



**CONGRESSIONAL BUDGET OFFICE
COST ESTIMATE**

April 27, 2007

**H.R. 1868
Technology Innovation and Manufacturing Stimulation Act of 2007**

*As ordered reported by the House Committee on Science and Technology
on April 25, 2007*

SUMMARY

H.R. 1868 would authorize appropriations for programs administered by the National Institute of Standards and Technology (NIST) for fiscal years 2008 through 2010. The bill also would establish a new fellowship program and authorize several new grant programs.

Assuming appropriation of the authorized amounts, CBO estimates that implementing H.R. 1868 would cost \$417 million in 2008 and \$2.5 billion over the 2008-2012 period. The bill would allow NIST to accept and spend funds from private industries to support certain programs. Such collections would be recorded on the budget as revenues; CBO estimates the effect on federal revenues and direct spending would be insignificant.

H.R. 1868 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA); the bill could benefit public institutions of higher education.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of H.R. 1868 is shown in the following table. The costs of this legislation fall within budget function 370 (commerce and housing credit).

	By Fiscal Year, in Millions of Dollars					
	2007	2008	2009	2010	2011	2012
SPENDING SUBJECT TO APPROPRIATION						
NIST Spending Under Current Law						
Budget Authority ^a	604	0	0	0	0	0
Estimated Outlays	361	154	41	30	11	6
Proposed Changes:						
Scientific and Technical Research and Services						
Authorization Level	0	573	592	596	0	0
Estimated Outlays	0	380	514	569	176	62
Industrial Technology Services						
Authorization Level	0	223	264	282	0	0
Estimated Outlays	0	36	137	219	217	115
Other Provisions						
Estimated Authorization Level	0	7	10	12	2	2
Estimated Outlays	0	1	4	8	9	7
Total Proposed Changes						
Estimated Authorization Level	0	803	866	891	2	2
Estimated Outlays	0	417	655	796	402	183
Total Spending NIST Under H.R. 1868						
Estimated Authorization Level ^a	604	803	866	890	2	2
Estimated Outlays	361	571	696	826	413	189

a. The 2007 level is the amount appropriated for that year for programs administered by the National Institute of Standards and Technology.

BASIS OF ESTIMATE

For this estimate, CBO assumes that the bill will be enacted in 2007 and that the authorized amounts will be appropriated for each year. Estimated outlays are based on historical spending patterns for NIST.

H.R. 1868 would specifically authorize the appropriation of \$2.6 billion for fiscal years 2008 through 2010 for programs related to manufacturing technology. In addition, CBO estimates that implementing other provisions of the bill would require appropriations of \$7 million in 2008 and \$33 million over the 2008-2012 period. Estimated outlays from these amounts would total about \$2.5 billion over the 2008-2012 period.

Scientific and Technological Research and Services

Section 101 would authorize the appropriation of \$471 million for 2008, \$498 million for 2009, and \$538 for 2009 for Scientific and Technical Research and Services. This program supports NIST's laboratories and technical programs as well as national research facilities, including the Center for Neutron Research and the Center for Nanoscale Science and Technology. Assuming appropriation of the specified amounts, CBO estimates that implementing this provision would cost \$1.5 billion over the 2008-2012 period.

Section 101 also would authorize appropriations for the Malcolm Baldrige National Quality Award Program, which recognizes US businesses for their achievements in both performance and quality. The bill would authorize the appropriation of \$8 million in each year over the 2008-2010 period. Assuming appropriation of the specified amounts, CBO estimates that implementing this provision would cost \$24 million over the 2008-2012 period.

Finally, section 101 would authorize appropriations for construction and maintenance of NIST facilities—\$94 million in 2008, \$86 million in 2009, and \$50 million in 2010. Assuming appropriation of the specified amounts, CBO estimates that implementing this provision would cost \$169 million over the 2008-2012 period.

Industrial Technology Services

Under current law, two NIST programs operate under the Industrial Technology Services (ITS) account. The Manufacturing Extension Partnership (MEP) combines federal funds with funding from state and local governments and private industry to provide technical assistance and training to small manufacturers. Section 102 of the bill would authorize appropriations of \$113 million in 2008, \$122 million in 2009, and \$132 million in 2010 for the MEP. Assuming appropriation of these amounts, CBO estimates that implementing this provision would cost \$348 million over the 2008-2012 period.

The second program operating under ITS is the Advanced Technology Program (ATP). H.R. 1868 would replace the ATP with the Technology Innovation Program (TIP), which would make grants to small- and medium-sized businesses or joint ventures between universities or other research institutes and small- or medium-sized businesses to support research and development on emerging technologies. The bill would authorize appropriations of \$110 million in 2008, \$142 million in 2009, and \$151 million in 2010. Of these amounts, \$45 million would be reserved for new grant awards each year. Assuming appropriation of the specified amounts, CBO estimates that implementing this provision would cost \$375 million over the 2008-2012 period.

Other Provisions

Section 206 would create a pilot program that would make grants to promote partnerships between manufacturers and non-manufacturing organizations (universities, research institutions, state agencies, or nonprofit organizations) to develop new manufacturing technologies. The bill would authorize a single grant competition to make awards for a three-year period. CBO estimates that implementing the pilot grant program would cost \$1 million in 2008 and \$21 million over the 2008-2012 period.

Section 207 would authorize a new fellowship program to support research related to manufacturing. CBO estimates this provision would cost \$7 million over the 2008-2012 period.

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

H.R. 1868 contains no intergovernmental or private-sector mandates as defined in UMRA. The bill would authorize grant funds that could benefit public institutions of higher education. Any costs they might incur would result from complying with conditions of federal assistance.

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