



**NETWORKING AND INFORMATION TECHNOLOGY**  
*Research and Development Funding in the President's FY 2006 Budget*

With President Bush's 2006 Budget request of \$2.2 billion for the Networking and Information Technology R&D (NITRD) program, the investment in this area over five years will total more than \$10.4 billion. Research in networking and information technologies underpins advances in virtually every other area of science and technology and provides new capabilities and tools that make the economy more productive. Through active coordination, NITRD agencies leverage each others' resources to make broader advances in networking and information technology than any single agency could attain.

NITRD Budget Authority (\$ million)					
Department/Agency	2001 Actual	2005 Estimate	2006 Request	Dollar Change: 2001 to 2006	Percent Change: 2001 to 2006
National Science Foundation	\$636	\$795	\$803	\$167	26
Health and Human Services	277	589	569	292	105
Energy	326	370	341	15	5
NASA*	177	163	74	-103	-58
Defense	310	278	299	-11	-4
Commerce	38	58	62	24	63
Environmental Protection Agency	4	4	6	2	50
<b>TOTAL</b>	<b>\$1,768</b>	<b>\$2,256</b>	<b>\$2,155</b>	<b>\$387</b>	<b>22</b>

\*NASA has modified how it accounts for costs since 2001; the numbers in this table are not fully comparable.

Seven Federal agencies participate in the NITRD program. The National Science Foundation (NSF) continues to provide the largest share of federal NITRD funding, reflecting the Foundation's broad mission in supporting fundamental research across all disciplines of science and engineering as well as its leadership role in coordinating NITRD activities. Other agencies' NITRD funding serves to advance networking and information technology relevant to the mission of the agency, which in turn supports progress towards some of the Nation's highest priorities, including defense and homeland security. NASA's NITRD funding decreases primarily because NASA research in intelligent systems and grid computing has been redirected to more directly address critical agency mission needs.

High-end computing (HEC) continues to be a major focus within the NITRD program. In FY 2004, the interagency High End Computing Revitalization Task Force (HECRTF) produced the *Federal Plan for High-End Computing*, which describes a roadmap for progress in core technologies for high-end computing, mechanisms for improving access to high-end computing resources, and strategies for improving Federal procurement and coordination of high-end systems. The FY 2006 budget reflects the continuation of NITRD activities that are consistent with recommendations described in the *Federal Plan*, such as investments in new high-end systems by NASA and DOE's Office of Science. NASA continues to emphasize high-end computing within its NITRD portfolio through the recently-completed acquisition of the *Project Columbia* supercomputer, a portion of which NASA plans to make available to other Federal users. Similarly, DOE's Office of Science has committed to operate their new *Leadership Class Computing* facility at the Oak Ridge National Laboratory as a national user facility.

To help provide the technological foundation for the next generation of high-end computing architectures, NSF, DOE, and DARPA have responded to the *Federal Plan* by jointly establishing High-End Computing University Research Activities (HEC-URA), which supports research in scalable operating systems, software tools, and compilers.