



**CONGRESSIONAL BUDGET OFFICE
COST ESTIMATE**

August 19, 2008

S. 3362

SBIR/STTR Reauthorization Act of 2008

*As ordered reported by the Senate Committee on Small Business and Entrepreneurship
on July 30, 2008*

SUMMARY

S. 3362 would extend and expand programs that require certain agencies to set aside portions of their research and development budgets for small businesses. The bill also would authorize appropriations to increase the number of small businesses participating in those programs. Finally, the bill would require participating agencies to develop new databases for program evaluation and business development and authorize several studies of the programs by the Government Accountability Office (GAO) and the National Academies of Science (NAS).

Based on information from the Small Business Administration (SBA) and other agencies, CBO estimates that implementing S. 3362 would cost \$217 million over the 2009-2013 period, subject to appropriation of the necessary amounts. Enacting the bill would not affect direct spending or revenues.

S. 3362 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. 3362 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 | | | | | 2009- 2013 |
|---|--|------|------|------|------|---------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | |
| CHANGES IN SPENDING SUBJECT TO APPROPRIATION | | | | | | |
| Reauthorize SBIR/STTR Programs | | | | | | |
| Estimated Authorization Level | 27 | 33 | 34 | 34 | 35 | 163 |
| Estimated Outlays | 21 | 31 | 34 | 34 | 35 | 155 |
| Increase in R&D Budget Set-asides | | | | | | |
| Estimated Authorization Level | 0 | 2 | 3 | 4 | 5 | 14 |
| Estimated Outlays | 0 | 1 | 2 | 4 | 5 | 12 |
| 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 | 48 | 46 | 48 | 49 | 51 | 242 |
| Estimated Outlays | 27 | 42 | 47 | 50 | 51 | 217 |

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 expenditures are 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. SBA is authorized to coordinate and monitor activities under both programs. Eleven agencies currently participate in one or both programs, including the Department of Defense, the Department of Health and Human Services, the Department of Energy, the Department of Agriculture, 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 costs to solicit applications, prepare reports, and track outcomes. The organizational structures of such 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; some have employees working part-time on the program.

Based on information from SBA and participating agencies, CBO estimates that implementing S. 3362 would cost \$217 million over the 2009-2013 period, assuming appropriation of the necessary amounts.

Reauthorization of the SBIR and STTR programs

The bill would extend the SBIR program through 2022 and the STTR program through 2023. Under current law, the SBIR program is scheduled to terminate at the end of fiscal year 2008, 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 \$30 million in 2008 (about \$2 million of that amount will be for SBA). CBO estimates that reauthorizing the SBIR program would cost \$21 million in 2009. Extending the SBIR program and the STTR program would cost \$155 million over the 2009-2013 period, assuming appropriation of the necessary amounts. (Continuation of the two programs would cost an additional \$35 million to \$40 million a year after 2013.)

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

S. 3362 also would increase the amount of each agency's R&D budget to be set aside for the programs starting in fiscal year 2010. For SBIR, the set-aside would increase by 0.1 percent each year over the 2010-2019 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 over the 2010-2014 period, ending at 0.6 percent of each participating agency's 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 under both programs by more than a third

over the 2009-2013 period. Assuming appropriation of the necessary amounts, CBO estimates that processing the additional applications would cost \$12 million over the 2009-2013 period.

FAST Program Reauthorization

S. 3362 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 would also 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 the appropriation of \$10 million for each of fiscal years 2009 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 2009-2013 period, assuming appropriation of the specified amounts. (An additional \$24 million would be spent after 2013.)

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. 3362 would authorize the appropriation of \$1 million per year in fiscal years 2010 through 2014 for this program. CBO estimates that implementing this provision would cost \$3 million over the 2009-2013 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 National Academy of Sciences (NAS) for the National Research Council to study how the SBIR program has stimulated innovation and used small businesses to meet federal research and development needs. Based on the results of 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. 3362 would cost \$4 million over the 2009-2013 period.

Additional Agency Activities

S. 3362 would require each agency participating in the SBIR or STTR program to develop a data system to collect and maintain information from applicants and businesses that receive awards under either program to assess the performance of the program. Information maintained in those systems would serve as a source for a public and a government database maintained by SBA to evaluate the performance of the SBIR and STTR programs. Based on information from the agencies, CBO estimates that developing new databases for each participating agency would cost about \$6 million over the 2009-2013 period.

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. 3362 contains no intergovernmental or private-sector mandates as defined in UMRA and would impose no costs on state, local, or tribal governments.

PREVIOUS CBO ESTIMATE

On April 22, 2008, CBO transmitted a cost estimate for H.R. 5819, the SBIR/STTR Reauthorization Act, as reported by the House Committee on Small Business on April 18, 2008. The Senate legislation has several differences from the House legislation: It would reauthorize and expand the SBIR and STTR programs over a longer period of time; it would reauthorize the FAST program for six years rather than two as provided in H.R. 5819; and it would authorize several new studies. H.R. 5819, however, contains an authorization of appropriations for a commercialization program that is not included in S. 3362. CBO estimated that implementing the provisions of H.R. 5819 would cost \$263 million over the 2009-2013 period.

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