

## NETWORKING AND INFORMATION TECHNOLOGY Research and Development Funding in the President's FY 2009 Budget

President Bush's FY 2009 Budget of \$3.5 billion for Networking and Information Technology R&D (NITRD) represents a doubling (101% increase) since 2001. This brings total investment in this area during this Administration to more than \$20.9 billion. The 2009 Budget emphasizes the President's American Competitiveness Initiative (ACI) by providing increases over 2008 funding in NITRD for all three ACI agencies, the National Science Foundation (NSF), DoE's Office of Science (DoE SC), and DoC's National Institute of Standards and Technology. The tools and capabilities that result from research in networking and advanced information technologies affect every area of science and technology and enhance the Nation's competitiveness.

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

Department/Agency	2001 Actual	2008 Funding	2009 Budget	Dollar Change: 2001 to 2009	Percent Change: 2001 to 2009
Defense*	\$310	\$1,250	\$1,237	\$927	299%
National Science Foundation	\$636	\$931	\$1,090	\$454	71%
Health and Human Services	\$277	\$556	\$555	\$278	100%
Energy	\$326	\$436	\$494	\$168	52%
NASA**	\$177	\$72	\$71	-\$106	-60%
Commerce	\$38	\$85	\$90	\$52	137%
Environmental Protection Agency	\$4	\$6	\$6	\$2	50%
National Archives & Records Admin***	_	\$5	\$5	\$5	_
TOTAL	\$1,768	\$3,341	\$3,548	\$1,780	101%

<sup>\*</sup> Includes research areas not reported as NITRD in 2001; includes research by military services not reported in 2001

The Department of Defense IT R&D investment to support the nation's defense is the largest share of the NITRD Program, followed by NSF with over \$1 billion of NITRD funding to support NSF's mission of funding fundamental research in science and engineering. Active coordination of all NITRD research activities promotes accelerated progress on some of the Nation's highest priorities, including defense, homeland security, energy independence and enhanced economic competitiveness.

High-end computing (HEC) continues to be a high priority for the NITRD Program. The 2009 Budget substantially strengthens investment in both HEC infrastructure and HEC R&D, and maintains the path for DoE DOE SC and NSF to deploy petascale computing systems by the end of the decade as recommended in the 2004 *Federal Plan for High-End Computing*.

Advanced networking research is another area of increase for the NITRD Program in FY 2009, 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 also directly contribute to US competitiveness.

The 2009 Budget also emphasizes a third NITRD Program priority, cyber security and information assurance. The increased investments in basic research related to cyber security in FY 2009 are intended to respond to the need for an information infrastructure that is more flexible, resilient, and reliable. Improving the security of the Nation's information infrastructure is essential as it is used both by the U.S. Government and its citizens for providing an increasing array of information and financial services.

<sup>\*\*</sup> NASA has modified how it accounts for costs so the 2001 numbers on this line are not fully comparable

<sup>\*\*\*</sup> NARA is a new member of the NITRD Program, so no 2001 number is available