

NATIONAL NANOTECHNOLOGY INITIATIVE Research and Development Funding in the President's 2009 Budget

The President's 2009 Budget provides over \$1.5 billion for the multi-agency National Nanotechnology Initiative (NNI), over three times the level of investment at the beginning of this Administration, bringing the total since the NNI was established in 2001 to nearly \$10 billion. This sustained investment is advancing our understanding of the unique phenomena and processes that occur at the nanometer scale and expediting the responsible use of this knowledge to achieve advances in medicine, manufacturing, information technology, and energy and environmental technologies.

The NNI comprises research on and development of novel materials, devices, and systems that exploit the fundamentally distinct properties of matter as it is manipulated at the atomic and molecular levels. NNI-supported R&D results are already leading to breakthroughs in disease detection and treatment, manufacturing at the nanoscale level, environmental monitoring and protection, energy production and storage, and creating electronic and computing devices that have even greater capabilities than those available today.

Guided by the 2007 NNI Strategic Plan, participating agencies will continue to support the broad spectrum of discovery, development and application of nanotechnology through investigator-led fundamental and applied research; multidisciplinary centers of excellence; education and training of nanotechnology researchers, teachers, workers, and the public; critical infrastructure, including user facilities and networks that are broadly available to support research and innovation; and standards development. In addition, agencies continue to maintain a focus on the responsible development of nanotechnology, with attention to the potential human and environmental health impacts, as well as ethical, legal, and other societal issues.

These activities will be appropriately coordinated with stakeholders outside of the Federal government, including industry, academia, and other governments. Agency investments in nanotechnology R&D are informed by the National Science and Technology Council's Nanoscale Science, Engineering, and Technology Subcommittee and by outside reviews by the President's Council of Advisors on Science and Technology and the National Research Council. Reports of these Federal and non-Federal bodies help to identify and prioritize research, including in the area of environmental, health, and safety aspects of nanotechnology. Information about the NNI is available at www.nano.gov.

National Nanotechnology Initiative (dollars in millions)					
Department/Agency	2001 Actual	2008 Funding	2009 Budget	Dollar Change: 2001 to 2009	Percent Change: 2001 to 2009
DoD	\$125	* \$487	\$431	\$306	245%
NSF	\$150	\$389	\$397	\$247	165%
DoE	\$88	\$251	\$311	\$223	253%
HHS/NIH	\$40	\$226	\$226	\$186	465%
DoC/NIST	\$33	\$89	\$110	\$77	233%
NASA**	\$22	\$18	\$19	-\$3	-14%
EPA	\$5	\$10	\$15	\$10	200%
HHS/NIOSH	\$0	\$6	\$6	\$6	-
USDA	\$0	\$11	\$8	\$8	-
DoJ	\$1	\$2	\$2	\$1	0%
DHS	\$0	\$1	\$1	\$1	-
DoT/FHWA	\$0	\$1	\$1	\$1	-
TOTAL	\$464	\$1,491	\$1,527	\$1,063	229%

Agencies funding research on the human and environmental health implications of nanotechnology and methods for managing potential risks include EPA, NIH, NIOSH, NIST, NSF, DoE, DoD, and USDA.

2008 and 2009 funding levels for: DoE includes the Offices of Science, Fossil Energy, and Energy Efficiency and Renewable Energy; and USDA includes Cooperative State Research, Education, and Extension Services, and the Forest Service.

^{*} The 2008 DoD estimate exceeds the 2008 request by \$112 million but includes many Congressional earmarks that are outside the NNI plan.

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