



## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

June 1, 2007

### **H.R. 1467** **10,000 Trained by 2010 Act**

*As ordered reported by the House Committee on Science and Technology  
on May 23, 2007*

#### **SUMMARY**

H.R. 1467 would authorize the appropriation of about \$100 million over the 2008-2011 period for the National Science Foundation (NSF) to award grants to institutions of higher education to conduct basic research and improve undergraduate and graduate education in the study of information systems. Research grants would be awarded on a competitive basis to develop innovative approaches to improve the collection and management of information. Additionally, grant funds authorized by the bill would be used to develop curricula, acquire equipment, establish and expand degree programs, and undertake other activities to improve education in information-related fields.

CBO estimates that implementing H.R. 1467 would cost \$83 million over the 2008-2012 period (with additional outlays after 2012), assuming the appropriation of the specified funds. Enacting H.R. 1467 would have no effect on direct spending or revenues.

H.R. 1467 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA); costs to public institutions of higher education would result from complying with conditions of federal assistance.

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

The estimated budgetary impact of H.R. 1467 is shown in the following table. The costs of this legislation fall within budget function 250 (general science, space, and technology).

	By Fiscal Year, in Millions of Dollars				
	2008	2009	2010	2011	2012
<b>CHANGES IN SPENDING SUBJECT TO APPROPRIATION</b>					
Research Grants					
Authorization Level	4	4	4	4	0
Estimated Outlays	1	2	3	4	3
Informatics Research Centers					
Authorization Level	5	5	5	5	0
Estimated Outlays	1	3	4	4	4
Capacity Building Grants					
Authorization Level	9	9	9	10	0
Estimated Outlays	1	5	7	9	8
Information Education and Centers					
Authorization Level	7	7	7	8	0
Estimated Outlays	1	4	6	7	6
Total Changes					
Authorization Level	25	25	25	27	0
Estimated Outlays	4	14	20	24	21

## **BASIS OF ESTIMATE**

H.R. 1467 would authorize the appropriation of about \$100 million over the next five years for the NSF to award grants to institutions of higher education for research and education programs on information systems. For this estimate, CBO assumes that the bill will be enacted in fiscal year 2007 and that the amounts authorized by the bill will be appropriated for each fiscal year. Assuming the appropriation of the specified amounts, CBO estimates that implementing H.R. 1467 would cost \$4 million in 2008 and \$83 million over the 2008-2012 period.

### **Research Grants**

H.R. 1467 would establish a grant program for institutions of higher education to conduct research on innovative approaches to improve information systems. The bill would authorize the appropriation of about \$15 million to NSF for this activity over the 2008-2011 period. Based on the historical spending patterns of other NSF research activities, CBO estimates that implementing this grant program at the levels specified in the bill would cost \$13 million over the 2008-2012 period.

## **Informatics Research Centers**

H.R. 1467 would authorize the appropriation of \$20 million over the next four years to establish informatics research centers. Competitive, multiyear grants would be awarded to institutions of higher education to conduct informatics research (i.e., the study of the structure, behavior and interactions of systems that store, process, and communicate information.) Assuming the appropriation of the specified amounts, CBO estimates that implementing this provision would cost \$16 million over the 2008-2012 period.

## **Capacity Building Grants**

H.R. 1467 would direct NSF to award grants to institutions of higher education to improve undergraduate and graduate education in information systems. Grants could be used to establish or expand degree programs, develop curricula, acquire necessary equipment, foster relationships with the public and private sector, and provide opportunities for students to obtain practical experience in the information field. The bill would authorize the appropriation of \$37 million over the 2008-2011 period for the operation of such a grant program. Based on the historical spending patterns of similar NSF programs, CBO estimates that implementing this provision would cost \$30 million over the 2008-2012 period.

## **Information Education and Centers**

H.R. 1467 would authorize the appropriation of \$29 million over the 2008-2011 period for two grant programs originally created by the Scientific and Advanced Technology Act of 1992. Under that Act, NSF is directed to award grants to institutions of higher education that offer associate degree programs in advanced technology fields. Grants could be used to develop model instructional programs and materials, provide for the professional development of faculty members, establish partnerships with the public and private sectors, acquire necessary equipment, and establish centers that serve as information clearinghouses and models for other educational institutions. Assuming the appropriation of the specified amounts, CBO estimates that implementing this grant program would cost \$24 million over the 2008-2012 period.

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

H.R. 1467 contains no intergovernmental or private-sector mandates as defined in UMRA. Public institutions of higher education would benefit from the research and program development activities authorized in the bill. Any costs those institutions might incur would result from complying with conditions of federal assistance.

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