

Right: In the spring of 2007, scientists from more than 100 countries will embark on an intensive, coordinated campaign of multi-disciplinary scientific observations, research, and analysis in the arctic and antarctic regions as part of the International Polar Year (IPY) 2007–2008. The research is expected to dramatically expand our understanding of the polar regions—including their relationship to the global ecosystem—and to provide unprecedented insight into how societies in high northern latitudes are coping with environmental change. The National Science Foundation (NSF), which manages the U.S. Antarctic Program and chairs the Interagency Arctic Research Policy Committee, is the lead federal agency for the IPY. Shown in this photograph is a North Pole Arctic ice jumble. The constantly moving ice cover of the arctic ocean begins to break up in the spring, causing enormous sheets of ice to collide with one another and pile up like frozen waves.

Credit: Peter West, NSF

For more information:

<http://www.nsf.gov/news/overviews/arcticantarctic/index.jsp>

For more information:

NSF Budget Requests
www.nsf.gov/about/budget/

PMA Improper Payments Initiative
www.whitehouse.gov/omb/financial/fia/improv_accuracy_fed_payments.pdf

*Department of Treasury
Metric Tracking System*
www.fido.gov/mts/cfo/public/200510/



FINANCIAL HIGHLIGHTS

“The Foundation’s leadership in advancing the frontiers of science and engineering research and education is fueled by a commitment to forward-thinking administration and management processes. We pursue excellence and innovation in our business practices, just as in the research and education we support. The core values that enable our success include teamwork, mutual respect, integrity, creativity, responsibility, initiative, professionalism, and last but not least, a sense of humor. Above all we value our people, recognizing their expertise and trusting their judgment.”

Thomas N. Cooley



Thomas N. Cooley
Chief Financial Officer

From the Chief Financial Officer

I am pleased to join NSF Director Dr. Arden L. Bement, Jr. in presenting the National Science Foundation's *Performance Highlights* for FY 2005.

NSF has a strong tradition as an efficient and effective organization, and builds continuously on its legacy of excellence. Our core business operations are based on the principles of effective internal controls and timely access to reliable financial data.

NSF's electronic communications and processing systems are at the forefront of e-government, providing streamlined functions within the agency, as well as to our research and education communities. A few notable achievements of the past year include the following:

- Recognized as the first agency to earn a "Green" rating for financial performance on the President's Management Agenda (PMA) scorecard and sustaining this rating for 14 consecutive quarters.
- Achieved "Green" ratings for the PMA's Budget and Performance Integration initiative and for the Improper Payments initiative.
- Recognized by the Department of the Treasury and the Office of Management and Budget for achieving one of the highest agency marks on Treasury's Financial Management Scorecard and the governmentwide Chief Financial Officer (CFO) Council's financial management metrics.
- Our *Performance Highlights* report was named one of the top government annual reports by the League of American Communications Professionals for the fourth consecutive year.

In addition, I am pleased to report that the agency received its eighth consecutive unqualified "clean" audit opinion indicating that the financial statements were fairly stated in all material respects. The Auditors' Report included two reportable conditions. We take seriously our commitment to maintaining quality management practices and have already initiated improvements in these areas. More detailed information on our annual audit can be found in NSF's *FY 2005 Performance and Accountability Report*.

For NSF, excellence in financial management has enabled the agency to pursue critical investments in science and engineering research and education. Underlying all of these efforts is our guiding mission: to promote progress in science and engineering in order to help ensure the Nation's security, prosperity, and well being. Our success reflects the quality, integrity, and professionalism of the NSF staff. Our successes are a result of their collective outstanding performance.

A handwritten signature in black ink that reads "Thomas N. Cooley". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Thomas N. Cooley
March 2006

EXPLORING THE WORLD

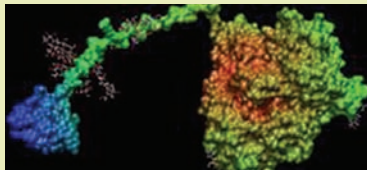


NSF supports a variety of informal science educational projects that reach millions of children and adults through films, museum exhibits, innovative television programs, radio shows, and web-based resources. *Peep and the Big Wide World* (PEEP) is a daily television series for 3- to 5-year-olds that teaches science to preschoolers. Research indicates PEEP viewers are more scientifically grounded than children who don't tune in. When presented with materials to manipulate and explore, fans are more likely to initiate explorations and use problem-solving strategies to solve the problems that they initiate. The series also provides parents with web-based and other outreach activities to extend science learning. *Forces of Nature* is a National Geographic film made with NSF support that showcases the awesome spectacle of earthquakes, volcanoes, and severe storms. The film follows scientists on their quest to understand what triggers these natural disasters.

For more information:

www.nsf.gov/news/now_showing/tv/peep.jsp

ETHANOL



To develop efficient large-scale conversion of biomass into ethanol to provide a clean-burning and renewable fuel source, researchers at the National Renewable Energy Laboratory simulated the action of the enzyme cellulase on cellulose using the CHARMM (Chemistry at HARvard Molecular Mechanics) code, a versatile community code for simulating biological reactions. The binding domain is in blue, the glycosylated linker in green, and the catalyst domain in orange and yellow. San Diego Supercomputer Center researchers are enhancing CHARMM to perform the largest ever simulation of a scientific problem, which will yield significant economic and environmental benefits.

For more information:

www.sdsc.edu/Press/2005/10/101305_biomass.html

Financial Highlights

In FY 2005, NSF maintained its record of excellence in financial management even as we, along with other federal agencies, faced an increasing need for accountability to the American taxpayer. We continued to build on our record of leadership in government business practices, particularly in electronic business and grants management. We further improved our financial management and sustained our “Green” ratings in both the PMA and the Department of the Treasury’s Financial Management scorecards. In addition, NSF achieved one of the top scores in the governmentwide CFO Council’s financial management metrics.

NSF’s high quality, responsive electronic communications and processing systems are the backbone of our operations and the key to our success in conducting business with the research and education communities we serve. One of our top priorities is to offer reliable, useful, and timely financial information to NSF managers so that they can make informed decisions and ensure ongoing accountability to our stakeholders. NSF’s three primary data systems—the Financial Accounting System, the Executive Information System, and ReportWeb—provide comprehensive financial, budgetary, merit review, and awards management data to NSF decision makers.

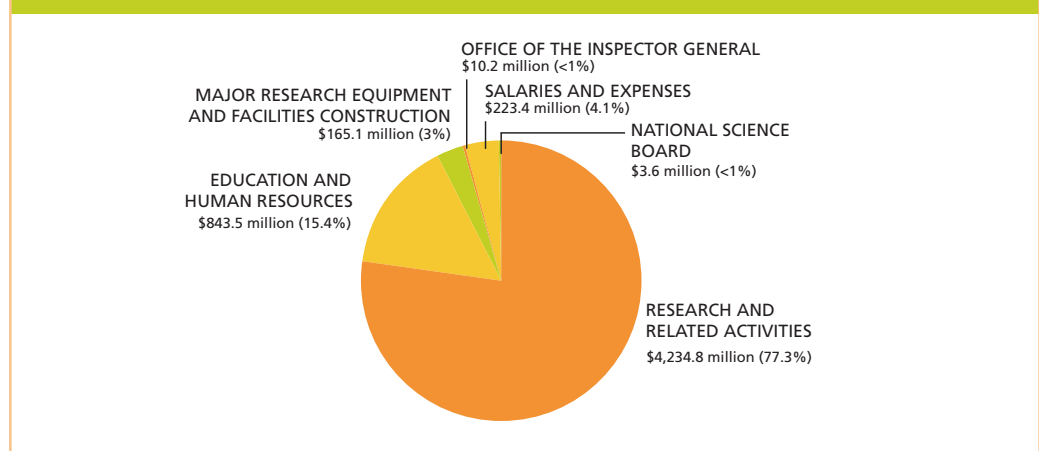
NSF prepares annual financial statements in conformity with generally accepted accounting principles of the United States and subjects them to an independent audit to ensure their reliability in assessing performance. In FY 2005, NSF received its eighth unqualified “clean” audit opinion. An unqualified audit opinion is a measure of the fair presentation of our financial statements.

The Foundation prepares a Balance Sheet, Statement of Net Cost, Statement of Changes in Net Position, Statement of Budgetary Resources, and Statement of Financing. Supplementary statements prepared include Budgetary Resources by Major Budgetary Accounts, Intragovernmental Balances, Deferred Maintenance, and Stewardship Investments.

The following pages feature highlights of NSF’s FY 2005 financial condition. Details of our assets and liabilities appear on page 17. The statement on Stewardship Investments is shown on page 19. A more detailed discussion of NSF’s financial performance and a complete set of financial statements, accompanying notes, and the audit opinion can be found in NSF’s *FY 2005 Performance and Accountability Report*.

NSF is funded primarily through six congressional appropriations that totaled \$5.5 billion in FY 2005, as shown on the chart below. NSF appropriations funded four strategic outcome goals: Ideas, Tools, People, and Organizational Excellence. Organizational Excellence focuses on the administrative and management activities that enable NSF to achieve its programmatic activities and mission. Funding for Organizational Excellence has been allocated among Ideas, Tools, and People to capture the (net) cost of each of these outcome goals, shown on the statement on page 18.

FY 2005 Budget Obligations by Account (\$5,480 million)

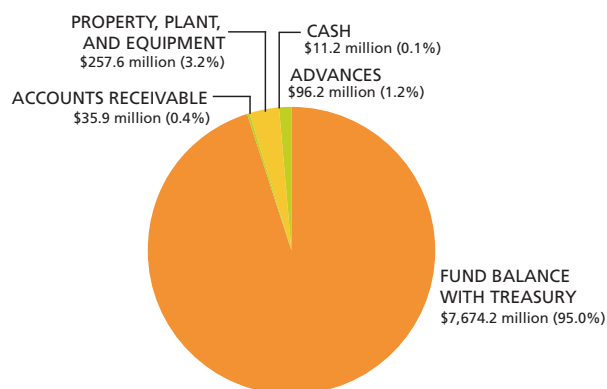




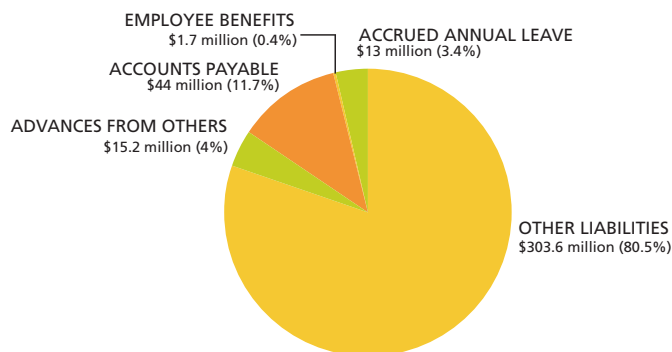
Significant Changes in Financial Position in FY 2005 (Amounts in Thousands)

Net Financial Condition	FY 2005	FY 2004	Increase/Decrease	% Change
Assets	\$8,075,059	\$7,929,034	\$146,025	2%
Liabilities	\$377,543	\$396,113	-\$18,570	-5%
Net Position	\$7,697,516	\$7,532,921	\$164,595	2%
Net Cost	\$5,408,174	\$5,100,143	\$308,031	6%

FY 2005 Assets



FY 2005 Liabilities



FY 2005 Assets and Liabilities

Fund Balance with Treasury; Property, Plant, and Equipment (PP&E); and Advances represent 99 percent of NSF's current year assets. *Fund Balance With Treasury* is funding available through the Department of the Treasury accounts from which NSF is authorized to make expenditures and pay amounts due. *PP&E* is capitalized property located at NSF headquarters and NSF-owned property in New Zealand and Antarctica that supports the U.S. Antarctic Program. *Advances* are funds advanced to NSF grantees, contractors, and other government agencies.

Advances From Others, Accounts Payable, and Accrued Liabilities (Other Liabilities) represent 96 percent of NSF's current year liabilities. *Advances From Others* are remaining prior year amounts advanced to NSF from other federal entities for the administration of grants on their behalf. *Accounts Payable* includes liabilities to NSF vendors for unpaid goods and services received. *Accrued Liabilities* are amounts recorded for NSF's grants and contracts for which work has been completed, although payment has not been made.

NSF's Net Position increased to \$7.7 billion in FY 2005, a 2 percent increase due to the increase in *Unexpended Appropriations*. *Unexpended Appropriations* is affected mainly by *Appropriations Received* and *Appropriations Used*, with minor impact from *Appropriation Transfers* from the U.S. Agency for International Development and *Other Adjustments*, which include appropriation rescissions and cancellations.

COMMUNICATING IN THREE DIMENSIONS



While most ancient cultures recorded civil matters and business transactions by inscribing characters on 2-dimensional sheets, new evidence shows that Peru's original inhabitants used a 3-dimensional system of knotted strings to track business transactions and affairs of state. National Science Foundation-supported anthropologist Gary Urton and database developer Carrie Brezine of Harvard University report that their computer analysis of 21 of the knotted objects, known as khipu, revealed distinct patterns that help confirm the textile devices were used for record keeping and to communicate affairs of state throughout the sprawling empire of the Inka—a spelling Urton prefers because it is closer to the native Peruvian language. Seven of the objects appeared to contain cumulative numerical data.

Deciphering the khipu information also helps explain how the vast Inka bureaucracy, which ruled the Andes from 1425 to 1532, stayed so organized without ever developing a system of 2-dimensional writing. According to Urton, khipu were used to record the information deemed most important to the state, which often included accounting and other data related to censuses, finance, and the military. In this regard, the discovery that khipu were used as ledger books reveals a new consonance between the Inka and other ancient cultures.

• For more information:

www.nsf.gov/news/news_summ.jsp?cntn_id=104350&org=NSF&from=news

Information about *Net Cost* is taken from NSF's Statement of Net Cost for Years Ended September 30, 2005 and 2004. Information about *Stewardship Investments* is taken from NSF's FY 2005 Stewardship Investments statement. Both can be found in the financial statements of NSF's *FY 2005 Performance and Accountability Report*.

**FY 2005 Net Cost of Investment Categories
(Amounts in Thousands)**

IDEAS		
Fundamental Science & Engineering Centers		\$ 2,327,110
Capability Enhancement		176,183
		<u>202,855</u>
Total Ideas Program Costs		2,706,148
Less: Earned Revenue		<u>119,826</u>
Net Ideas Program Costs		<u>2,586,322</u>
TOOLS		
Large Facilities		531,911
Infrastructure & Instrumentation		321,155
Polar Tools, Facilities, & Logistics		312,784
Federally Funded Research & Development Centers		<u>209,570</u>
Total Tools Program Costs		1,375,420
Less: Earned Revenue		<u>324</u>
Net Tools Program Costs		<u>1,375,096</u>
PEOPLE		
Individuals		894,227
Institutions		179,356
Collaborations		<u>379,489</u>
Total People Program Costs		1,453,072
Less: Earned Revenue		<u>6,316</u>
Net People Program Costs		<u>1,446,756</u>
Net Cost of Operations		\$ <u>5,408,174</u>



**Stewardship Investments: Research and Human Capital
(Amounts in Thousands) (Unaudited)**

	2005	2004	2003	2002	2001
RESEARCH AND HUMAN CAPITAL ACTIVITIES					
Basic Research	\$ 3,564,093	\$ 3,494,302	\$ 3,519,159	\$ 3,092,060	\$ 2,692,243
Applied Research	291,169	209,225	218,152	193,788	211,421
Education and Training	1,386,952	1,224,058	867,489	767,734	704,949
Non-Investing Activities	292,426	268,298	196,363	183,887	170,757
Total Research and Human Capital Activities	\$ 5,534,640	\$ 5,195,883	\$ 4,801,163	\$ 4,237,469	\$ 3,779,370
INPUTS, OUTPUTS, AND/OR OUTCOMES					
Research and Human Capital Activities					
<u>Investments In</u>					
Universities	\$ 3,970,851	\$ 3,705,751	\$ 3,310,365	\$ 2,919,897	\$ 2,631,405
Industry	223,563	196,260	178,000	185,062	162,176
Federal Agencies	143,316	107,212	144,792	106,458	125,823
Small Business	193,199	200,995	186,400	144,844	130,977
Federally Funded R&D Centers	1,003,711	985,665	981,606	881,208	728,989
	\$ 5,534,640	\$ 5,195,883	\$ 4,801,163	\$ 4,237,469	\$ 3,779,370
<u>Support To</u>					
Scientists	\$ 454,053	\$ 477,970	\$ 427,304	\$ 394,144	\$ 355,261
Postdoctoral Programs	162,132	175,680	163,239	148,334	128,499
Graduate Students	538,233	546,084	475,315	402,620	362,820
	\$ 1,154,418	\$ 1,199,734	\$ 1,065,858	\$ 945,098	\$ 846,580
Outputs and Outcomes					
<u>Number Of</u>					
Awards Actions	22,000	23,000	23,000	21,000	20,000
Senior Researchers	32,000	31,000	30,000	28,000	27,000
Other Professionals	12,000	15,000	12,000	11,000	10,000
Postdoctoral Associates	6,000	6,000	6,000	6,000	6,000
Graduate Students	27,000	29,000	27,000	26,000	25,000
Undergraduate Students	33,000	35,000	32,000	32,000	31,000
K-12 Students	11,000	14,000	14,000	11,000	11,000
K-12 Teachers	74,000	86,000	85,000	84,000	83,000

NSF's mission is to support basic scientific research and research fundamental to the engineering process as well as science and engineering education programs. Toward this end, NSF's Stewardship Investments fall principally into the categories of Research and Human Capital. In Research, most NSF funding is devoted to basic research, with a relatively small share going to applied research. This funding supports both the conduct of research and the necessary supporting infrastructure, including state-of-the-art instrumentation, equipment, computing resources, and multi-user facilities such as digital libraries, observatories, and research vessels and aircraft. NSF's Human Capital investments focus principally on education and training, toward a goal of creating of a diverse, internationally competitive and globally engaged workforce of scientists, engineers, and well-prepared citizens. NSF supports activities to improve formal and informal science, mathematics, engineering, and technology education at all levels, as well as public science literacy projects that engage people of all ages in life-long learning. The decrease in the number of people involved in NSF activities in FY 2005 reflects decreased funding for programmatic activities related to science and engineering education.