

FY 2000 Budget Proposal Requests Increases in Science and Technology

On February 1st, the Clinton Administration presented its budget request for fiscal year 2000, representing the seventh consecutive year that the Administration has proposed increased investments in civilian research and development (R&D)—to a total of \$39.8 billion. Civilian R&D now constitutes 51% of the overall R&D budget of \$78.2 billion. The FY 2000 budget boosts funding for basic research

to \$18.2 billion, an increase of 4.2% (\$727 million) over FY 1999. The budget also strengthens university-based research, which increases by \$353 million.

Administration's R&D and Interagency Initiatives

The Clinton Administration proposes three major R&D initiatives. According to the White House, the \$38 billion 21st Century Research Fund grows by 3% in FY 2000, and provides for overall stability and for growth in the highest priority

research programs. The Information Technology for the 21st Century (IT2), a new interagency initiative which addresses an increase in funding for fundamental, long-term research; advanced applications; and research on the economic and social implications of information technology, is funded at \$366 million in FY 2000. The Climate Change Technology is a \$1.8 billion interagency initiative to promote energy efficiency and technologies that reduce greenhouse gas emissions. The budget provides a 34% increase for this initiative, which includes \$1.4 billion in R&D on energy efficiency, renewable energy, carbon sequestration, and improvements in nuclear and fossil technologies. The initiative also provides \$0.4 billion in tax credits to stimulate adoption of energy efficiency technologies.

The proposal also describes the budget increases as investment in national priorities requiring additional multi-agency investments. For example, for High Performance Computing and Communications (HPCC) and IT2, the budget provides a total of \$1.8 billion (a 28% increase).

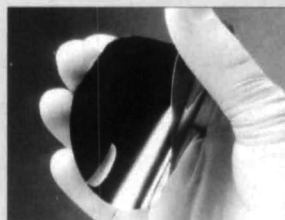
For the U.S. Global Change Research Program, the budget provides \$1.8 billion (a 6% increase) to observe, understand, predict, and assess the state of the Earth and how it changes in response to natural and human-induced forces. The budget provides \$264 million (a 10% increase) for the Partnership for a New Generation of Vehicles (PNGV), a cost-shared, industry partnership that aims to develop affordable cars that achieve up to three times the fuel economy of comparable vehicles and meet all applicable emission and safety standards.

The budget provides \$50 million (including \$25 million at NSF) to support large-scale, interdisciplinary research in three key areas within the Education Research Initiative: school readiness for learning reading and mathematics; K-3 learning in reading and mathematics; and education of PreK-12 teachers in mathematics, reading, and science. According to the proposal, the resulting knowledge base will be used to support the development, testing, and implementation of scalable and sustainable interventions to improve teaching and learning through information and computer technologies.

The budget provides \$2.4 billion to extend the Research and Experimentation (R&E) Tax Credit scheduled to expire on June 30, 1999, until June 30, 2000. According to the proposal, the R&E credit helps stimulate additional private sector investment in R&D which encourages technological advancement.

"But still try—for who knows what is possible?"

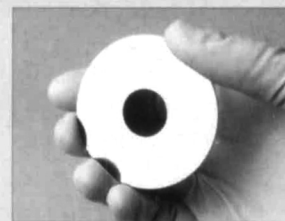
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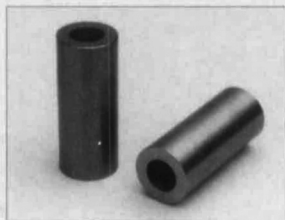
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Basic Research

For basic research, the proposal shows a 7% increase in the National Science Foundation's (NSF) budget. It provides \$3.92 billion for the continued support that NSF provides to all fields of scientific study and \$146 million for NSF to play a lead role in the IT2 initiative. The proposal calls for \$2.84 billion (a 5% increase) for basic science programs at the Department of Energy's (DOE) science budget. It includes resources for basic research as well as continued support for construction and operation of large scientific user facilities, including the Spallation Neutron Source and the international partnership on the Large Hadron Collider. According to the proposal, DOE's participation in IT2 will help to accelerate scientific discovery, and research under the Climate Change Technology Initiative will provide long-term advances toward energy efficiency and renewable energy technologies.

Within the National Aeronautics and Space Administration (NASA), the FY 2000 budget includes \$2.46 billion for the International Space Station (an 8% increase); \$2.2 billion for Space Science (a 4% increase over FY 1999); \$1.46 billion for Earth Science (a 3% increase); and \$493 million over five years for new technology investments to enable, for example, robotic outposts throughout the solar system.

Within the Department of Commerce (DOC), the budget includes \$918 million in the 21st Century Research Fund, \$239 million (an 18% increase) for the National Institute of Standards and Technology's (NIST) Advanced Technology Program to promote cost-shared R&D partnerships, and \$283 million to the National Oceanic and Atmospheric Administration (NOAA) for research to support decisionmaking on climate change, air quality, and ozone depletion.

Within the Department of Defense (DoD), the budget provides \$1.1 billion in basic research, \$3 billion in applied research, and \$3.3 billion in advanced technology development. Research on counter-terrorism and on improvements in the safety and security of the U.S. physical infrastructure and information and communications systems receive targeted increases.

See the Table for a breakdown of the FY 2000 budget proposal by agency. Further information can be obtained from the White House website (www.whitehouse.gov) and the American Association for the Advancement of Science website (www.aaas.org).

Table. R&D in the FY 2000 Budget by Selected Agencies and Departments
(budget authority in millions of dollars)

	FY 1999	FY 2000	Change FY 99-00	
	Estimate	Budget	Amount	Percent
Total R&D (Conduct and Facilities)				
NASA	9,714	9,771	57	0.6%
DOE	7,240	7,465	225	3.1%
NSF	2,721	2,934	213	7.8%
NOAA	600	600	0	0.0%
NIST	468	555	87	18.6%
Defense	40,638	38,481	-2,157	-5.3%
Nondefense	38,629	39,761	1,132	2.9%

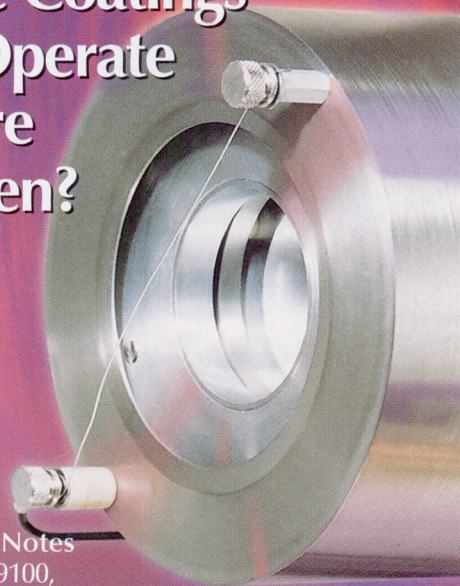
Source: Taken from the American Association for the Advancement of Science's preliminary report, February 4, 1999, Table 1.

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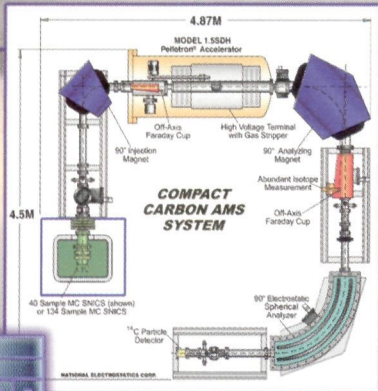
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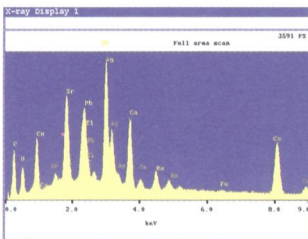


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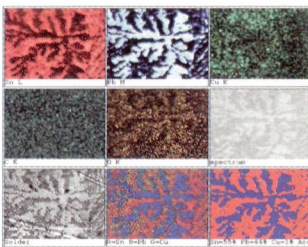
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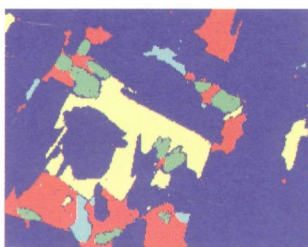
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