ]**, (o)(9), and (o)(15), the number of proposals received from, and the number and total amount of awards to, HUBZone small business concerns under each of the SBIR and STTR programs, and a description of the extent to which Federal agencies are providing in a timely manner information needed to maintain the database described in subsection (k).

\* \* \* \* \*

(e) For the purpose of this section—

(1) \* \* \*

\* \* \* \* \*

(6) the term “Small Business Technology Transfer Program” or “STTR” means a **[pilot]** program under which a portion of a Federal agency's extramural research or research and development effort is reserved for award to small business concerns for cooperative research and development through a uniform process having—

\* \* \* \* \*

(k) DATABASE.—

(1) PUBLIC DATABASE.—Not later than 180 days after the date of the enactment of the Small Business Innovation Research Program Reauthorization Act of 2000, the Administrator shall develop, maintain, and make available to the public a searchable, up-to-date, electronic database that includes—

(A) the name, size, location, and an identifying number assigned by the Administrator, of each small business concern that has received a first phase or second phase SBIR or STTR award from a Federal agency;

(B) a description of each first phase or second phase SBIR or STTR award received by that small business concern, including—

\* \* \* \* \*

(C) an identification of any business concern or subsidiary established for the commercial application of a product or service for which an SBIR or STTR award is made; **[and]**

(D) information regarding mentors and Mentoring Networks, as required by section 35(d)**[. ]**; and

(E) with respect to assistance under the STTR program only—

(i) whether the small business concern or the research institution initiated their collaboration on each assisted STTR project;

(ii) whether the small business concern or the research institution originated any technology relating to the assisted STTR project;

(iii) the length of time it took to negotiate any licensing agreement between the small business concern and the research institution under each assisted STTR project; and

(iv) *how the proceeds from the commercialization, marketing, or sale of technology resulting from each assisted STTR project were allocated (by percentage) between the small business concern and the research institution.*

(2) GOVERNMENT DATABASE.—Not later than 180 days after the date of the enactment of the Small Business Innovation Research Program Reauthorization Act of 2000, the Administrator, in consultation with Federal agencies required to have an SBIR program pursuant to subsection (f)(1) *or an STTR program pursuant to subsection (n)(1)*, shall develop and maintain a database to be used solely for SBIR *and STTR* program evaluation that—

(A) contains for each second phase award made by a Federal agency—

(i) \* \* \*

\* \* \* \* \*

(iii) any other information received in connection with the award that the Administrator, in conjunction with the SBIR *and STTR* program managers of Federal agencies, considers relevant and appropriate;

\* \* \* \* \*

(D) includes any other data collected by or available to any Federal agency that such agency considers may be useful for SBIR *or STTR* program evaluation; and

\* \* \* \* \*

(n) REQUIRED EXPENDITURES FOR STTR BY FEDERAL AGENCIES.—

【(1) REQUIRED EXPENDITURE AMOUNTS.—With respect to fiscal years 1998, 1999, 2000, and 2001, each Federal agency that has an extramural budget for research, or research and development, in excess of \$1,000,000,000 for that fiscal year, is authorized to expend with small business concerns not less than 0.15 percent of that extramural budget specifically in connection with STTR programs that meet the requirements of this section and any policy directives and regulations issued under this section.】

(1) REQUIRED EXPENDITURE AMOUNTS.—

(A) IN GENERAL.—*With respect to each fiscal year through fiscal year 2009, each Federal agency that has an extramural budget for research, or research and development, in excess of \$1,000,000,000 for that fiscal year, shall expend with small business concerns not less than the percentage of that extramural budget specified in subparagraph (B), specifically in connection with STTR programs that meet the requirements of this section and any policy directives and regulations issued under this section.*

(B) EXPENDITURE AMOUNTS.—*The percentage of the extramural budget required to be expended by an agency in accordance with subparagraph (A) shall be—*

(i) *0.15 percent for each fiscal year through fiscal year 2003; and*

(ii) 0.3 percent for fiscal year 2004 and each fiscal year thereafter.

\* \* \* \* \*

(o) FEDERAL AGENCY STTR AUTHORITY.—Each Federal agency required to establish an STTR program in accordance with subsection (n) and regulations issued under this Act, shall—

(1) \* \* \*

\* \* \* \* \*

(11) **develop** a model agreement not later than July 31, 1993, to be approved by the Administration, *adopt the agreement developed by the Administrator under subsection (w) as the agency's model agreement* for allocating between small business concerns and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization;

(12) develop, in consultation with the Office of Federal Procurement Policy and the Office of Government Ethics, procedures to ensure that federally funded research and development centers (as defined in subsection (e)(8)) that participate in STTR agreements—

(A) \* \* \*

\* \* \* \* \*

(13) not later than July 31, 1993, develop procedures for assessing the commercial merit and feasibility of STTR proposals, as evidenced by—

(A) \* \* \*

\* \* \* \* \*

(D) the presence of other indicators of the commercial potential of the idea**].**;

(14) *implement an outreach program to research institutions and small business concerns for the purpose of enhancing its STTR program, in conjunction with any such outreach done for purposes of the SBIR program; and*

(15) *collect, and maintain in a common format, in accordance with subsection (v), such information from awardees as is necessary to assess the STTR program, including information necessary to maintain the database described in subsection (k).*

(p) STTR POLICY DIRECTIVE.—

(1) \* \* \*

(2) CONTENTS.—The policy directive required by paragraph (1) shall provide for—

(A) \* \* \*

(B) a simplified, standardized funding process that provides for—

(i) \* \* \*

\* \* \* \* \*

(ix) 1-year awards for the first phase of an STTR program, generally not to exceed \$100,000, and 2-year awards for the second phase of an STTR program, generally not to exceed **[\$500,000]** *\$750,000*, greater or lesser amounts to be awarded at the discretion of the awarding agency, *and shorter or longer periods of time*

*to be approved at the discretion of the awarding agency where appropriate for a particular project;*

\* \* \* \* \*

(3) *MODIFICATIONS.*—*Not later than 120 days after the date of enactment of this paragraph, the Administrator shall modify the policy directive issued pursuant to this subsection to clarify that the rights provided for under paragraph (2)(B)(v) apply to all Federal funding awards under this section, including the first phase (as described in subsection (e)(6)(A)), the second phase (as described in subsection (e)(6)(B)), and the third phase (as described in subsection (e)(6)(C)).*

\* \* \* \* \*

(w) *STTR MODEL AGREEMENT FOR INTELLECTUAL PROPERTY RIGHTS.*—

(1) *IN GENERAL.*—*The Administrator shall promulgate regulations establishing a single model agreement for use in the STTR program that allocates between small business concerns and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization.*

(2) *OPPORTUNITY FOR COMMENT.*—*In promulgating regulations under paragraph (1), the Administrator shall provide affected agencies, small business concerns, research institutions, and other interested parties the opportunity to submit written comments.*

\* \* \* \* \*

**SEC. 34. FEDERAL AND STATE TECHNOLOGY PARTNERSHIP PROGRAM.**

(a) \* \* \*

\* \* \* \* \*

(c) *GRANTS AND COOPERATIVE AGREEMENTS.*—

(1) \* \* \*

(2) *SELECTION CONSIDERATIONS.*—*In making awards or entering into cooperative agreements under this section, the Administrator and the SBIR program managers referred to in paragraph (1)—*

(A) \* \* \*

(B) *shall consider, at a minimum—*

(i) \* \* \*

\* \* \* \* \*

(iv) *whether the proposal integrates and coordinates the proposed activities with other State and local programs assisting small high-technology firms in the State; [and]*

(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 located in 1 or more qualified census tracts, as that term is defined in section 42(d)(5)(C)(ii) of the Internal Revenue Code of 1986.*

\* \* \* \* \*



(4) PROCESS.—Proposals and applications for assistance under this section 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 paragraph (2), including standards regarding each of the considerations identified in paragraph (2)(B).*

\* \* \* \* \*

## ADDITIONAL VIEWS

Democratic Members of the Committee on Small Business are well aware of the important role that technology plays in not only developing small businesses, but in strengthening the nation's economy. This was well-proven by the technology boom of the 1990s, fueled by small businesses and, especially high-tech firms. The strength of the economy, for such an unprecedented time period, was directly related to the success of the high-tech sector.

The Small Business Technology Transfer (STTR) Program, and its sister program, the Small Business Innovation Research (SBIR) Program, both work to foster the development of small technology businesses. These businesses can, in turn, improve the economic stability of their towns and communities. Reauthorizing the STTR Program through fiscal year 2009, is an important step in growing these small high-tech firms.

This reauthorization legislation also increases the percentage of agency's extra-mural research budgets to be devoted to the STTR Program from .15 percent to .3 percent beginning in fiscal year 2004. This action doubles the amount of research that the government will be devoting to small firms.

By increasing the grant amount of Phase I awards from the current \$500,000 to \$750,000 as proposed in the bill, small businesses will have more funding with which to conduct their research, thereby increasing the likelihood that their research will result in useful items that will culminate with commercialization.

Additionally, language in the bill includes provisions that will assist with the assessment of the STTR program, by requiring the collection and maintaining of pertinent data, that can later be used to evaluate the program's strengths and weaknesses.

Further, agency outreach for the STTR program has traditionally been incorporated with that of the SBIR program at many agencies. There have been numerous conferences for the SBIR program over the years that focused on the SBIR program only. The mandate to implement an outreach program to research institutions and small businesses to increase participation in the program is a necessary and much needed enhancement.

Democratic Committee Members included three very important changes to encourage the growth of high-tech businesses. These changes include developing an STTR Program-wide model agreement, increasing awards to low-income areas, and tracking low income awards.

The STTR Program operates by small businesses forming partnerships with either research institutions, federally-funded research and development centers (FFRDCs), or non-profit organizations. This partnership then submits a proposal for necessary federal research requirements. The partnership is formalized with an agreement outlining the rights and responsibilities of each partner,

and addressing the intellectual property rights and rights to carry out follow-on research, development or commercialization, if any, that are assigned to each partner.

It has come to the Committee's attention that each participating agency has a model agreement, and many universities and FFRDCs have model agreements. The result is an exercise in which the small business and its research partner must come to an agreement, and have that agreement parallel the agency's agreement. The scenario often occurs wherein a small business doing work for the same agency, but with multiple research partners, must have multiple agreements, none of which are standard. Ultimately, this results in time devoted to developing partnership agreements when that time would be more effectively used to actually conduct research.

Therefore, Committee Democrats have included language that requires the Small Business Administration (SBA) to go through a rule-making process to develop a single model agreement that can be acceptably used by all small businesses, agencies, and research partners. It is intended that this rule-making process involve commentary from affected agencies, small business owners, research institutions, and other interested parties. The resulting model agreement shall be used by all agencies as their model agreement so that small research firms can devote their time to that which they do best—research.

Secondly, Committee Democrats have included language in the STTR reauthorization bill to modify the Federal and State Technology Partnership (FAST) Program that was made part of the statute with the enactment of P.L. 106-554. This five-year temporary program was designed to promote the development of high-technology firms in states that have few SBIR awards, and states that have few awards in low-income areas. Firms who participate in the STTR Program will also benefit from this Program.

Grants or loans under the FAST Program may be given to companies to pay all or some of the cost of developing SBIR or STTR proposals. Outreach, financial support and technical assistance may be provided to establish a Mentoring Network will be developed within the FAST program to assist small businesses identified by FAST participants, SBIR agencies, the Administrator or other entities; a training program for individuals providing SBIR outreach and assistance at the state level; and to "encourage" commercialization of SBIR-funded technology.

There is a limit of one proposal for each state in the FAST program in any fiscal year. The matching requirements for FAST Program grants are as follows: Fifty cents private for each federal dollar for the 18 states that receive the fewest SBIR first phase awards. One dollar private for each federal dollars for the 16 states receiving the greatest number of SBIR first phase awards. For the rest of the states: 75 cents private for each federal dollar.

Language was included in this Program by House Democrats on the Committee on Small Business that allows a 50 cents private for each federal dollar for assistance directed to low-income areas—even if the state is a high-volume state as far as SBIR awards. We were concerned when this language was included, that it would not be implemented properly, and that not enough emphasis would be

placed on this issue. This has become a reality in that the SBA did not include any reference to low-income area assistance under the FAST Program in its recent Policy Directive.

Therefore, at the insistence of Committee Democrats, language was included in the STTR reauthorization legislation to require that a separate evaluation criteria for FAST proposals be developed to ensure that these proposals address how they are going to increase technology in low income areas of states—areas that have been historically underutilized as far as the STTR and SBIR programs. It is the intent of the proposal that the SBA go through a rule-making process to determine the weight that this criteria should have compared to other criteria, and to determine the standards by which these proposals shall be evaluated.

Lastly, we included language in the STTR reauthorization to require that the SBA report to Congress, on an annual basis, on the number of SBIR and STTR awards made to small businesses located in HUBZones. These “Historically Underutilized Business” Zones are specifically defined as areas of high unemployment and low income. These locations have been out of the mainstream of economic growth that the nation has experienced over the past 10 years, and, as such, would benefit greatly from the economic strength that technology provides to a community. Further, tracking awards made to these businesses will assist in evaluating the success of the FAST Program.

From a program administration standpoint, we believe it is important to address the staffing needs of the Office of Technology within the SBA’s Office of Government Contracting and Business Development. We also believe it is important to address the placement of the Office of Technology within the SBA’s current organizational structure. The Office of Technology administers the SBIR and STTR Programs.

We are concerned that with a staff of six, with three employees being support personnel, the Office of Technology is approaching the point of critical under-staffing. This division manages and administers the two research and development programs, two outreach grant programs, the National Research Council study on the SBIR Program, the public/private database, submits annual reports for SBIR and STTR to Congress, conducts outreach for technology programs to the ten participating agencies and small businesses across the country, implements a program policy directive, and administers an internal initiative through Historically Black Colleges and Universities. With all of these functions and only three professional staff members, we believe that the success of the programs could be doomed before all of the programs and initiatives are fully implemented.

We are also concerned with the fact that the Office of Technology is effectively buried within the Office of Government Contracting and Business Development, under the supervision of the Associate Administrator for the Office of Policy Planning and Liaison. The SBIR and STTR Programs do not have the same mission as the Office of Government Contracting and Business Development. The purpose of the Office of Government Contracting and Business Development is to ensure that small businesses receive their fair share of contracts with the Federal government. The SBIR and

STTR Programs within the Office of Technology are in place to improve the capacity of small research and development companies, by ensuring that small firms receive Federal R&D projects.

The SBA, overall, has a scatter-shot approach, at best, to assisting small businesses with technology, and particularly electronic commerce. This is especially disturbing to Committee Democrats in light of a recent report by Forrester Research that predicted online sales will reach \$3 trillion by 2003. SBA's electronic commerce initiatives include various memoranda of understanding with private companies to provide training, but no long-term strategic plan to increase the number of small businesses who have the capacity to take advantage of electronic commerce. Further, SBA appears to have no strategy whatsoever to encourage small businesses to improve their internal ordering mechanisms through business-to-business electronic commerce. There is no focal point for the existing electronic commerce-related initiatives other than directly within the Administrator's office.

Therefore, we believe it is more reasonable to expand the mission of the existing Office of Technology to include electronic commerce and other technology-related issues and place this Office under the direct supervision of the Administrator, than to have the Office of Technology report to the Office of Government Contracting and Business Development, and to have no office evaluating electronic commerce and business-to-business electronic commerce initiatives.

To conclude, Committee Democrats are committed to ensuring that small businesses across the country are able to grow and expand their technology capabilities. We know that not only do small businesses, in general, employ more than half of the non-farm workforce, but small businesses account for 38 percent of the private sector workforce in the high tech industry. We believe the STTR and SBIR Programs are critical to increasing the capacity of small business technology companies, and that these programs should continue to be monitored and evaluated, and given the appropriate resources to ensure their continued success.

NYDIA M. VELÁZQUEZ.

