

NETWORKING AND INFORMATION TECHNOLOGY Research and Development Funding in the President's FY 2008 Budget

President Bush's 2008 Budget includes \$3.1 billion for Networking and Information Technology R&D (NITRD), which represents a 73% increase since 2001. This would bring total investment in this area during this Administration to over \$17 billion. The 2008 Budget emphasizes the President's American Competitive Initiative (ACI) by providing increases in NITRD over amounts requested in 2007 for the National Science Foundation (NSF +10 percent) and the Department of Energy's Office of Science (DoE SC +4 percent). Research on advanced networking, supercomputing and other information technologies produces tools and capabilities that underpin every area of science and technology and contribute significantly to the Nation's competitiveness.

Networking & Information Technology Research & Development (dollars in millions)

Department/Agency	2001 Enacted	2007 Estimate*	2008 Budget	Dollar Change: 2001—2008	Percent Change: 2001—2008
DoD**	\$310	\$1,063	\$1,027	\$717	231
NSF	636	904	994	358	56
Health & Human Services	277	541	463	186	67
DoE	326	389	404	78	24
NASA***	177	82	85	-92	-52
Commerce	38	73	73	35	92
EPA	4	6	6	2	50
National Archives & Records Admin.****	_	4	5	5	_
TOTAL	\$1,768	\$3,062	\$3,057	\$1,289	73

^{*} The amounts included as 2007 Estimates reflect the 2007 request levels, with the exception of the number for the Department of Defense, which is the enacted level.

DoD provides the largest share of NITRD program funding, to address IT needs for the nation's defense. NSF is close behind with nearly \$1 billion of NITRD funding, promoting NSF's mission of supporting fundamental research across all disciplines of science and engineering. The other agencies support research to advance networking and information technology that has direct relevance to their missions. Active coordination of all NITRD research activities ensures accelerated progress on some of the Nation's highest priorities, including national and homeland security.

High-end computing (HEC) continues to be a priority for the NITRD Program. The 2008 Budget maintains the momentum for DoE SC and NSF to attain the goal of deploying petascale computing systems by the end of the decade, as recommended in the 2004 *Federal Plan for High-End Computing*, ensuring that U.S. scientists and researchers continue to have access to the world's most powerful computing resources.

Advanced networking research is another priority for the NITRD Program, ensuring 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 resulting network technologies will directly contribute to U.S. competitiveness.

The 2008 Budget also emphasizes long-term fundamental research in cyber security and information assurance, a third major priority of the NITRD Program. Investments in basic research in cyber security will help improve the protection and reliability of the Nation's information infrastructure, upon which much of the future economy of the U.S. will rely.

^{**} Includes research by the military services that was not reported as NITRD in 2001.

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

^{****} NARA is a new member of the NITRD Program, so no 2001 number is available.