



U.S. Small Business Administration

**SMALL BUSINESS  
TECHNOLOGY  
TRANSFER PROGRAM  
(STTR)**

**ANNUAL REPORT – FY 2008**

**Office of Technology  
U.S. Small Business Administration**



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**SMALL BUSINESS  
INNOVATION  
RESEARCH PROGRAM  
(SBIR)**

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## Introduction

The Small Business Innovation Development Act of 1982, Public Law 97-219, as amended, directs the U.S. Small Business Administration (SBA) to establish policy for monitoring, evaluating, and reporting on accomplishments of the Small Business Innovation Research (SBIR) program. This is the 26<sup>th</sup> annual report on the SBIR program, which summarizes program activities and results for FY 2008.

Public Law 97-219 was signed on July 22, 1982, and is found in section 9 of the Small Business Act. Congress reauthorized the SBIR program in 1986, and again in 1993, extending it to October 1, 2000. This reauthorization also increased the percentage of research and development (R&D) funds that participating Federal agencies must direct to small businesses under the program from 2 percent to 2.5 percent. On December 21, 2000, Public Law 106-554 was signed, reauthorizing the SBIR program through September 30, 2008. The program was extended through FY 08.

## FY 2008 Summary

- In FY 2008, the 11 agencies participating in the SBIR program released a total of 24 Phase I solicitations. The Department of Education (ED) released 4 solicitations; the Department of Defense (DOD), the Department of Commerce (DOC), Department of Homeland Security (DHS), and the Department of Health and Human Services (HHS) released 3 solicitations, the Department of Transportation (DOT) and the National Science Foundation (NSF) each released two solicitations; and the other four agencies released one each.
- Participating agencies received 22,081 Phase I proposals from small high-tech business concerns. Agencies subsequently made 3,626 Phase I awards, representing 16 percent of proposals received.

- A total of 3,227 Phase II proposals were received by participating agencies, resulting in 1,771 awards. These awards represented 54.8 percent of Phase II proposals received.
- In total, 25,308 Phase I and Phase II proposals were received in FY 2008. Phase I and Phase II awards totaled 5,397, representing 21 percent of the total number of proposals received.

## HUBZone Small Business Concerns

The Small Business Act requires the SBA to report on the participation of HUBZone small business concerns (SBCs) in the program. The participating agencies received 776 proposals and made 86 Phase I awards to HUBZone SBCs. The participating agencies received 111 proposals and made 67 Phase II awards to HUBZone SBCs. Phase I awards totaled \$8.2 million, and awards for Phase II totaled \$38.1 million for a total of \$46.3 million to HUBZone SBCs.

## Technology Resources Network

As defined in Section 9 of the Small Business Act, the SBA designed the Technology Resources Network (Tech-Net) which was implemented in part in 1998. Tech-Net streamlines and standardizes the reporting of SBIR awards and applicant information by the Federal agencies required to participate in the SBIR program. The SBA held several working sessions with the agencies to define the input data fields and a core set of output reports to facilitate the administration of the program. The SBA incorporated the unique needs of each agency into the design of the database system to ensure that the system would provide much needed award and applicant information. Information such as name, size, location, abstracts and identifying number of each SBC that has received a Phase I or Phase II award is available in this

database. Agencies now have the ability to review awards and applicant information and edit previously reported data interactively. The public version of this database can be accessed by visiting the website: <http://tech-net.sba.gov>.

required to notify SBA, and outline the rationale for the award. Upon review of the agency notification, SBA may file an appeal with the agency further questioning the rationale for the award and the reason why the Congressional preference has not been utilized.

In FY 08, SBA tested the Government database, which will maintain commercialization information on all Phase II projects funded under the SBIR program. This database will not be directly accessible by the public, instead aggregated performance information will be included in our annual reports. Therefore, any confidential information that is provided by the SBIR Phase II awardees will not be disclosed to the public. A username and password will be required to access the database. The SBA will control the issuance of the username and passwords. The database is being designed to collect information that will allow stakeholders to effectively measure the impact and success of the program.

SBA is working to develop a measure that would be the percentage of sales compared to Phase I and Phase II awards plus additional Federal investment, i.e.  $\text{sales}/(\text{Phase I} + \text{Phase II} + \text{follow-on investment})$ .

## **Compliance with Reporting of Follow-on Non- SBIR Awards**

SBIR firms should be encouraged to develop and expand business applications of their SBIR research with the desired outcome of generating new employment and income. One purpose of follow-on funding agreements or Phase III is to commercialize the innovation and help the small business concern grow. Congress requires agencies that operate SBIR Programs to give preference to make Phase III awards to the SBIR awardees that developed the technology. There are however, occasions where agencies make Phase III awards to firms other than the firm that developed the technology under a Phase I or Phase II award. When a Phase III award is given to a firm under these circumstances, agencies are

**Table 1: SBIR Program Data**

Fiscal Year 2008 SBIR Agency Obligations Summary (dollars in thousands)													
	DOA	DOC	DOD	DOE	DOT	ED	EPA	DHS	HHS	NASA	NSF	TOTAL	
Agency Extramural Budget	755,215	248,316	46,857,094	4,944,312	291,970	313,000	151,595	621,090	23,544,008	4,180,000	3,853,000	85,759,600	
Agency SBIR Budget	18,804	5,888	1,172,097	123,992	3,649	7,825	3,789	19,302	588,600	104,500	95,459	2,143,905	
Dollars Obligated	18,744	5,760	1,172,097	119,119	5,330	9,861	3,801	18,783	594,998	90,652	95,459	2,134,604	
Percent of SBIR to Extramural Budget	2.48%	2.32%	2.50%	2.41%	1.83%	3.15%	2.51%	3.02%	2.53%	2.17%	2.48%	2.49%	
Deficit/Surplus	-60	-128	0	-4,873	1,681	2,036	12	-519	6,398	-13,848	0	-9,301	
Fiscal Year 2008 Award Profile (dollars in thousands)													
	DOA	DOC	DOD	DOE	DOT	ED	EPA	DHS	HHS	NASA	NSF	TOTAL	
Total Phase I Awards	77	40	1,826	280	11	33	25	28	806	276	224	3,026	
Minority/Disadvantaged Phase I Awards	13	4	120	11	4	0	0	4	47	36	24	263	
HubZone Phase I Awards	7	0	42	15	0	0	3	1	1	2	15	86	
Total Phase II Awards	37	6	1,034	141	0	12	7	20	312	121	81	1,771	
Minority/Disadvantaged Phase II Awards	6	0	78	8	1	0	2	2	22	9	5	133	
HubZone Phase II Awards	10	3	30	9	0	0	1	1	1	4	8	67	
Total Phase I Dollars Awarded (\$)	6,056	3,652	161,289	27,902	1,096	2,915	1,745	3,095	180,717	27,450	22,275	438,192	
Minority/Disadvantaged Phase I Dollars (\$)	1,034	365	10,763	1,092	375	0	0	500	7,166	3,574	2,396	27,265	
HubZone Phase I Dollars (\$)	1,031	0	3,612	1,498	0	0	209	100	100	200	1,495	8,245	
Total Phase II Dollars Awarded (Obligations)	12,688	2,108	734,225	101,757	0	7,477	1,575	13,526	361,037	71,203	39,951	1,345,547	
Minority/Disadvantaged Phase II Dollars (\$)	2,017	0	56,247	5,999	300	0	687	1,172	20,497	5,393	2,485	94,797	
HubZone Phase II Dollars (\$)	3,418	1,007	23,878	3,317	0	0	345	1,000	375	850	3,982	38,172	
Average Amount for Phase I Awards (\$)	79	91	88	100	100	88	70	111	224	99	99	121	
Average Amount for Phase II Awards (\$)	343	351	710	722	0	623	225	676	1,157	588	493	760	
Fiscal Year 2008 Agency Solicitation Profile													
	DOA	DOC	DOD	DOE	DOT	ED	EPA	DHS	HHS	NASA	NSF	TOTAL	
Number of Solicitations Released	1	3	3	1	2	4	1	3	3	1	2	24	
Number of Research Topics in Solicitations	12	13	935	60	19	7	14	9	198	28	6	1,301	
Number of Copies Distributed	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	
Number of Phase I Proposals Received	652	194	12,280	1,494	238	189	379	291	3,414	1,500	1,450	22,081	
Number of Phase II Proposals Received	69	10	1,672	244	8	48	27	33	637	243	236	3,227	
Number of Phase I Awards	77	40	1,826	280	28	33	25	28	995	276	224	3,832	
Number of Phase II Awards	36	6	1,072	142	4	11	7	25	346	121	81	1,851	

Dollars obligated can include modifications to previous year's awards: DOD \$224,940,048; HHS \$7,118,718; EPA \$239,961,000; DHS \$232,718; DOT \$545,464; NSF \$27,446,830

\*Distributed over the Internet Website

**Table 2: Number of SBIR Awards --  
FY 1983 through FY 2008**

Fiscal Year	Phase I	Phase II	Totals
83	776	-	776
84	1,005	275	1,280
85	1,470	347	1,817
86	1,585	567	2,152
87	2,052	688	2,740
88	1,932	702	2,634
89	2,031	748	2,779
90	2,354	833	3,187
91	2,598	747	3,345
92	2,487	907	3,394
93	2,911	1,028	3,939
94	3,088	882	3,970
95	3,059	1,246	4,305
96	2,826	1,184	4,010
97	3,327	1,400	4,727
98	2,976	1,249	4,225
99	3,324	1,235	4,559
00	3,894	1,328	5,222
01	4,231	1,520	5,751
02	5,112	1,585	6,697
03	5,086	1,734	6,820
04	4,375	1,978	6,353
05	4,216	1,859	6,075
06	3,722	1,926	5,648
07	3,814	1,541	5,355
08	3,626	1,771	5,397
*Total	77,877	29,280	107,157

\*The above table uses Tech-Net data rather than summary information provided by the participating agencies. The SBA is using Tech-Net data because it is more specific and accurate than the summary information, and therefore, the numbers shown here will be different than in prior reports. Specifically, the data that is compiled in Tech-Net contains information on all individual awards (including an abstract of the award, company information, and award information). This information allows the SBA to look behind the summary programmatic numbers and review individual awards.

During FY 2008, participating agencies awarded over \$2.1 billion (including modifications) through the SBIR program.

- FY 2008 Phase I awards totaled over \$438 million.
- Phase II awards aggregating over \$1.3 billion were made in FY 2008.
- In FY 2008, minority/disadvantaged-owned firms received 396 awards totaling over \$122 million.

**Table 3: Value of SBIR Awards--  
FY 1983 through FY 2008  
(in millions of dollars)**

Fiscal Year	Phase I	Phase II	Totals
83	\$ 36.7	\$	\$ 36.7
84	48.8	99.8	148.6
85	72.8	118.2	199.1
86	81.1	221.3	303.5
87	103.0	164.7	267.7
88	97.8	290.2	388.0
89	102.0	291.1	393.1
90	119.8	327.2	447.1
91	130.8	319.7	450.5
92	125.0	390.8	515.8
93	158.6	459.7	618.4
94	219.6	373.6	593.3
95	233.9	708.9	942.8
96	227.2	684.2	911.4
97	277.4	841.6	1,119.1
98	257.7	776.7	1,034.4
99	289.7	812.8	1,102.6
00	290.4	755.1	1,045.5
01	303.2	857.4	1,294.3
02	411.4	1,023.3	1,160.7
03	465.6	1,266.4	1,732.0
04	491.0	1,463.7	1,954.7
05	450.7	1,397.4	1,848.1
06	422.1	1,479.5	1,901.6
07	447.3	1,196.6	1,644.0
08	438.1	1,345.5	1,783.6
*Total	6,298.6	17,713.7	24,012.3

\*The above table uses Tech-Net data rather than summary information provided by the participating agencies. The SBA is using Tech-Net data because it is more specific and accurate than the summary information, and therefore, the numbers shown here will be different than in prior reports. Specifically, the data that is compiled in Tech-Net contains information on all individual awards (including an abstract of the award, company information, and award information). This information allows the SBA to look behind the summary programmatic numbers and review individual awards.

The FY 09 SBIR annual report will also include award rate data on R&D contracts and grants other than SBIR awards.

Through its SBIR Policy Directive, the SBA requires each participating agency to list the number of Phase I awards made both within 6 months and after 6 months of the closing date of its solicitation announcement. Table 4 provides this information for FY 2008.

**Table 4: FY 2008-- Phase I Timeframe**

Agency	Total FY 08 Phase I Awards	No. within 6 Months of Solicitation Close	No. More Than 6 Months After Solicitation Close
DOA	77	77	0
DOC	40	40	0
DOD	1826	1,464	362
DOE	280	280	0
DOT	11	11	0
ED	33	33	0
EPA	25	25	0
DHS	28	28	0
HHS	806	803	3
NASA	276	276	0
NSF	224	224	0
<b>TOTAL</b>	<b>3,626</b>	<b>3,261</b>	<b>365</b>

## Energy Independence and Security Act of 2007

On December 19, 2007, the President signed into law the Energy Independence and Security Act of 2007 (Public Law 110-140, codified at 15 U.S.C. §638(2)(1)(B)), directing the SBA to:

- Ensure that SBIR agencies give high priority to small business concerns that participate in or conduct energy efficiency or renewable energy system research and development projects;
- Include in SBA's annual report to Congress a determination of whether such priority is being carried out;
- Consult with the heads of the agencies in determining whether such priority has been given; and
- Issue guidelines and directives to assist the participating agencies in meeting these requirements.

On September 3, 2008, guidelines were issued to the participating agencies for meeting the requirements.

Below is a sample of priorities being given to energy-related projects:

SBIR program solicitations have included energy efficiency or renewable energy topics. Some of those topics or technology areas are:

Power and Direct Energy, High Energy Flexible Propulsion Technology, Unmanned Technology, Energy and Power Security Technology, Solid State Electrolyte Development for Advanced Energy Storage Devices, Materials for Advanced Cooling Applications, Technologies Related to Energy Storage for Hybrid and Plug-In Hybrid Electric Vehicles, Development of Cavitating Liquid Jets for Remediation, and a Multi-Channel Gastric Pacer for Treating Gastroparesis.

In addition to energy efficiency and renewal energy topics in the SBIR solicitation, other mechanisms used to give priority to energy efficiency include outreach to raise awareness of the Energy Independence and Security Act of 2007 to the small business research community through presentations, conferences, meetings, and website notices. Some websites report success stories that show the impact of the SBIR program on energy efficiency and renewable energy system technology research. For example, instructions have been included in some solicitations stating that proposals that address energy related aspects to their technology development will have a "tie-breaker" advantage. This is also stressed during outreach presentations to the small business community. One agency is also teaching students about the underlying concepts related to energy efficiency and renewable energy.

## Extramural Budget Calculation

Public Law 106-554 directs each Federal agency with an SBIR program to provide SBA with an annual report that includes a description of the methodology used for calculating the amount of the extramural budget of the Federal agency. (See Table 5)

To monitor and report on the participating agencies' SBIR programs, the SBA has established a reporting base to compare against each agency's budget data. To determine extramural obligations as a base for the size of each agency's SBIR program, the Small Business Act provides a definition of R&D.

It should be noted that a 3-year budget cycle is used for establishing extramural R/R&D obligations. Within any given year, a participating agency's initial estimate can change due to congressional action on that agency's R/R&D budget. To ensure proper implementation of the program, each agency will establish an estimated budget as a basis for operations during the year.

The SBA's Chief Financial Officer's office has reviewed the methodology used in calculating each participating agency's extramural budget. The results of that review are in Table 5.

**Table 5: CALCULATION OF EXTRAMURAL BUDGET**  
(\$ In Thousands)

Agency Name	FY 2008 R&D Budget	Intramural Budget & Other	Extramural Budget	\$SBIR	Other Comments
Dept. of Agriculture	\$2,188,000	\$1,441,000	\$ 747,000	\$18,675	Estimates forwarded to Cooperative State Research, Education and Extension Service managing SBIR program
Dept. of Air Force	18,380,455	4,757,682	13,491,985	337,300	
Dept. of Army	12,126,591	948,603	10,816,353	270,409	
DOD-TRICARE Management Activity	955,466	0	955,466	23,888	
US Special Operations Command	374,163	590	346,203	8,655	
DOD Defense Missile Defense Agency (MDA)	8,611,029	934,620	4,906,756	122,669	
DOD-CBD Program	1,053,035	412,313	502,815	12,570	
DOD-OSD	2,692,906	526,057	1,789,521	44,738	
Defense Logistics Agency	134,339,000	26,626,000	106,875,000	2,672,000	
Defense Microelectronics Activity	47,440,000	621,000	46,490,000	1,162,250	
Defense Adv. Research Projects Agency	3,085,617	295,908	2,663,168	66,579	
Defense Threat Reduction Agency	455,717	170,747	284,970	7,124	
Dept. of Navy	18,716,537	5,525,367	10,946,492	273,662	
Dept of HHS (including NIH)	23,544,008	-0-	23,44,008	588,600	
Nat'l Oceanic & Atmospheric Administration	580,000	425,700	115,100	2,878	Uses National Science Foundation definitions of extramural R&D.
Nat'l Science Foundation	4,135,235	-0-	4,135,235	96,330	\$282 million budgeted for FFRDC was excluded from calculations of SBIR.
Dept. of Transportation (Combined)	886,969	224,815	662,154	7,299	Both FAA (\$203,263) and FHWA (\$166,921) were excluded from SBIR assessment.
Dept. of Education	326,000	13,000	313,000	7,825	
EPA	547,595	396,035	151,560	3,789	
NASA	6,828,000	N/A	4,618,000	99,825	FY 08 Extramural Budget of \$4,618 million represents 68% of the actual FY 08 R&D Budget.
NIST	430,044	354,452	75,592	1,890	Uses data in financial accounting system to determine total R&D funds obligated, adjusted for prior year recoveries and over accruals.
Dept. of Homeland Security-Science and Technology	587,900	-0-	352,740	12,600	Approximately 40% of funding is not subject to SBIR. Non-SBIR program funding was provided to fund one award in amount of \$723K.
Dept. of Homeland Security-Domestic Nuclear Detection Office	323,500	-0-	268,000	6,700	Non-SBIR program funding was used to fund awards exceeding 2.5% by approximately \$1 million.

## Introduction

Pursuant to Public Law 102-564, the Small Business Research and Development Enhancement Act of 1992, as amended, the U.S. Small Business Administration (SBA) is presenting the fifteenth annual Small Business Technology Transfer program (STTR) annual report.

This report describes the operation and administration of the STTR program for fiscal year (FY) 2008. It also provides data on the results of the first 15 years of the STTR program, including the number of solicitations released, the number of proposals received and the number of awards resulting from those solicitations.



## Summary of Legislation

### *Public Law 102-564, as amended*

Title I of Public Law 102-564 amended the Small Business Act by reauthorizing the Small Business Innovation Research (SBIR) program. Congress passed Title II of the Act authorizing the STTR program.

The STTR program and the SBIR program share a similar philosophy. It recognizes Federally funded research and development as a base for technological innovation that will contribute to the growth and strength of the Nation's economy. It differs from the SBIR program in that STTR awards are made to small businesses that pursue technological innovation through cooperative research and development with Federal laboratories and non-profit scientific and educational institutions. In September 1996, Public Law 104-208 reauthorized the STTR program through FY 1997. In December 1997, Public Law 105-135 reauthorized the program through September 30, 2006. In October 2001, Public Law 107-50 reauthorized the STTR program through FY 2009 and increased the program set-aside from .15 percent to .3 percent which began in FY 2004.

## Technology Resources Network

As defined in Section 9 of the Small Business Act, the SBA designed the Technology Resources Network (Tech-Net) which was implemented in part in 1998. Tech-Net streamlines and standardizes the reporting of STTR awards and applicant information by the Federal agencies required to participate in the STTR program. The SBA had several working sessions with the agencies to define the input data fields and a core set of output reports to help the SBA administer the program. The SBA incorporated the unique needs of each agency into the design of the database system to ensure that the system would provide much needed award and applicant information. Information such as name, size, location, abstracts and identifying number of each small business concern that has received a Phase I or Phase II award is available in this database. Agencies now have the ability to review awards and applicant information, and edit previously reported data interactively through Tech-Net. The public version of this database can be accessed by visiting the website: <http://tech-net.sba.gov>. The participating agencies are providing information needed in a timely manner to maintain the database.

In FY 08, SBA tested the government database which will maintain commercialization information on all Phase II projects funded under the STTR program. This database will not be accessible by the public; therefore, any confidential information that is provided by the STTR Phase II awardees will not be disclosed to the public. A username and password will be required to access the database. The SBA will control the issuance of the username and passwords. The database is being designed to allow the SBA, each participating agency, Government Accountability Office, the National Academy of Science and the Congress to more effectively measure the impact and success of the program.

SBA is working to develop a measure that would be the percentage of sales compared to Phase I and Phase II awards plus additional Federal investment, i.e. sales/(Phase I + Phase II + follow-on investment).

## Summary of Data

During FY 2008, small businesses submitted 3,728 proposals under the STTR program, including 3,264 Phase I proposals and 464 Phase II proposals. A total of 734 awards were made to small businesses including 483 Phase I awards and 251 Phase II awards. In FY 2008, total STTR program obligations were \$230,533,311. Small business received \$132,512,196 or 57 percent of total funding. Research institutions received \$87,872,842 or 38 percent.

Table 1 shows the number of awards made by year throughout the life of the Program. Table 2 shows the value of awards from inception of the Program to the current year.

**Table 1: Number of STTR Awards –  
FY 1994 through FY 2008**

Fiscal Year	Phase I	Phase II	Totals
94	0	0	0
95	1	0	1
96	0	0	0
97	0	0	0
98	206	1	207
99	297	74	371
00	311	93	404
01	315	89	404
02	367	99	466
03	457	112	569
04	718	180	898
05	579	223	802
06	633	227	860
07	634	213	847
08	483	251	734
Total	5,000	1,562	6,562

\*The above table uses Tech-Net data rather than summary information provided by the participating agencies. The SBA is using Tech-Net data because it is more specific and accurate than the summary information, and therefore, the numbers shown here will be different than in prior reports. Specifically, the data that is compiled in Tech-Net contains information on all individual awards (including an abstract of the award, company information, and award information). This information allows the SBA to look behind the summary programmatic numbers and review individual awards.

**Table 2: Value of STTR Awards  
FY 1994 through FY 2008  
(in millions of dollars)**

Fiscal Year	Phase I \$	Phase II \$	Totals \$
94			
95	90.8		90.8
96			
97			
98	19.3	.4	19.7
99	24.0	31.9	55.9
00	23.5	39.6	63.1
01	24.6	36.8	61.4
02	30.8	54.4	85.2
03	41.3	67.1	108.4
04	82.3	120.4	202.7
05	66.0	159.8	225.8
06	78.8	165.2	244.0
07	83.5	159.4	242.9
08	61.2	178.3	239.5
Total	626.0	1,013.3	1,639.3

\*The above table uses Tech-Net data rather than summary information provided by the participating agencies. The SBA is using Tech-Net data because it is more specific and accurate than the summary information, and therefore, the numbers shown here will be different than in prior reports. Specifically, the data that is compiled in Tech-Net contains information on all individual awards (including an abstract of the award, company information, and award information. In addition, because the information is inputted by the STTR participating agency, and the agencies can update the information at any time, the numbers may vary from report to report). This information allows the SBA to look behind the summary programmatic numbers and review individual awards.

The FY 09 STTR annual report will also include award rate data on R&D contracts and grants other than STTR awards.

## HUBZone Small Business Concerns

The agencies received 126 Phase I and 12 Phase II proposals. The participating agencies made 19 Phase I awards totaling \$1,626,675 and 5 Phase II awards totaling \$2,895,394 to HUBZone certified small business concerns.

## Energy Independence and Security Act of 2007

On December 19, 2007, the President signed into law the Energy Independence and Security Act of 2007 (Public Law 110-140 codified at 15 U.S.C. §638(2)(1)(B)), directing the SBA to:

- Ensure that STTR agencies give high priority to small business concerns that participate in or conduct energy efficiency or renewable energy system research and development projects;
- Include in SBA's annual report to Congress a determination of whether such priority is being carried out;
- Consult with the heads of the agencies in determining whether such priority has been given; and
- Issue guidelines and directives to assist the participating agencies in meeting these requirements.

On September 3, 2008, guidelines were issued to the participating agencies for meeting the requirements.

Below is a sample of priorities being given to energy-related projects:

STTR program solicitations have included energy efficiency or renewable energy topics. Some of those topics or technology areas are: Power and Direct Energy, High Energy Flexible

Propulsion Technology, Chemical Energy and Power Security Technology, Solid State Electrolyte Development for Advanced Energy Storage Devices, Materials for Advanced Cooling Applications, Technologies Related to Energy Storage for Hybrid and Plug-In Hybrid Electric Vehicles, Development of Cavitating Liquid Jets for Remediation, and a Multi-Channel Gastric Pacer for Treating Gastroparesis.

In addition to energy efficiency and renewal energy topics in the STTR solicitation, other mechanisms used to give priority to energy efficiency include outreach to raise awareness of the Energy Independence and Security Act of 2007 to the small business research community through presentations, conferences, meetings, and website notices. Some websites report success stories that show the impact of the STTR program on energy efficiency and renewable energy system technology research. An example is that instructions have been included in some solicitations stating that proposals that address energy related aspects to their technology development will have a "tie-breaker" advantage. This is stressed during outreach presentations to the small business community.

STTR Program Data - Fiscal Year 2008

	DOD	NSF	DOE	NASA	HHS	TOTAL
<b>COOPERATIVE RESEARCH PROFILE</b>						
TOTAL DOLLARS OF AWARDS	98,038,010	10,279,676	18,224,659	13,724,900	73,995,686	214,262,931
DOLLARS TO SMALL BUSINESS	66,154,491	6,597,973	9,487,330	8,790,353	41,482,049	132,512,196
DOLLARS TO RESEARCH INSTITUTION	42,274,031	3,681,703	5,678,607	4,934,546	31,303,955	87,872,842
NO. OF AWARDS TO UNIVERSITIES	319	116	44	44	204	727
DOLLARS TO UNIVERSITIES	34,408,644	3,518,616	5,234,820	9,489,952	25,983,577	78,635,609
NO. OF AWARDS TO FFRDCS	14	2	14	0	1	31
DOLLARS TO FFRDCS	2,212,195	56,695	1,890,186	0	33,001	4,192,077
NO. OF AWARDS TO OTHER NON-PROFITS	16	4	0	2	43	65
DOLLARS TO OTHER NON-PROFITS	1,213,827	106,382	0	631,875	5,287,377	7,239,461
<b>PHASE I</b>						
NUMBER OF FFRDC AWARDS	6	2	8	0	1	17
NUMBER OF UNIVERSITY AWARDS	192	91	30	26	116	455
NO. OF OTHER NON-PROFIT AWARDS	12	2	0	1	25	40
TOTAL DOLLARS OF AWARDS	18,181,500	7,474,599	3,796,497	2,697,481	22,773,661	54,923,738
DOLLARS TO SMALL BUSINESS	10,933,043	4,410,013	2,345,296	1,593,368	12,687,512	31,969,232
DOLLARS TO RESEARCH INSTITUTIONS	6,850,060	3,064,586	1,442,201	1,103,830	11,203,025	23,663,702
NO. OF AWARDS TO UNIVERSITIES	192	91	30	26	116	455
DOLLARS TO UNIVERSITIES	6,300,559	2,953,954	1,191,501	1,071,955	9,113,860	20,631,829
NO. OF AWARDS TO FFRDCS	6	2	8	0	1	17
DOLLARS TO FFRDCS	192,950	56,695	250,700	0	33,001	533,346

# STTR Program Data - Fiscal Year 2008

AGENCY OBLIGATIONS	DOD	NSF	DOE	NASA	HHS	TOTAL
AGENCY EXTRAMURAL BUDGET	44,614,275,000	4,135,235,000	4,944,312,000	4,180,000,000	23,193,000,000	81,066,822,000
AGENCY STTR BUDGET	133,844,955	11,560,000	14,877,000	12,560,000	69,579,000	242,420,955
DOLLARS OBLIGATED	116,868,392	11,650,423	15,165,937	13,724,900	73,123,659	230,533,311
% OF EXTRAMURAL BUDGET	0.26%	0.28%	0.31%	0.33%	0.32%	0.28%
DEFICIT/SURPLUS	-16,976,563	90,423	288,937	1,164,900	3,544,659	-11,887,644
<b>STTR AWARD PROFILE - COMMITMENTS</b>						
TOTAL PHASE I AWARDS	210	95	38	27	113	483
MINORITY DISAD. PHASE I AWARDS	21	8	1	3	4	37
HUBZONE PHASE I AWARDS	9	9	0	1	0	19
TOTAL PHASE II AWARDS	139	27	20	15	50	251
MINORITY/DISAD. PHASE II AWARDS	11	3	3	4	0	21
HUBZONE PHASE II AWARDS	3	0	0	1	1	5
TOTAL PHASE I DOLLARS AWARDED	18,181,500	13,783,569	3,796,497	2,697,481	22,773,661	61,232,708
MIN/DISAD. PHASE I DOLLARS AWARDED	1,767,676	710,000	100,000	299,647	500,700	3,378,023
HUBZONE PHASE I DOLLARS AWARDED	716,675	810,000	0	100,000	0	1,626,675
TOTAL PHASE II DOLLARS AWARDED	90,247,022	13,495,053	14,428,162	8,986,119	51,222,025	178,378,381
MIN/DISAD. PHASE II DOLLARS AWARDED	6,854,669	222,000	2,249,532	2,386,871	0	11,713,072
HUBZONE PHASE II DOLLARS AWARDED	2,249,194	0	0	250,000	396,200	2,895,394
TOTAL PHASE I & II AWARDED	108,428,522	27,278,622	18,224,659	13,724,900	73,995,686	239,611,089
AVERAGE AMOUNT PHASE I AWARDS (\$)	86,579	145,090	99,908	99,909	201,537	126,776
AVERAGE AMOUNT PHASE II AWARDS (\$)	649,259	499,817	721,408	599,075	1,024,441	710,671
<b>STTR SOLICITATION PROFILE</b>						
NO. OF SOLICITATIONS RELEASED	2	2	1	1	1	7
NO. OF RESEARCH TOPICS	166	2	60	10	156	394
NO. PHASE I PROPOSALS RECEIVED	1,796	315	228	166	759	3,264
NO. PHASE II PROPOSALS RECEIVED	219	60	35	25	125	464
<b>RESEARCH INSTITUTION PROFILE</b>						
NUMBER OF FFRDCS	14	2	14	0	1	31
NUMBER OF UNIVERSITIES	319	116	44	40	204	723
NUMBER OF OTHER NON-PROFIT	16	4	0	2	43	65

STTR Program Data - Fiscal Year 2008

	DOD	NSF	DOE	NASA	HHS	TOTAL
NO. OF AWARDS TO OTHER NON-PROFITS	12	2	0	1	25	40
DOLLARS TO OTHER NON-PROFITS	356,551	53,937	0	31,875	2,056,164	2,498,527
<b>PHASE II</b>						
NUMBER OF FFRDCS	8	0	6	0	0	14
NUMBER OF UNIVERSITIES	127	25	14	14	88	268
NUMBER OF OTHER NON-PROFIT	4	2	0	1	18	25
TOTAL DOLLARS OF AWARDS	90,247,022	2,805,077	10,620,143	8,986,119	49,061,303	161,719,664
DOLLARS TO SMALL BUSINESS	55,221,448	1,683,046	8,745,523	5,895,603	28,794,537	100,340,157
DOLLARS TO RESEARCH INSTITUTIONS	30,984,287	1,122,031	5,682,805	3,090,518	20,100,930	60,980,571
NO. OF AWARDS TO UNIVERSITIES	127	25	14	14	88	268
DOLLARS TO UNIVERSITIES	28,107,766	564,662	4,043,319	8,386,122	16,869,717	57,971,586
NO. OF AWARDS TO FFRDCS	8	0	6	0	0	14
DOLLARS TO FFRDCS	2,019,245	0	1,639,486	0	0	3,658,731
NO. OF AWARDS TO OTHER NON-PROFITS	4	2	0	1	25	32
DOLLARS TO OTHER NON-PROFITS	857,276	52,445	0	600,000	3,231,213	4,740,934

FY 2008 dollars obligated include modifications to previous year's awards for DOD (\$18,832,382) DOE (\$749,297)

DOE - additional funds of \$288,937 were deobligated funds carried over from previously funded projects