



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

June 20, 2006

H.R. 5356 **Research for Competitiveness Act**

As ordered reported by the House Committee on Science on June 7, 2006

SUMMARY

H.R. 5356 would authorize appropriations for the Department of Energy (DOE) and the National Science Foundation (NSF) for research grant programs. CBO estimates that implementing H.R. 5356 would cost \$67 million in 2007 and \$1.2 billion over the 2007-2011 period, assuming appropriation of the specified and estimated amounts. Because H.R. 5356 would expand the authority of NSF to accept donations from nonfederal entities, enacting the bill could effect revenues and direct spending, but CBO estimates that such effects would be insignificant.

H.R. 5356 contains no intergovernmental or private-sector mandates as defined by the Unfunded Mandates Reform Act (UMRA) and would not directly affect the budgets of state, local, or tribal governments.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of H.R. 5356 is shown in the following table. The costs of this legislation fall within budget function 250 (general science, space, and technology).

BASIS OF ESTIMATE

For this estimate, CBO assumes that H.R. 5356 will be enacted by the end of fiscal year 2006 and that the entire amounts authorized and estimated to be necessary will be appropriated for each year. Estimated outlays are based on historical spending patterns for NSF and DOE programs.

	By Fiscal Year, in Millions of Dollars					
	2006	2007	2008	2009	2010	2011
SPENDING SUBJECT TO APPROPRIATION						
Spending under Current Law						
Budget Authority ^a	273	0	0	0	0	0
Estimated Outlays	264	199	79	25	5	0
Proposed Changes:						
NSF Grant Programs						
Estimated Authorization Level	0	282	295	308	322	337
Estimated Outlays	0	62	192	257	286	304
DOE Grant Programs						
Authorization Level	0	27	29	31	33	35
Estimated Outlays	0	5	26	29	31	33
Total Changes						
Estimated Authorization Level	0	309	324	339	355	372
Estimated Outlays	0	67	218	286	317	337
Spending Under H.R. 5356						
Estimated Authorization Level	273	309	324	339	355	372
Estimated Outlays	264	266	297	311	322	337

a. The 2006 level is the amount appropriated for that year for the NSF and DOE programs authorized by H.R. 5356.

Spending Subject to Appropriation

H.R. 5356 would authorize the appropriation of \$309 million in 2007 and about \$1.7 billion for the 2007-2011 period for NSF and DOE programs. Assuming appropriation of the necessary amounts, CBO estimates that implementing H.R. 5356 would cost \$67 million in fiscal year 2007 and \$1.2 billion over the 2007-2011 period. As described below, most of these amounts would be used for federal grant programs.

National Science Foundation Programs. H.R. 5356 would authorize funding for four NSF grant programs. The bill would authorize specific appropriations for two of these: between \$3 million and \$15 million a year for matching grants to scientists and engineers for high-risk, high-return research and between \$94 million and \$123 million a year to institutions of higher learning for purchases of major scientific equipment. In addition, the bill would direct NSF to allocate 3.5 percent of amounts appropriated each year for research and related activities for grants to scientists and engineers under its program that supports development of faculty early in their careers. Based on 2006 appropriations, we estimate that this

provision would authorize the appropriation of \$154 million in 2007 and \$800 million over the 2007-2011 period. Finally, the bill would direct NSF to establish a cross-disciplinary grant program focusing on physical and nonbiomedical life sciences. Based on information provided by NSF regarding similar programs, we estimate that this provision would authorize the appropriation of about \$30 million annually. We estimate that implementing the four grant programs would cost \$62 million in 2007 and \$1.1 billion over the 2007-2011 period.

Department of Energy Programs. H.R. 5356 would specifically authorize the appropriation of \$155 million over the 2007-2011 period for DOE grant programs. Of that amount, \$125 million would be used to continue DOE's early-career research grants to scientists. The remaining \$30 million would be used to create a new matching grant program. Assuming appropriation of these amounts, CBO estimates that implementing these programs would cost \$5 million in 2007 and about \$125 million over the 2007-2011 period.

Direct Spending and Revenues

By allowing NSF to accept donations for specific prize competitions, H.R. 5356 could increase revenues from donations and subsequent direct spending of those revenues. Under current law, NSF can use and receive funds only if donated without restriction. Based on information provided by NSF, CBO expects that the effects of this provision on revenues and direct spending would be negligible.

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

H.R. 5356 contains no intergovernmental or private-sector mandates as defined by UMRA and would not directly affect the budgets of state, local, or tribal governments.

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