



## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

June 22, 2009

### **S. 1233** **SBIR/STTR Reauthorization Act of 2009**

*As ordered reported by the Senate Committee on Small Business and Entrepreneurship  
on June 18, 2009*

#### **SUMMARY**

S. 1233 would extend and expand programs that require certain federal agencies to set aside portions of their research and development budgets for small businesses. The bill also would authorize appropriations for efforts to increase the number of small businesses participating in those programs. The bill would require participating agencies to collect and report more information about program participants that would be used both to evaluate the program and for business development. The bill would authorize the Government Accountability Office (GAO) and the National Academy of Sciences (NAS) to prepare studies concerning the operation and effectiveness of the programs.

Based on information from the Small Business Administration (SBA) and other participating agencies, CBO estimates that implementing S. 1233 would cost \$229 million over the 2010-2014 period, subject to appropriation of the necessary amounts. Enacting the bill would not affect direct spending or revenues.

S. 1233 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

#### **ESTIMATED COST TO THE FEDERAL GOVERNMENT**

The estimated budgetary impact of S. 1233 is shown in the following table. The costs of this legislation fall within budget functions 050 (national defense), 250 (general science, space, and technology), 270 (energy), 300 (natural resources and environment), 350 (agriculture), 370 (commerce and housing credit), 400 (transportation), 500 (education, training, employment, and social services), 550 (health), and 750 (administration of justice).

	By Fiscal Year, in Millions of Dollars					2010-
	2010	2011	2012	2013	2014	2014
<b>CHANGES IN SPENDING SUBJECT TO APPROPRIATION</b>						
Reauthorize SBIR/STTR Programs						
Estimated Authorization Level	33	34	34	35	36	172
Estimated Outlays	25	32	35	35	36	163
Increase in R&D Budget Set-asides						
Estimated Authorization Level	0	2	3	5	6	16
Estimated Outlays	0	2	3	5	6	16
FAST Program Reauthorization						
Authorization Level	10	10	10	10	10	50
Estimated Outlays	2	5	9	10	10	36
SBIR-STEM Workforce Development Program						
Authorization Level	0	1	1	1	1	4
Estimated Outlays	0	0	1	1	1	3
National Academy of Sciences Study						
Estimated Authorization Level	4	0	0	0	0	4
Estimated Outlays	1	1	1	1	0	4
Additional Agency Activities						
Estimated Authorization Level	7	0	0	0	0	7
Estimated Outlays	3	4	0	0	0	7
Total Changes						
Estimated Authorization level	54	47	48	51	53	253
Estimated Outlays	31	44	49	52	53	229
Note: SBIR = Small Business Innovation Research; STTR = Small Business Technology Transfer; FAST = Federal and State Technology Partnership; STEM = Science, Technology, Engineering, and Math.						

## BASIS OF ESTIMATE

Under current law, the Small Business Innovation Research (SBIR) program requires federal agencies with extramural budgets for research and development (R&D) that exceed \$100 million per year to set aside 2.5 percent of that budget for contracts with small businesses. (Extramural budgets are made up of expenditures for activities not performed by agency employees.) Likewise, the Small Business Technology Transfer (STTR) program requires federal agencies with extramural budgets for R&D that exceed \$1 billion per year to set aside 0.3 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.

The cost of those programs to the participating agencies consists primarily of personnel and associated overhead expenses to solicit applications, prepare reports, and track outcomes. The organizational structures of the program offices vary. 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.

For this estimate, CBO assumes that the bill will be enacted near the end of fiscal year 2009 and that the necessary funds will be appropriated near the start of each year. Based on information from SBA and participating agencies, CBO estimates that implementing S. 1233 would cost \$229 million over the 2010-2014 period, assuming appropriation of the necessary amounts.

### **Reauthorization of the SBIR and STTR programs**

The bill would extend both the SBIR and STTR programs through 2023. Under current law, the SBIR program is scheduled to terminate on July 31, 2009, and the STTR program is scheduled to terminate at the end of fiscal year 2009. Based on information from SBA and participating agencies, CBO estimates that administering the two programs will cost about \$25 million in 2010 (about \$2 million of that amount will be for SBA). CBO estimates that reauthorizing both programs would cost \$163 million over the 2010-2014 period, assuming appropriation of the necessary amounts.

### **Increase in the R&D Budget Set-asides for Small Businesses**

S. 1233 also would increase the amount of each participating agency's R&D budget set aside for the programs starting in fiscal year 2011. For SBIR, the set-aside would increase by 0.1 percent each year over the 2011-2020 period, ending at 3.5 percent of each participating agency's R&D budget. For STTR, the set-aside would increase by 0.1 percent every two years through 2015, ending at 0.6 percent of each participating agency's R&D budget. Based on information from SBA and the agencies, CBO expects that the expansion would lead to an increase in the number of applications received by both programs by more than a third over the 2010-2014 period. Assuming appropriation of the necessary amounts, CBO estimates that processing the additional applications would cost \$16 million over the 2010-2014 period.

## **FAST Program Reauthorization**

S. 1233 would reauthorize the Federal and State Technology (FAST) Partnership program to improve the competitiveness of small businesses in technological fields. A portion of the funds made available under the program also would be available to conduct outreach and provide technical assistance to increase the number of small businesses participating in the SBIR program. The bill would authorize \$10 million for each of fiscal years 2010 through 2014 to implement the program. Based on historical spending patterns of SBA's other business assistance programs, CBO estimates that implementing this provision would cost \$36 million over the 2010-2014 period, assuming appropriation of the necessary amounts.

## **SBIR-STEM Workforce Development Program**

The bill would establish a program to encourage small businesses that participate in the SBIR program to provide internships to college students who are pursuing studies in the fields of science, technology, engineering, and math. Participating businesses would be eligible for a bonus grant equal to 10 percent of their SBIR award, up to a maximum of \$10,000 per year. S. 1233 would authorize the appropriation of \$1 million per year for fiscal years 2011 through 2015 for this program. CBO estimates that implementing this provision would cost \$3 million over the 2010-2014 period, assuming appropriation of the necessary amounts.

## **National Academy of Sciences Study**

The bill would direct certain agencies participating in the SBIR program to enter into an agreement with the NAS for the National Research Council to study the degree to which the SBIR program has stimulated innovation and used small businesses to meet federal R&D needs. Based on results from the study, NAS also would develop recommendations for improving the SBIR program. Based on information from NAS, CBO estimates that conducting a study as required by S. 1233 would cost \$4 million over the 2010-2014 period.

## **Additional Agency Activities**

S. 1233 would require each agency participating in the SBIR or STTR program to expand the amount of information collected and maintained about applicants and businesses that receive awards under the programs. This information would serve as a source for two databases, one public and one governmental, maintained by SBA to evaluate the two programs. Based on information from the agencies, CBO estimates that collecting and maintaining additional data in each participating agency would cost about \$6 million over the 2010-2014 period to expand the systems already in place.

The bill also would require GAO to conduct two studies: one to determine whether the agencies participating in the SBIR and STTR programs are complying with the programs' requirements to allocate a specific portion of their R&D budgets, the other to assess whether agencies participating in the SBIR program are sufficiently protecting the intellectual property rights of the small businesses that receive awards under the program. CBO estimates that conducting such studies would cost about \$1 million, subject to the availability of appropriated funds.

## **INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT**

S. 1233 contains no intergovernmental or private-sector mandates as defined in UMRA. The bill would reauthorize the FAST program, a matching-grant program to encourage states to assist in the development of high-technology small businesses. Any costs to state governments to provide matching funds would be incurred voluntarily.

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