



NETWORKING AND INFORMATION TECHNOLOGY
Research and Development Funding in the President's FY 2007 Budget

President Bush's 2007 Budget of \$2.8 billion for Networking and Information Technology R&D (NITRD) represents an increase of 9% over 2006 and a 57% increase since 2001. This brings total investment in this area over six years to more than \$13.7 billion. Tools and capabilities that result from research in networking and information technologies propel advances in nearly every area of science and technology, and enhance the Nation's competitiveness. Agencies participating in the NITRD program actively coordinate their research programs, making these programs far more productive than if they were independent.

NITRD Budget Authority (\$ million)					
Department/Agency	2001 Actual	2006 Estimate	2007 Request	Dollar Change: 2001 to 2007	Percent Change: 2001 to 2007
National Science Foundation	\$636	\$810	\$904	\$268	42
Health and Human Services	277	563	548	271	98
Energy	326	291	387	61	19
NASA*	177	78	82	-95	-54
Defense**	310	743	790	480	155
Commerce	38	53	66	28	74
Environmental Protection Agency	4	6	6	2	50
TOTAL	\$1,768	\$2,544	\$2,783	\$1,015	57

* NASA has modified how it accounts for costs so the 2001 numbers on this line are not fully comparable.

** Includes research areas not reported as NITRD in 2001; does not include research by the military services consistent with historical NITRD reporting.

The National Science Foundation (NSF) provides the largest share of NITRD program funding, due to NSF's mission of supporting fundamental research across all disciplines of science and engineering. The other mission-oriented agencies generally support research to advance networking and information technology that has direct relevance to their specific mission. Coordinating these agency-specific research programs ensures accelerated progress on some of the Nation's highest priorities, including defense and homeland security.

High-end computing (HEC) continues to be a major focus of NITRD. DoE's Office of Science (DoE SC), NSF and NASA are all engaged in developing and/or operating leadership class computing systems as recommended in the 2004 *Federal Plan for High-End Computing*, with the goal of deploying petascale computing systems by the year 2010. The DoE SC 2007 investment of \$103M in leadership class computing, coupled with NSF's investment of \$50M in their Office of Cyber Infrastructure, will ensure that U.S. scientists and researchers have access to the most powerful computational resources in the world. Similarly, NASA continues to emphasize high-end computing within its NITRD portfolio through the operation of the *Project Columbia* supercomputer. All three agencies have pledged to make a portion of their leadership class computing systems available to other Federal users and the larger research community.

A 9% increase in support for advanced networking research in 2007, primarily by NSF, DARPA and DoE SC, will ensure that large-scale networking technologies will keep pace with the rapid development of petascale computing systems, so that the results of petascale computations are immediately accessible for analysis.

The 2007 Budget also includes significant increases in long-term fundamental research in cyber security and information assurance, as recommended by the President's Information Technology Advisory Committee. Budget increases in cyber security and information assurance for NSF (+28%), DHS (+43%) and the National Institute of Standards and Technology (+11%) will support substantial new research activities to help secure the Nation's information infrastructure, including fundamental research, and support for large-scale cyber security test beds and data sets.