Summary and Analysis of the
President’s FY 2011 Budget Request
for Federal Research and Education Programs

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Introduction

On February 1\textsuperscript{st}, President Obama submitted to Congress an unprecedented $3.8 trillion FY 2011 budget request. The proposed budget, which includes a renewed emphasis on job creation and economic growth, provides significant increases for education, scientific research and development, and innovation programs.

Highlighting the prioritization of these programs, the increases would be provided despite the White House instituting a three-year freeze in overall spending for non-security domestic discretionary programs projected to save $250 billion over the next decade.

The President proposes significant national investments in agencies and programs critical to the research and education communities:

- National Institutes of Health – $32.24 billion in FY 2011 (3.2 percent above the FY 2010 appropriated funding level);
- National Science Foundation (NSF) – $7.42 billion in FY 2011 (7.2 percent above the FY 2010 appropriated funding level);
- Department of Energy’s Office of Science – $5.12 billion in FY 2011 (4.4 percent above the FY 2010 appropriated funding level);
- U.S. Department of Agriculture’s Agriculture and Food Research Initiative – $429 million in FY 2011 (64 percent above the FY 2010 appropriated funding level); and
- Pell Grants – The maximum Pell Grant award per student would be raised to $5,710 in FY 2011 (2.8 percent), and the Pell Grant would become a mandatory program.

There is also continued prioritization of climate science research activities at NSF, the National Oceanic and Atmospheric Administration, and the National Aeronautics and Space Administration (NASA) Earth Science programs.

To fund his initiatives, the President necessarily has to propose spending reductions elsewhere in the budget. President Obama’s FY 2011 budget proposes to terminate or reduce 126 programs (including Congressionally supported ones such as NASA’s Constellation program and the Department of Defense’s Alternative Engine for the Joint Strike Fighter) for overall savings of $23 billion. In a recent report, the White House indicated that the Congress went along with about 60 percent ($6.8 billion) of President Obama’s proposed discretionary spending cuts in the FY 2010 appropriations bills. The President, continuing his effort to reduce congressionally-directed spending, or earmarks, has also eliminated from his budget proposal funding for the projects earmarked by Congress in the FY 2010 appropriations bills.

Ensuring that Congress enacts the proposed increases in this budget through the annual appropriations process will be a significant challenge in this critical mid-term election year, as Congressional attention is focused on the continuing serious effects of the economic recession and concern over increasing budget deficits. The concern comes as Congress must work within overall fiscal constraints, including the President’s own cap on spending for domestic discretionary programs, evaluate whether to restore any of the more than 120 programs proposed for termination or reduction, and make room for the inclusion of Congressional earmarks.
Nonetheless, the President’s recognition of education, scientific research and development, and technology innovation as key investments to create new industries and jobs for the next decade and to invigorate the United States economy at a time of burgeoning global competition is a significant “win” for the academic and research communities.

**Department of Commerce**

**National Oceanic and Atmospheric Administration**

The President’s FY 2011 budget request includes $5.554 billion for the National Oceanic and Atmospheric Administration (NOAA), which is the largest request NOAA has ever received. It represents an increase of $806 million or 17 percent above the FY 2010 enacted level. As has been the case for the last several years, the majority of this increase would be focused on NOAA’s satellite programs; in this year’s case, for a major restructuring of the National Polar-orbiting Operational Environmental Satellite System (NPOESS) program. Smaller increases for NOAA research activities are also proposed. Research and operations focused on climate change would see the most significant growth under the President’s proposal.

Below is a breakdown of funding according to each NOAA line office:

**NOAA Research – Office of Oceanic & Atmospheric Research**

The President requests $464.8 million for NOAA’s Office of Oceanic and Atmospheric Research (OAR), an increase of $15.7 million or 3.5 percent over the FY 2010 level. Within OAR, the request includes a total of $241.5 million for climate research, including $173.2 million for the Competitive Research Program, a $29 million or 20 percent increase. Weather and Air Quality Research would receive $75.5 million, a $5.5 million increase, and Ocean, Coastal and Great Lakes Research would receive $124.3 million, including a slight decrease for the National Sea Grant College Program at $62.5 million (which includes $1 million for aquatic invasive species research and $4.3 million for marine aquaculture research), and $11.6 million for a new integrated ocean acidification program. In addition, as has been the case in recent budgets, the FY 2011 request seeks to merge the National Undersea Research Program (NURP) with the Ocean Exploration Program. The requested funding for the combined program is $27.8 million, which represents a $2.87 million decrease when taking into account the combined funds appropriated in FY 2010 for the separate NURP and Ocean Exploration programs.

**National Environmental Satellite, Data and Information Service**

The FY 2011 request includes $2.209 billion for National Environmental Satellite, Data and Information Service (NESDIS), which is $811 million or 58 percent more than the FY 2010 enacted level. This increase can be attributed to a proposed major reorganization of the NPOESS program and new funding to get the satellite’s procurement back on track. The restructuring of NPOESS, a tri-agency program between NOAA, the Department of Defense (DOD), and the National Aeronautics and Space Administration (NASA), is in response to ongoing concerns surrounding the mounting costs and scheduling delays that have compromised the success of this program up until this point. The primary change is the elimination of the tri-agency structure in
2010; NOAA and DOD/Air Force will no longer jointly procure NPOESS. Instead, civilian and military procurements will be split – NOAA and NASA will have responsibility for the afternoon orbit while DOD will take responsibility for the morning orbit. NOAA’s portion will be renamed the Joint Polar Satellite System (JPSS). The agencies will continue to collaborate in areas that have been successful in the past (e.g. shared ground systems). A detailed plan for transitioning to the new structure will be released in the weeks to come. The new JPSS program would receive $1.06 billion under the President’s proposal, which is $679 million or more than double the FY 2010 appropriation for NPOESS.

The request also includes increases or new funding for other procurement activities within NESDIS, including $730 million for Geostationary Systems-R series (GOES-R) satellites, an increase of $62.5 million or 9.4 percent; $50 million for Jason-3, a $30 million increase; $3.7 million for the Constellation Observing System for Meteorology, Ionosphere, and Climate (COSMIC-2), which represents new funding; and $9.5 million to refurbish the existing NASA Deep Space Climate Observatory (DSCOVR) satellite.

National Weather Service
The request includes $1.003 billion for the National Weather Service (NWS), a $3.3 million increase over FY 2010 (less than one percent). The request highlights a $15 million boost, for a total budget of $26.7 million, to fund the Next Generation Air Transportation System (NextGen) to improve aviation weather services. The request also includes roughly flat funding for NEXRAD ($46.4 million) and the Advanced Weather Interactive Processing System (AWIPS) ($39.4 million).

National Ocean Services
The President’s budget request includes $550.6 million for the National Ocean Service (NOS), which is a $28.1 million or a 5.1 percent decrease from the FY 2010 enacted level. Within NOS, the President’s request would provide $14.55 million for the Integrated Ocean Observing System (IOOS) regional observations, $6.6 million for NOAA IOOS activities, and $6.77 million in new money for coastal and marine spatial planning activities in response to the framework developed by a White House Task Force in December.

National Marine Fisheries Service
The President proposes $992.3 million for the National Marine Fisheries Service (NMFS). This would represent a decrease of $15.8 million or 3.7 percent. The request highlights $8.4 million for aquaculture activities, $2.3 million of which would be added to the budget to support the ongoing NOAA/USDA alternative feeds research initiative.

NOAA Education Program
The budget request includes $20.76 million for NOAA Education Programs, which is $32.995 million less than the FY 2010 appropriated amount. This cut is the result of the proposed elimination of a number of education programs and projects within the account that are typically added to the budget via Congressional earmark, including the BWET regional program and the Educational Partnership Program with Minority Serving Institutions (EPPMSI).
The NOAA FY 2010 Budget Blue Book can be accessed here: 

**National Institute of Standards and Technology**

The National Institute of Standards and Technology (NIST), housed within the Department of Commerce, would receive $918.9 million in the FY 2011 budget request, an increase of $62.3 million or 7.3 percent above the FY 2010 appropriated level. When Congressionally-directed projects in the FY 2010 budget are removed, the proposed increase would be $119.8 million. NIST is one of the agencies, along with the National Science Foundation and the Department of Energy’s Office of Science, which the President has proposed to double as part of an investment in creating knowledge that will be the foundation of future jobs and innovative new industries in the United States.

While NIST’s funding primarily supports intramural laboratory programs, NIST does have a few programs that support extramural activities. Among those programs, the Technology Innovation Program (TIP) would receive $79.9 million in FY 2011, an increase of $10.0 million above the FY 2010 appropriated level. TIP funds joint ventures between universities and small and medium-sized businesses in research areas to address national needs; support for TIP complements a new innovation initiative within NSF to support university partnerships to expand the economic and societal impacts of academic research. Another extramural program, the Hollings Manufacturing Extension Partnership (MEP), would receive $129.7 million, an increase of $5.0 million above the FY 2010 appropriated level.

In FY 2010, Congress provided $20 million for a grant program that gives competitive awards for construction of research science buildings at colleges, universities, and other research organizations. Funding for this program is not included in the FY 2011 budget request. However, the Administration has never included funding for this program in a budget request, but Congress has added funds for it in each of the last three years.

In the intramural programs, NIST’s Scientific and Technical Research and Services (STRS) account would receive $584.5 million in the FY 2011 budget request, an increase of $69.5 million or 13.5 percent above the FY 2010 appropriated level. The NIST budget request includes funding increases for intramural initiatives in the following areas: manufacturing and construction in a clean-energy economy; interoperability standards for emerging technologies, such as the smart electric power grid and health information technology; cybersecurity; measurement science and standards to support manufacturing and regulatory approval of biologic drugs; disaster resilient buildings and infrastructure; sustainable energy sources (including photovoltaics) and nanomaterials; and enhancing STEM education.

Information about the NIST budget request is available at:
Economic Development Administration

Regional Innovation Clusters and Business Incubator Networks
President Obama would increase the focus of the Economic Development Administration (EDA) to reflect the Regional Innovation Clusters and Business Incubator Networks initiatives that were first included in his FY 2010 budget at a level of $50 million, but enacted by Congress at a much smaller amount. The two programs within EDA that would provide support for these initiatives are the Technical Assistance program, which would receive an increase of $3.6 million and the Economic Adjustment program, which would receive an increase of $86.4 million. Of these programs, $75 million would be reserved for regional planning and matching grants for the creation of Regional Innovation Clusters with the goal of using the individual strengths of different regions to increase competition, job creation, and overall economic growth. Note that the increases in EDA programs are actually transfers from other programs within EDA that have traditionally been less flexible in the projects they fund. The President’s overall budget request for FY 2011 for EDA programs is $246 million, a decrease of $9 million or 3.8 percent.

Department of Defense

In the FY 2011 President’s budget request, the basic research (6.1) programs at the Department of Defense (DOD) would receive $2.00 billion, which is $125.2 million, or 6.7 percent, above the FY 2010 level. The actual funding proposed to be directed to new initiatives and programs is likely to be somewhat larger, as the Administration will have eliminated the Congressionally-directed projects in the FY 2010 appropriations bills, which are usually on the order of $100 million.

A significant portion of the basic research increase is directed to the Defense Advanced Research Projects Agency (DARPA), where basic research would grow by 59.4 percent, to $328.2 million in FY 2011.

DOD would also continue and expand the Minerva Initiative, which funds academic research on social science and cultural issues important to the DOD mission. In FY 2011, the program would receive $15.3 million, and would expand to new topics such as theories of deterrence and the national security implications of energy and climate change.

Science, technology, engineering, and mathematics (STEM) education programs are receiving attention across the federal government, and DOD is no exception. The National Defense Education Program (NDEP), which includes scholarships and fellowships for undergraduate and graduate students in STEM fields critical to DOD, the National Security Science and Engineering Faculty Fellowships, and K-12 STEM initiatives, would receive $109.9 million in FY 2011, an increase of 38.6 percent over FY 2010.

Overall, funding for DOD Science and Technology (Basic Research, Applied Research, and Advanced Technology Development) would receive a total of $11.8 billion in FY 2011, a 12.2 percent decrease from FY 2010.
Defense-Wide Programs

Defense-wide programs cover all DOD research and development activities outside of the service branches; this includes DARPA, the Chemical and Biological Defense Program, the Defense Threat Reduction Agency, the Office of the Secretary of Defense, and other programs. Defense-wide basic (6.1) research programs would be funded at $535 million for FY 2011, an increase of 30.6 percent from the final FY 2010 level, and the Defense-wide applied (6.2) research programs would be funded at $1.77 billion, an increase of 0.8 percent.

DARPA

DARPA would receive $3.1 billion for FY 2011, an increase of 3.8 percent from FY 2010. In particular, DARPA basic research would grow by 59.4 percent, to $328.2 million.

Army

The Army’s basic (6.1) research programs would be funded at $406.9 million for FY 2011, a decrease of 5.8 percent from the final FY 2010 level, and its applied (6.2) research programs would be funded at $841.4 million, a decrease of 37.1 percent.

Navy

The Navy’s basic (6.1) research programs would be funded at $556.4 million for FY 2011, an increase of 1.3 percent from the final FY 2010 level, and its applied (6.2) research programs would be funded at $678.7 million, a decrease of 5.6 percent.

Air Force

The Air Force’s basic (6.1) research programs would be funded at $500.5 million for FY 2011, an increase of 3.7 percent from the final FY 2010 level, and its applied (6.2) research programs would be funded at $1.18 billion, a decrease of 3.3 percent.


Department of Education

The President’s FY 2011 budget request would provide increases for programs that support the Department’s stated goals of restructuring K-12 education, increasing college access and completion, investing in innovation, and rewarding success. In addition, the President is dedicated to consolidating and streamlining programs to help cut costs. Examples of this include his proposed consolidation of 38 K-12 programs into 11 funding tracks and elimination of the subsidies to private lenders under the Federal Family Entitlement Loan Program (FFELP). Many of these funding increases and new programs are dependent on the reauthorization of the Elementary and Secondary Education Act (ESEA) and the successful passage of the Student Aid and Fiscal Responsibility Act (SAFRA), which has passed the House and is pending in the Senate. Neither the House nor the Senate have taken up the reauthorization of ESEA, and due to
its size and scope and Congress’ crowded legislative agenda, it is unlikely to move through quickly.

In addition, the President’s FY 2011 budget request includes an increased focus on competitively funded programs. Although the President requested flat funding for many discretionary programs, education was an exception. In FY 2010, the Department’s enacted budget included $20.8 billion in formula funded programs and $4.2 billion in competitive funded programs; the President’s FY 2011 budget request includes $20.3 billion for formula funded programs and $7.8 billion in competitive funded programs. This is an increase of 85.7 percent for competitive funding.

The total Department budget request is $50.7 billion (please note this includes $1 billion that would be submitted by the President in a budget amendment if Congress reauthorizes ESEA), which is an increase of $4.5 billion or 7.5 percent over the FY 2010 enacted level.

**Student Financial Assistance**

President Obama’s FY 2011 budget request assumes the changes to the student aid programs that were outlined in the FY 2010 budget request. This includes Congress ending the FFELP program and allowing all federal student loans to be made in the Direct Loan (DL) program, thereby ending subsidies to private lenders. This proposal is dependent on the enactment of SAFRA.

**Pell Grant**

In his FY 2011 budget request, President Obama would transfer funding for the Pell Grant program from discretionary to mandatory spending, creating a new entitlement. Appropriators have previously objected to this idea and the House-passed SAFRA created only a partial entitlement.

Based on the proposed new entitlement structure, the maximum Pell Grant award would be increased to $5,710. This would be an increase of $160 or 2.8 percent above the FY 2010 maximum. Additionally, the President would set the increase rate at a level of the consumer price index plus 1 percent each year for the next 10 years.

**Income-Based Repayment**

The President’s request would provide $7.5 billion over 10 years to expand the income-based repayment (IBR) program. The new proposal would cap monthly student loan payments at 10 percent of any income that exceeds 150 percent of the federal poverty line and would forgive any outstanding payments after 10 years for work in public service and 20 years for other professions. The existing program, which began in July 2009, currently caps monthly payments at 15 percent of any income that exceeds 150 percent of the federal poverty line and forgives outstanding payments after 10 years for public service work and 25 years for any other profession.

**Campus Based Aid Programs**

Campus Based Aid programs include the Perkins Loan program, the Supplemental Educational Opportunity Grants (SEOG), and the Federal Work-Study program. The President’s FY 2011
budget request would level fund both SEOG and Federal Work-Study at $757.5 million and $980.5 million, respectively. The Perkins Loan program did not receive funding in FY 2010. SAFRA would expand and restructure the program, including shifting the program from discretionary to mandatory funding and moving responsibility of servicing loans from the individual institutions to the Department.

*Academic Competitiveness (AC)/Science and Mathematics Access to Retain Talent (SMART) Grants*
Funding for these two programs is not included in the President’s FY 2011 budget request as they are scheduled to sunset after the 2010-2011 academic year.

*Leveraging Education Assistance Partnerships (LEAP)*
The President’s budget would eliminate the LEAP program as part of the Administration’s work towards reducing duplicative or ineffective programs. In FY 2010, this program was funded at a level of $63.9 million and is the highest funded program proposed for elimination.

**Higher Education**

*Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) and TRIO Programs*
Both GEAR UP and TRIO programs would be level funded in FY 2011, according to the President’s budget request. GEAR UP would receive $910.1 million and TRIO would receive $323.2 million.

*Javits and GAANN*
President Obama requested $9.7 million for the Javits Fellowship program and $31 million for the Graduate Assistance in Areas of National Need (GAANN), both of which are equal to the FY 2010 enacted levels.

*International Education and Foreign Language Studies*
The President’s FY 2011 budget request would provide flat funding for the International Education and Foreign Language Studies program. The funding levels would be $108.4 million for domestic programs, which include National Resource Centers (NRCs); $15.6 million for overseas programs, which includes the Fulbright Program; and $1.9 million for the Institute for International Public Policy.

*Institutional Development*
The President’s FY 2011 budget request includes $520 million for support to institutions serving minority or disadvantaged students. This is an increase of $23.7 million or 4.8 percent above the FY 2010 level. The largest increases would go to support for Historically Black Colleges, Universities, and Graduate Institutions.

*Institute of Education Services*
For FY 2011, the President is requesting $738.8 million, an increase of $79.8 million or 12 percent. This would provide an additional $45 million for R&D projects in all levels of education and include a focus on evaluation and assessment and longitudinal data system actives. In
addition, the request includes a collaboration with the National Science Foundation on an evaluation initiative.

**Other Programs within the Department of Education**

*Promise Neighborhoods*

The President requests $210 million to expand the Promise Neighborhoods program that was originally established in his FY 2010 budget request. This funding would go to a second round of planning grants (one year) and establish implementation grants (five years) for proposals with a plan focusing on integrating work by foundations, local education agencies (LEAs), schools, and nonprofit organizations. Additionally, the President envisions coordination between this program in the Department of Education and other programs and services within the Department of Housing and Urban Development, Department of Justice, and Department of Health and Human Services.

*American Graduation Initiative*

Included in the pending Student Aid and Fiscal Responsibility Act, the American Graduation Initiative (AGI) would help reach the goal of increasing the number of college graduates in the U.S. The President supports the legislation, and includes in his budget request $10.6 billion to be used over 10 years to help achieve the goal of five million additional graduates by 2020. Funding for this program is dependent on the passage of SAFRA.

*College Access and Completion Fund*

Also included in SAFRA is the College Access and Completion Fund. The Administration has placed a priority on access and completion, and the President would provide $3.5 billion over 5 years to provide grants to states and intuitions of higher education to stimulate innovative approaches to college access and completion.

*American Recovery and Reinvestment Act Continued Programs*

President Obama’s FY 2011 budget request would provide additional funding for programs originally funded through the American Recovery and Reinvestment Act (ARRA). The additional funding would be provided annually as part of the appropriations process and would establish the programs as permanent additions to the Department.

*Investing in Innovation*

The President would provide increased funding for the Investing in Innovation (i3) Fund. Requests for applications for the ARRA-funded i3 competition have not yet been released, but a solicitation is expected to be released shortly. $650 million was provided for i3 in ARRA, with the President’s FY 2011 budget request seeking another $500 million. In addition, $150 million of the newly requested $500 million would be reserved for STEM projects.

*Race to the Top*

President Obama would also continue funding for the Race to the Top program that was created with $4 billion from ARRA. The President’s FY 2011 request would allocate an additional $1.35 billion and expand the program to include school districts as applicants. Therefore, institutions of higher education would have to partner with school districts to be eligible for funding. The original program limited applicants to states.
New Programs within the Department of Education
The Department’s new focus on competition and innovation is apparent in its increase in the number of and types of competitive programs. While many of these programs are limited to LEAs and states, topics of focus include evaluation and assessment and teacher and leader quality.

Effective Teaching and Learning: Science, Technology, Engineering, and Mathematics (STEM)
President Obama would provide $300 million in his FY 2011 budget request for a new program to expand the previous Mathematics and Science Partnerships program, which was funded in FY 2010 at a level of $180.5 million. This new program would provide competitive grants to state education agencies (SEAs) and partnerships between SEAs and nonprofit institutions, institutions of higher education, or other organizations to improve STEM teaching and learning.

Effective Teachers and Leaders
President Obama would provide $2.5 billion for the Effective Teachers and Leaders program designed to provide formula grants to states and LEAs to help develop and support the teaching profession, especially in high need schools and subjects.

Teacher and Leader Innovation Fund
The President’s FY 2011 request would provide $950 million for the Teacher and Leader Innovation Fund, which would make competitive awards to states and LEAs to improve teacher effectiveness, especially in high-needs schools. This program would incorporate the existing Teacher Incentive Fund.

Teacher and Leader Pathways
In his FY 2011 budget request, President Obama would provide $405 million to explore LEA, university, and other pathways for teacher preparation, and additionally encourage work on recruitment, preparation, and retention of effective teachers and leaders. The focus of this program would be to increase the education workforce in lowest achieving schools and in high-need subjects. The Teacher and Leader Pathways program provides almost triple the funding previously allocated for programs with similar goals, including the Teacher Quality Partnership program which would be consolidated into this new program.

Partnership for Workforce Innovation
The President proposes the inclusion of $30 million in his FY 2011 budget for a Workforce Innovation fund and another $30 from the Adult Education National Leadership Activities fund to contribute to the Partnership for Workforce Innovation, a collaboration between the Department of Education and Department of Labor totaling $321 million that would be used for competitive grants dealing with innovating and improving outcomes with the goal of improving the programs authorized by the Workforce Investment Act.

Successful, Safe, and Healthy Students
President Obama would provide $410 million for the new Successful, Safe, and Healthy Students program for a new program designed to incorporate the Safe and Drug-Free Schools and Communities National Activities program and others with similar goals. The three stated
priorities of this new program are improving school climate, students’ physical health, and mental health. In addition, the new program would establish a National Activities Authority to reserve funding for emergency preparedness initiatives for schools, including institutions of higher education.

The budget document for the Department of Education can be viewed at: http://www2.ed.gov/about/overview/budget/budget11/index.html.

**Department of Energy**

President Obama’s FY 2011 budget request continues his commitment to investing in scientific research and education through the Department of Energy (DOE) to foster discovery science, innovation, and advances in technology to develop clean, alternative sources of energy to enhance the nation’s security and independence from foreign oil, address climate change, and educate the workforce for the clean energy economy. The President’s budget proposals for DOE continue to seek the nation’s best talent from universities, industry, and the national laboratories to tackle the challenge of leading the development of clean energy technologies in a global economy. (Please note that this report focuses only on the civilian R&D programs of DOE).

Even with an overall freeze proposed for domestic discretionary spending, the President would provide $28.4 billion overall for the Department of Energy (DOE) in his FY 2011 budget request, a $1.8 billion (6.8 percent) increase above the FY 2010 enacted funding level. The President continues strong support for basic research through the Office of Science, requesting for the first time in excess of $5 billion for these programs. Within the Office of Science, an additional $40 million is requested to support the Energy Frontier Research Centers (EFRCs) program.

Emphasizing the importance of sustained investment in clean energy technologies, the President proposes nearly across-the-board increases for Energy Efficiency and Renewable Energy (EERE) programs, including wind energy, solar energy, and geothermal energy. The President also requests an additional $300 million to sustain funding for high-risk, high-reward transformational energy research through the Advanced Research Projects Agency-Energy (ARPA-E). To support innovative energy efficiency and renewable energy projects, the President also requests $500 million to subsidize $3 to $5 billion in loan guarantees.

Of specific interest to universities, the President continues his Energy Innovation Hubs initiative. The FY 2011 budget provides funding to support the three Energy Innovation Hubs approved in the FY 2010 Consolidated Appropriations Act (Fuels from Sunlight Hub; Nuclear Energy Modeling and Simulation Hub; and Energy Efficient Buildings Systems Hub) and proposes $34 million for a new Hub in FY 2011 – the Batteries and Energy Storage Hub. In all, $107 million is proposed for the Energy Innovation Hubs in FY 2011.

The President’s budget proposal would also engage the Department of Energy in education and workforce development again linked to the development of the clean energy economy. The Administration resubmits its RE-ENERGYSE (Regaining our Energy Science and Engineering
education initiative, requesting $55 million for higher education fellowships, development of an energy-focused interdisciplinary Master’s program, and K-12 education and outreach. This program would be implemented in collaboration with the National Science Foundation. The President also proposes $36 million to support students and educators in scientific disciplines to promote development of the nation’s technical U.S. workforce, including Graduate Fellowships and continuation of the Early Career Research program.

The President emphasizes the importance of sustaining a balanced portfolio of energy technologies to meet the nation’s current and future demand. The FY 2011 budget proposes to reorganize the Nuclear Energy programs and requests an additional $36 billion – for a total of $54.5 billion – in new loan guarantees for nuclear power facilities. The Administration also supports continued development of carbon capture and storage technologies to address the climate effects of coal-fired power generation.

Reflecting the President’s concern over the Congressional earmarking of funds in appropriations bills, the budget request would delete funding totaling $421.45 million for projects funded by Congress in the FY 2010 appropriations bills for the civilian research programs at DOE and reallocate it to ongoing programs and initiatives.

Office of Science
For the basic research programs of the Office of Science, President Obama would provide $5.12 billion overall, which is $217.7 million (4.4 percent) above the FY 2010 enacted level. The Administration continues to advocate for the doubling of physical sciences funding for the Office of Science programs. Almost all programs within the Office of Science are slated for funding increases to support basic research.

High Energy Physics
For High Energy Physics (HEP), a total of $829 million is requested, an increase of $18.5 million (2.3 percent) above the FY 2010 enacted level. The Administration would continue to run the Tevatron at the Fermi National Accelerator Laboratory (Fermilab) in Illinois. DOE would support U.S. experiments and scientists at the Large Hadron Collider (LHC) in Geneva, Switzerland. Construction continues for the NuMI Off-Axis Neutrino Appearance (NOvA) project with an additional $12 million requested for the project. The HEP program will also support project engineering and design of the Long Baseline Neutrino Experiment and the Muon to Electron (Mu2e) experiment, which are just getting underway.

Nuclear Physics
The President’s budget would provide $562 million for nuclear physics research, an increase of $27 million (5 percent) above the FY 2010 enacted level. In FY 2011, DOE would support core nuclear physics research at over 85 academic institutions and nine of the DOE’s national laboratories. The request supports near optimal levels of operations at four scientific user facilities while continuing construction for the upgrade at the Continuous Electron Beam Accelerator Facility (CEBAF). The Administration also requests initial design and engineering funding for the Facility for Rare Isotope Beams (FRIB).
Biological and Environmental Research
The FY 2011 budget request would provide $626.9 million for Biological and Environmental Research (BER), an increase of $22.7 million (3.8 percent) above the FY 2010 enacted level. The President’s budget continues to support the three DOE Bioenergy Research Centers, the Joint Genome Institute, and other research facilities. The President proposes to expand climate research in FY 2011, requesting $21.4 million to focus on resolving uncertainties surrounding the prediction of climate change and to increase the accuracy of projections.

Basic Energy Sciences
The President would provide $1.835 billion for Basic Energy Sciences (BES), the largest budget within the Office of Science. The proposed budget request would be $198.5 million (12.1 percent) above the FY 2010 enacted funding level. In FY 2011, DOE will continue support for the existing Energy Frontier Research Centers (EFRCs), many of which are based at U.S. universities. DOE indicates that about $66 million would be competed to support single investigators, small groups, and additional EFRCs to focus on the discovery and development of new materials and research for energy applications.

Funding of $34 million is also requested to support the initiation of the new Batteries and Energy Storage Energy Innovation Hub. The new Hub will focus on the design of advanced materials architectures; control of charge transfer and transport; development of probes of the chemistry and physics of energy storage; and the development of multi-scale computational models. Funding totaling $24.3 million is also requested to support the Fuels from Sunlight Hub approved in FY 2010. BES is responsible for the operation and management of several major DOE user facilities, including first-year operation of the Linac Coherent Light Source. Construction will continue on the National Synchrotron Light Source II.

A new $20 million initiative is proposed to develop the science base for computational design of advanced engines. The multi-scale simulation of internal combustion engines will focus on models that span vast scale ranges; improve understanding of fundamental physical and chemical properties; and develop science-based predictive simulation and modeling design of engines.

Advanced Scientific Computing Research
The budget request would provide $426 million for Advanced Scientific Computing Research (ASCR), an increase of $32 million (8.1 percent) above the FY 2010 enacted level. The President’s budget would continue research efforts at the Scientific Discovery through Advanced Computing (SciDAC), applied mathematics, and computer science programs. The budget request would support continued operations of the Leadership Computing Facilities at Oak Ridge National Laboratory and Argonne National Laboratory at the Petascale level. The budget envisions increasing the capacity at the National Energy Research Scientific Computing (NERSC) facility at Lawrence Berkeley National Laboratory to one Petaflop with the acquisition and operation of NERSC-6.

Fusion Energy
The President requests $380 million for Fusion Energy Sciences, which is $46 million (10.8 percent) below the FY 2010 enacted funding level. The Administration indicates that funding will be reduced for the International Thermonuclear Experimental Reactor (ITER) to research
burning of plasmas due to the current project status. The U.S. participates in ITER, which is under construction in France. The budget would support domestic research facilities and proposes an increase of $6.5 million for the High Energy Density Laboratory Plasma program which is a joint program with DOE’s National Nuclear Security Administration (NNSA).

**Workforce Development for Teachers and Scientists**

The Administration engages DOE in activities to support the development of the future workforce for scientists and teachers, requesting $35.6 million, an increase of $15 million (72.2 percent) above the FY 2010 level. This program funds the DOE Office of Science Graduate Fellowship program for which $10 million is requested in FY 2011 to fund an additional 170 fellowships. The Administration also proposes $16 million to fund an additional 60 Early Career Research Awards at universities and DOE national laboratories in FY 2011.

**Energy Transformation Acceleration Fund**

The President would provide $300 million to continue support for high-risk, high-reward transformational energy research and development through the Advanced Research Projects Agency-Energy (ARPA-E). Within this amount, $273 million would be provided for projects, and $27 million would be provided for program administration. ARPA-E was initially funded with $400 million in the American Recovery and Reinvestment Act (ARRA), which remains available through FY 2010.

**Energy Efficiency and Renewable Energy**

The President would provide $2.36 billion for energy efficiency and renewable energy programs in his FY 2011 budget request. The request would represent an increase of $113 million (5 percent) above the FY 2010 enacted level. These programs continue to receive strong Administration support as essential to developing the clean energy economy. For FY 2011, the Administration proposes several significant demonstration initiatives which are discussed below.

**Hydrogen Technology**

As it did last year, the Administration would restructure the Hydrogen Technology program, as the Hydrogen and Fuel Cell Technologies program. The President would provide $137 million for the overall program, a reduction of $37 million (21.3 percent) below the combined program level in FY 2010.

**Biomass and Biorefinery Systems R&D**

The Administration proposes level funding for the Biomass and Biorefinery Systems R&D program, requesting $220 million for FY 2011. Within the request, the Administration proposes $50 million to develop up to 500 megawatts of biomass power production capability utilizing advanced technology and/or re-commissioning existing facilities utilizing cellulosic feedstocks.

**Solar Energy**

A total of $302.4 million would be provided for solar energy by President Obama in his FY 2011 budget request. This would represent an increase of $55.4 million (22.4 percent) above the FY 2010 enacted funding level. The Department would allocate $50 million to facilitate the deployment of a cluster of Concentrating Solar Power (CSP) projects that together add up to one
gigawatt of electricity capacity. DOE also requests $152 million for Photovoltaic R&D, an increase of $23.5 million (18 percent).

Wind Energy
The President’s request of $122.5 million for wind energy would represent an increase of $42.5 million (53.1 percent) above the FY 2010 enacted level. The Department would allocate $49 million to facilitate the development of 300 megawatts of offshore wind power in the U.S. by building and expanding in areas currently targeted for deployment by developers. DOE would focus on shallow and intermediate depth offshore wind zones for this demonstration project.

Geothermal Energy
The Administration would continue to emphasize new sources of renewable energy, including a request of $55 million for geothermal energy, an increase of $11 million (25 percent) above the current FY 2010 level.

Water Power
The budget request of $40.5 million would be a reduction of $9.5 million (19 percent) below the current funding level. Within the budget request, DOE would like to initiate a multi-year project to increase the generation of electricity and the availability of pumped storage to support wind and solar renewable energy supply. DOE would allocate $10.5 million to this project with a focus to enable 1.1 gigawatts of new capacity and efficiency upgrades to existing dams.

Vehicle Technologies
Continuing to emphasize the need for alternative sources of energy to power transportation in the United States, President Obama would provide $325.3 million for the Vehicle Technologies program. This would represent an increase of $13.9 million (4.5 percent) above the FY 2010 enacted level. The President would increase funding for batteries and electric drive technology to $120.6 million, an increase of $19.2 million (19 percent) to support the goal of domestic production of more than 500,000 plug-in hybrid electric vehicles (PHEVs) by FY 2015.

Building Technologies
President Obama would provide $230.7 million for the DOE Building Technologies program, an increase of $8.7 million (3.9 percent) above the FY 2010 funding level. DOE proposes to continue research on emerging technologies, requesting $92.7 million for FY 2011, an increase of $6.7 million (7.8 percent) above the current level.

Industrial Technologies
For the Industrial Technologies program the President’s budget request would provide $100 million, an increase of $4 million (4.2 percent) above the current funding level. The Administration continues to focus on reducing the energy use in the U.S. industrial sector through the development of next-generation manufacturing technologies and voluntary partnerships.

RE-ENERGYSE
President Obama resubmits his Science, Technology, Engineering, and Mathematics (STEM) education initiative through DOE, proposing $50 million for RE-ENERGYSE (Regaining our
Energy Science and Engineering Edge) for FY 2011. While the Administration proposed this initiative and requested $115 million last year, Congress did not fund the program.

The proposed program emphasizes higher education for which $35 million would be used to support fellowships, assistantships, post-doctoral opportunities, as well as new interdisciplinary professional masters programs in the area of clean energy. An additional $15 million would be provided for technical training, education and outreach to support the development of effective education and training programs at community colleges and other training centers and to provide K-12 education and engagement focused on the students needed to enter the new clean energy workforce. An additional $5 million for the program is also requested in the Office of Nuclear Energy.

Electricity Delivery and Energy Reliability
A total of $185.9 million would be provided in the President’s budget request to continue activities associated with developing the smart electricity grid and securing the nation’s energy delivery system. The request would represent an increase of $13.95 million (8.1 percent) above the FY 2010 enacted funding level. For R&D, the President’s budget would provide $144.3 million for clean energy transmission and reliability with completion of High Temperature Superconductivity wire development and phase-out of the program; $39.3 million for smart grid R&D; $40 million for energy storage; and $30 million for cyber security for energy delivery systems.

Nuclear Energy
A total of $824.1 million would be allocated to Nuclear Energy programs under the President’s FY 2011 budget request, an increase of $37.4 million (4.8 percent) above the FY 2010 enacted level. The Department proposes a reorganization of the program to include a new Nuclear Energy Enabling Technologies program ($99.3 million) and a new Reactor Concepts Research, Development, and Demonstration program ($195 million). Fuel cycle R&D would be focused on safe and environmentally-sound waste storage and management solutions and is requested at $201 million for FY 2011. Finally, the Administration would refocus the Integrated Universities Program and incorporate it into the RE-ENERGYSE initiative.

Fossil Energy R&D
For FY 2011 the President’s budget would provide $586.6 million for DOE’s Fossil Energy R&D activities, a reduction of $85.8 million (12.8 percent) below the FY 2010 level. The Administration budget proposal consolidates coal R&D providing $403.85 million, approximately the same as the FY 2010 level. As with previous budgets, the Administration proposes to terminate the Natural Gas Technologies program for savings of $18 million. DOE would not continue the unconventional fossil energy technologies program in FY 2011 for savings of $20 million.
Department of Health and Human Services

The President requests a discretionary budget of $81.23 billion for the Department of Health and Human Services (HHS) for FY 2011. This would represent a $2.3 billion or 2.9 percent increase over the FY 2010 enacted level. The stated priorities in the President’s FY 2011 budget for HHS and its offices and agencies include:

- Investing in scientific research and development;
- Reinforcing the public health infrastructure to ensure preparedness;
- Reducing health care fraud;
- Supporting prevention and wellness programs; and
- Improving quality and access to care.

The President’s budget request would make investments guided by scientific and medical expertise. Furthermore, the President’s support for scientific research and development is reflected throughout the HHS budget. The budget request would reinforce the momentum of agency programs and build on current activities, such as expanding patient-centered health research, supporting a health care workforce, expanding the capacity of community health centers, and developing electronic medical records. Consistent with previous fiscal years, the National Institutes of Health (NIH) would remain the lead research agency, with funding for research at NIH equaling about 39.5 percent of the total HHS discretionary budget.

A strong theme that cuts across the other agencies of HHS is the proposed funding to support community, state, and regional health care and human services systems. Integration of behavioral health initiatives into existing primary health care systems would expand the support of HHS-supported programs in preventative care and wellness. The implicit message to academic institutions is clear – develop and foster productive partnerships that can bridge the divide between academic research and effective implementation of strategies that can improve the human condition.

Cross-Cutting HHS Areas of Emphasis

Comparative Effectiveness Research/Patient-Centered Health Research
The President’s FY 2011 budget request for HHS would include strong support for and the expansion of programs in comparative effectiveness research. However, the term “patient-centered health research” is beginning to replace “comparative effectiveness research” in the lexicon of the civilian health agencies. This transition in terminology is clearly due to the ongoing health care debate, in which “comparative effectiveness” has become mistakenly confused with “cost effectiveness.” As the lead agency, the Agency for Healthcare Research and Quality (AHRQ) would receive a total of $286 million ($273 million for research and $13 million for program support) for its programs in patient centered health research, a total increase of $261 million above FY 2010 levels and comprising 46.8 percent of AHRQ’s total budget. The expanded AHRQ program in patient centered health would support the development of scientific evidence and initiatives to disseminate scientific findings into health care practice. In addition, funds would be available to support career development of clinicians and research doctorates focusing on patient centered research. $116 million of the $286 million would be directed toward 105 new AHRQ research grants in FY 2011.
The President’s budget request does not include specific amounts for patient-centered or comparative effectiveness research in any other HHS agencies. The request for NIH notes that the agency would support comparative effectiveness research that rigorously evaluates different treatment options for given medical conditions for particular sets of patients. Most likely, individual NIH institutes would support such work only as it may relate to the diseases and conditions within their purview. The President’s budget would also direct the Centers for Medicare and Medicaid Services (CMS) to provide an infrastructure within its payment systems for comparative effectiveness research.

The President’s FY 2011 budget request for the Veterans Health Administration (VHA), within the Department of Veterans Affairs (VA) would designate $590 million for medical and prosthetic research conducted within the VA system, an increase of 1.5 percent over FY 2010. Comparative effectiveness would be one of the five core priorities for the VA (along with mental health, regenerative medicine, diabetes, and women veterans). In language accompanying the FY 2011 budget request, the agency notes its affiliations with academic institutions and its integration into the larger biomedical research community. However, no specific collaborative programs with academic institutions or academic health centers are included in the President’s request.

HHS-Wide Efforts in Health Information Technology

The President’s FY 2011 budget requests a total of $78 million for health information technology (IT) in the HHS Office of the National Coordinator for Health Information Technology (ONC), which would be $36 million or 85.7 percent more than the FY 2010 enacted level of $42 million. This level of support would allow the Office to continue its role as the Federal health IT leader and coordinator. As previously stated, an additional $32 million is requested for AHRQ and $135 million is requested for the Indian Health Service (IHS) to support HHS’s efforts in evaluating the quality, safety, and efficiency of health care. Health IT investments would also be made at additional HHS agencies, including $1.6 million in the Office of Civil Rights and $1 million in the Office of the Assistant Secretary for Planning and Evaluation. An additional $7 million of ONC’s FY 2011 funds would support economic analysis and the development of models for the adoption, meaningful use, and interoperability of electronic health records.

National Institutes of Health

For the National Institutes of Health (NIH) in FY 2011, the President requests $32.239 billion, which is $1 billion, or 3.2 percent, above NIH’s final FY 2010 funding level.

Departing from past year practices, the FY 2011 budget request would reward those Institutes and Centers (ICs) that are supporting opportunities tied to NIH Director Francis Collins’ five scientific priority areas:

- Applying high throughput technologies to understand fundamental biology and to uncover the causes of specific diseases;
- Translating basic science discoveries into new and better treatments;
- Putting science to work for the benefit of health care reform;
- Encouraging a greater focus on global health; and
• Reinvigorating and empowering the biomedical research community.

Note: Because NIH ICs have only about a quarter of their funds available each year for new and competing grants and contracts, the discrepancy in the percentage increases for each of the ICs is not as great as would be if their research portfolio was more nimble. Please see the chart below for individual Institutes and Centers funding levels in the FY 2011 budget request.

The budget request indicates that about 83 percent of the funds appropriated to NIH in FY 2011 will flow out to the extramural community. If this budget is approved by Congress, NIH estimates that it would support 9,052 new and competing Research Project Grants (RPGs) in FY 2011, a decrease of 199 below the estimated level for FY 2010, excluding funds from the American Recovery and Reinvestment Act (ARRA). The total number of RPGs to be funded in FY 2011 is expected to be 37,001, an increase of 195 above FY 2010 non-ARRA levels.

The President’s budget request does not include any money to continue the Extramural Research Facilities Improvement Program (C06), which provides support for alterations/renovations or additions to existing facilities, completion of uninhabitable shell space in existing facilities, or construction of new facilities. In addition, no funding is requested for the NIH Director’s Bridge Award program, “as ARRA funds enabled NIH to support additional awards just missing the nominal payline.”

Trans-NIH Programs and Other Agency Priorities

The budget request also specifically targets many trans-NIH programs for increases, including:

Cancer and Autism Spectrum Disorders Research- The FY 2011 budget request would continue to reinforce cancer research and investigations into the causes of and treatments for autism spectrum disorders. However, the President is not as explicit in his support for these two diseases as he was last year when he proposed that approximately 60 percent of NIH’s increase would be designated for cancer and autism research. This year, the budget includes $6.036 billion to continue to expand research related to cancer, and $143 million to expand research related to Autism Spectrum Disorders, representing a 4.4 percent increase for cancer research across all ICs and a 5 percent increase for Autism Spectrum Disorders across the ICs that support research in this area.

NIH Common Fund- The NIH Common Fund would receive approximately $562 million in the President’s FY 2011 request. This represents an increase of approximately $18 million, or 3.3 percent, over the FY 2010 level. While NIH Director Collins supports the Common Fund, he has remarked numerous times during the past few months that there is unlikely to be any additional funding for roadmap projects until FY 2012, at the earliest, as a result of the budgetary out-year commitments already made to currently funded roadmap activities. Nonetheless, NIH intends to pilot several scientific projects during the next one to two years and welcomes input from the scientific community on specific initiatives to pursue.

Therapeutics for Rare and Neglected Diseases (TRND) program- NIH would provide an additional $26 million, or a 108.3 percent increase, in FY 2011 to expand the TRND program to
a total of $50 million. TRND will bridge the wide gap in time and resources that often exists between basic research and human testing of new drugs and encourage and speed the development of new drugs for rare and neglected diseases. This program is grounded in and intended to complement existing processes for drug development in the pharmaceutical industry.

Clinical and Translational Science Awards (CTSA)- The request includes a total investment of $500 million for CTSAs, which represents an increase of $20 million, or 4.2 percent, in new and reallocated funds with the National Center for Research Resources (NCRR). These awards were developed and implemented to reduce the time it takes for laboratory discoveries to become treatments for patients, to engage communities in clinical research efforts, and to train a new generation of clinical and translational researchers.

Basic Behavioral and Social Sciences Opportunity Network (OppNet)- The request includes $20 million to expand this initiative, which was launched by NIH in FY 2010 through funds provided by the American Recovery and Reinvestment Act (ARRA). This trans-NIH initiative is intended to further understanding of fundamental mechanisms and patterns of behavioral and social functioning relevant to the nation’s health and well-being, as they interact with each other, with biology, and the environment. Research results will lead to new approaches for reducing risky behaviors and improving health.

Ruth L. Kirschstein National Research Service Awards- The request includes $824.4 million, which is a 6 percent increase over the FY 2010 enacted level, for training stipends.

National Nanotechnology Initiative- The request includes $382 million, a $22 million or 6 percent increase above the FY 2010 level for the National Institute of Environmental Health Sciences (NIEHS) to continue its efforts in applying technological advancements to a wide array of human health, environmental protection, and safety issues and concerns.

National Synchrotron Light Source-II (NSLS-II)- The request includes $33 million to be used at the Department of Energy for construction of a high performance synchrotron light source. In FY 2010 the National Center on Research Resources (NCRR) will contribute $12 million from their ARRA funds.

AIDS Research Program- The request includes $3.184 billion for the AIDS research program, an increase of $98.7 million or 3.2 percent. In addition, NIH would transfer $300 million to the Global Fund for HIV/AIDS, Tuberculosis and Malaria.

Stem Cell Research- The budget request points out that under the President’s Executive Order and subsequent NIH Guidelines for Human Stem Cell Research, NIH has approved 40 responsibly-derived stem cell lines – nearly double the previous number of lines available – for path-breaking research.

Alzheimer’s disease- The budget request also explicitly states that NIH will pursue the discovery, development, and pre-clinical testing of novel compounds for the prevention and treatment of symptoms associated with Alzheimer’s disease.
The National Children’s Study - The FY 2011 budget request provides $194 million for the National Children’s Study, nearly identical to what was requested in FY 2010 and later enacted by Congress.

**FY 2011 President's Budget Request for Individual Funding Levels for National Institutes of Health (NIH) Institutes and Centers**

(Amounts in Millions of Dollars)

<table>
<thead>
<tr>
<th>Institutes/Centers</th>
<th>Final FY 2010 Enacted</th>
<th>FY 2011 President’s Budget Request</th>
<th>Dollar Comparison to FY 2010 Actual</th>
<th>Percent Comparison to FY 2010 Actual</th>
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<tbody>
<tr>
<td>National Cancer Institute (NCI)</td>
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</tbody>
</table>
Institutes/Centers | Final FY 2010 Enacted | FY 2011 President's Budget Request | Dollar Comparison to FY 2010 Actual | Percent Comparison to FY 2010 Actual |
--- | --- | --- | --- | --- |
National Institute of Biomedical Imaging and Bioengineering (NIBIB) | $316 | $326 | $9 | 3.0% |
National Center for Research Resources (NCRR) | $1,269 | $1,309 | $40 | 3.2% |
National Center for Complementary and Alternative Medicine (NCCAM) | $129 | $132 | $3 | 2.5% |
National Center on Minority Health and Health Disparities (NCMHHD) | $212 | $219 | $8 | 3.6% |
John E. Fogarty International Center (FIC) | $70 | $73 | $3 | 4.3% |
National Library of Medicine (NLM)**** | $351 | $365 | $14 | 4.0% |
Office of the Director (OD) | $1,177 | $1,220 | $43 | 3.7% |
Buildings and Facilities | $100 | $126 | $26 | 25.6% |
**Total** | **$31,089** | **$32,089** | **$1,000** | **3.2%** |
**Total (With Mandatory Juvenile Diabetes Research and Evaluation Funds)** | **$31,247** | **$32,247** | **$1,000** | **3.2%** |

* NIDDK includes mandatory juvenile diabetes research  
** NIAID includes transfer to Global HIV/AIDS Fund  
*** NIEHS includes both Labor/HHS and Interior Appropriations  
**** NLM includes Evaluation Funds  

It is important to note that comparison may not be exact due to unit size (millions)  

Other HHS Agencies and Priorities

The President’s request for the remaining operating divisions within HHS would support other initiatives that have been prioritized. The Obama Administration has focused this year on cutting health care costs, promoting prevention and wellness policies, and ensuring access to health and human services for all Americans. HHS agency budget requests and priorities for FY 2011 include:

**Health Resources and Services Administration (HRSA)**

The President’s request would hold the HRSA budget relatively flat, providing the agency with $7.511 billion in discretionary budget authority, which is $28 million or 0.4 percent more than the FY 2010 enacted level of $7.483 billion. Priorities for the agency would include increasing access to health care in underserved areas of the country by expanding the number and capabilities of community health centers (which would receive $2.5 billion in FY 2011, a $290 million increase over FY 2010) and building a strong health care workforce. The budget would provide a total of $995 million (a $33 million or 3.4 percent increase over FY 2010) for recruiting and retaining low-income and minority populations into the health care workforce. Existing programs such as the National Health Service Corps would receive $169 million in FY 2011 (a $27 million or 19 percent increase over FY 2010); $94 million would be provided for the Nurse Loan Repayment and Scholarship Program as well as $150 million for Nursing Workforce...
Development programs (both equal to the amount received in FY 2010); and $96 million would also be allocated to Training and Diversity Programs to increase opportunities for minorities to enter a health profession. Additionally, the President’s request would also provide $318 million for the Children’s Hospitals Graduate Medical Education Payment Program. As with previous Administrations, the current Administration would propose to eliminate funding for Congressionally directed projects (including Health Care Facilities and Construction) and would redirect the approximately $380 million in Congressionally directed projects to support primary care health centers and other HRSA programs.

Substance Abuse and Mental Health Services Administration (SAMHSA)
The President’s request would provide SAMHSA with $3.54 billion in discretionary budget authority, which is $109 million or 3.2 percent more than the FY 2010 enacted level. Priorities for the agency would include prevention and treatment programs for substance abuse and mental health issues. This emphasis would include expanding the treatment capacity of drug courts, expanding community-prevention and wellness efforts, and supporting screening and brief intervention programs. The request would also provide $136 million ($34 million or 33.3 percent over FY 2010) for national data collection and analysis efforts.

Agency for Healthcare Research and Quality (AHRQ)
The President’s request would provide AHRQ with $611 million in discretionary budget authority, which is $214 million or 54 percent more than the FY 2010 enacted level. This significant increase would continue support for patient centered health research, patient safety research, and prevention and care management research. The request would also provide $32 million ($4 million or 14.2 percent) for AHRQ’s health IT development and dissemination program.

Administration for Children and Families (ACF)
The President’s request would provide ACF with $17.5 billion in discretionary budget authority, which is $144 million or 0.8 percent more than the FY 2010 enacted level. Priorities for the agency include supporting the President’s Zero to Five Plan and continuing the expansion of Head Start. Head Start would receive $8.2 billion, an increase of $989 million or 12.1 percent over FY 2010.

Administration on Aging (AOA)
The President’s request would provide AOA with $1.6 billion in discretionary budget authority, which would be $108 million or 7.1 percent more than the FY 2010 enacted level. The top priority for the agency would be to establish the new Caregiver Initiative. Part of this initiative would include $50 million to support caregiver services, such as counseling, training, and respite care.

Indian Health Service (IHS)
The President’s request would provide IHS with $4.4 billion in discretionary budget authority, which is $354 million or 8.7 percent more than the FY 2010 enacted level. Priorities for the agency would include reducing health disparities experienced by American Indians and Alaska Natives as well as continuing to develop the agency’s health IT system (which would receive $135 million, a $4 million or 3.1 percent increase over FY 2010).
**Center for Medicare & Medicaid Services (CMS)**
The President’s request would provide CMS with $3.6 billion in discretionary budget authority, which is $186 million or 5.4 percent more than the FY 2010 enacted level. The agency’s top priority would be to reduce healthcare fraud and abuse. The request would invest $250 million in new resources to detect, prevent, and prosecute health care fraud.

**Food and Drug Administration (FDA)**
The President’s request would provide FDA with $2.51 billion in discretionary budget authority, which is $146 million or 6.1 percent more than the FY 2010 enacted level. Priorities for the agency would include increased support for regulatory science (an increase of $25 million over FY 2010, with $15 million of the total budget request supporting nanotechnology research), reinvigorating the fight against tobacco use, and a continued emphasis on increased food safety.

**Centers for Disease Control and Prevention (CDC)**
The President’s request would provide CDC with $6.34 billion in discretionary budget authority, which is a decrease of $133 million or 2.1 percent from the FY 2010 enacted level. The $133 million decrease in requested budget authority is due to the unobligated funds available to the agency from the FY 2009 pandemic influenza supplemental appropriation. Priorities for the agency would include the development and implementation of behavioral and prevention programs for HIV/AIDS, building a global public health capacity, and establishing a community health program that works with large cities to prevent chronic disease. Additionally, the budget request would also provide $31 million (the same amount received in FY 2010) for health protection research.

The budget request documents for HHS are available on line at: [http://www.hhs.gov/asrt/ob/docbudget/index.html](http://www.hhs.gov/asrt/ob/docbudget/index.html).

**Department of Homeland Security**
The President’s budget request would provide $47.1 billion in appropriated funds for the Department of Homeland Security (DHS) in FY 2011, up $1.1 billion or 2.4 percent over the FY 2010 level.

**Science and Technology Directorate**
The DHS Science and Technology (S&T) Directorate would receive $1.018 billion in FY 2011, up $11.8 million or 1.2 percent over the FY 2010 appropriated level. All accounts would decrease in FY 2011; the apparent additional funding reflects a proposed increase in the Management and Administration account and $109 million in new funding due to the proposed transfer of the Transformational Research and Development program from the DHS Domestic Nuclear Detection Office. Of the existing research areas within DHS S&T Directorate, the best proposed outcome is for the Explosives portfolio, which would remain flat from FY 2010 to FY 2011.
**University Programs**

The University Programs account within the S&T Directorate would receive $40.0 million in FY 2011, down $9.4 million or 18.9 percent from the FY 2010 appropriated level. This account provides funding for the university-based DHS Centers of Excellence (COEs), a minority-serving institutions program, and educational programs that provide tuition and stipends to undergraduates, graduate students, and post-doctoral researchers.

The Centers of Excellence program would receive $30.4 million in FY 2011, down $8.0 million or 20.8 percent from the FY 2010 appropriated level. The budget request does not indicate any plans to establish new Centers of Excellence in FY 2011, and states that the funding decrease would result in DHS adjusting the current structure of the Centers and require DHS to decide which Centers not to fund based on performance (specific Centers that might not be funded are not listed).

The educational programs (scholarships and fellowships) would receive $5.22 million in FY 2011, down $0.7 million or 12.2 percent from the FY 2010 appropriated level.


**Department of Housing and Urban Development**

Proposals of interest to the research community within the President’s FY 2011 budget request for the Department of Housing and Urban Development (HUD) will again focus on building sustainable communities.

**Sustainable Communities Initiative**

The budget request would provide $150 million, level with the FY 2010 enacted level, for the Sustainable Communities Initiative, a joint effort with Department of Transportation (DOT) and the Environmental Protection Agency (EPA). The initiative is primarily targeted at municipalities, and it is unclear what role institutions of higher education could play in this initiative. The initiative would be implemented through four components:

- Sustainable Communities Planning Grants administered by HUD to develop integrated metropolitan planning using data, analytics, and geographic information systems.
- Sustainable Communities Challenge Grants to implement Sustainable Community plans developed in FY 2010.
- Creation of a capacity-building program and tools clearinghouse designed to support Sustainable Communities grantees and other interested parties.
- A joint HUD-DOT-EPA research effort to advance transportation and housing linkages through data development, information platforms, analytic tools and research that support the three agencies’ missions.

**Catalytic Investment Competition Grants Program**

This new $150 million proposal would, “provide capital to bring impactful and innovative economic development projects to scale.” Consortia, including high capacity non-governmental entities that have an innovative plan, may apply along with governmental entities. Proposals
would target areas experiencing significant economic distress and would include measurable outcomes for job creation and economic activity. The Secretary may also consider to what extent the projects would complement other activities such as the Choice or Promise Neighborhoods initiatives.

University Community Fund
In FY 2010 four separate university partnership programs were consolidated into the University Community Fund. In FY 2011, the budget request would provide $25 million for this initiative, same as the enacted FY 2010 level. The funding under this program is requested to be primarily allocated to minority serving institutions (MSI); however, the FY 2011 budget request language states, “the University Community Fund will allow funding opportunities for colleges and universities interested in forming consortia with other minority-serving or non-minority-serving institutions to jointly address the community/economic development needs of local communities,” potentially leaving the door open for non-MSIs.

Choice Neighborhoods
The Choice Neighborhoods initiative was introduced as a $250 million initiative in the FY 2010 budget request; however, Congress only allocated $65 million for a Choice Neighborhoods demonstration. For FY 2011, the budget request would again request $250 million. The Choice Neighborhoods initiative would, “transform distressed neighborhoods and public and assisted projects into functioning, sustainable mixed-income neighborhoods by linking housing improvements with appropriate services, schools, public assets, transportation, and access to jobs.” This initiative is a follow-up to the public housing HOPE VI initiative started in 1992.

Environmental Protection Agency
The President’s FY 2011 budget request includes $10.02 billion for the Environmental Protection Agency (EPA), a decrease of $278 million or 2.8 percent below the FY 2010 level. While overall the FY 2011 request is below the FY 2010 enacted level, it signals significant ongoing support for EPA by the Obama Administration given that the request is billions of dollars higher than the requests seen during the Bush Administration.

Much of the proposed increase can be attributed to the Obama Administration’s continued focus on climate change. The request states, “The Administration supports a comprehensive market-based climate change policy to reduce greenhouse gas emissions in the United States more than 80 percent below 2005 levels by 2050. The President also supports a near-term target in the range of a 17-percent reduction by 2020.” This statement is in-line with climate change proposals being debated on Capitol Hill. Additionally, the request includes $56 million, $43 million in new money, for regulatory initiatives to control greenhouse gas emissions under the Clean Air Act. The question around EPA’s authority to regulate greenhouse gases under the Clean Air Act has been the subject of heated debate in Washington. This proposal will no doubt ignite debate throughout the upcoming appropriations process.
The EPA budget request is organized according to the Agency’s five goals:
1. Clean Air and Global Climate Change – $1.193 billion, a 9 percent increase;
2. Clean and Safe Water – $4.587 billion, a 6.7 percent decrease;
3. Land Preservation and Restoration – $1.752 billion, a 0.7 percent decrease;
4. Healthy Communities and Ecosystems – $1.674 billion, a 7.5 percent decrease; and
5. Compliance and Environmental Stewardship – $824 million, an increase of 5.4 percent.

Science and Technology
The President’s request includes $847 million, an increase of $648,000, for the EPA Science and Technology account, which provides funding for research and development at EPA laboratories and the external community, such as universities. Most of the proposed funding for EPA’s Office of Research and Development (ORD) is provided from the Science and Technology account. This includes the Science to Achieve Results (STAR) program, which would receive $87.2 million, an increase of $25.8 million or 42 percent. The STAR program is EPA’s primary competitive research program for extramural researchers.

Funding proposals for other EPA research programs include:
• Green Infrastructure Research would be significantly expanded to assist EPA’s Office of Water, states and municipalities with the development of “scientifically rigorous tools and models” as well as approaches for addressing clean water challenges. The request includes $10.4 million, an increase of $6 million, for green infrastructure research.
• STAR Fellowship grants would receive $14 million under the President’s request, an increase of $6.2 million, which would allow for approximately 240 new fellowships.
• The Human Health Research program would receive $80.1 million in the FY 2011 proposal. This program funds extramural research that complements intramural programs with a focus on children’s health, safe schools, and epidemiological approaches to link exposure to health outcomes.
• The EPA Global Change Research Program would receive $22 million, an increase of $1.2 million, to “enhance understanding of the effects of global change on the environment.
• Air Quality Research would receive $85.3 million, an increase of $3.4 million over the FY 2010 level.

In addition to the funding requested directly for EPA’s Science and Technology account, the Superfund program would transfer funding for hazardous waste research to the account. For FY 2011, the President requests a transfer of $24.5 million, a 9.4 percent decrease.


National Aeronautics and Space Administration
President Obama’s FY 2011 budget request would provide the National Aeronautics and Space Administration (NASA) with $19.0 billion, which is $276 million, or 1.5 percent, above the FY 2010 enacted level. The request also projects $6 billion in increases over the next five years (FY 2011- FY 2015) and provides significant increases for Earth Science and technology development.
The President’s budget request would make dramatic changes to NASA’s programmatic activities, most noticeably by canceling the Constellation Program, which has been funded since 2006 to develop next generation human spaceflight capabilities, and ending the Space Shuttle Program in late 2010 or early 2011. Given the potential negative workforce implications of these changes, it is unlikely that Congress will accept all of the Administration’s proposed human spaceflight reductions.

The NASA budget is organized in eight (formerly seven) funding accounts – Science; Aeronautics and Space Research and Technology; Exploration; Space Operations; Education; Cross-Agency Support; Construction and Environmental Compliance and Restoration; and Inspector General accounts. The complete NASA budget request is not yet available; however a partial analysis is included below.

Science
The Obama Administration’s request would provide $5.006 billion for the Science account, an increase of $512 million, or 11.4 percent, over the FY 2010 enacted level. Consistent with last year’s budget prioritization, most of this increase is for Earth Science, but Planetary Science and Heliophysics would also see overall increases. Astrophysics would receive a decrease.

Earth Science
In the request for the Science Mission Directorate, Earth Science is the big winner, and would receive $1.802 billion, an increase of $381 million, or 26.8 percent, over the FY 2010 enacted level. The request includes:
- $170 million to re-fly the Orbiting Carbon Observatory;
- Funding to expand and accelerate Venture-class missions;
- Funding to accelerate the Decadal Survey Missions;
- Funding to enhance climate change modeling and effects forecasting;
- Funding to launch Glory, NPOESS Preparatory Project (NPP), and Aquarius; and
- Continued funding for Landsat Data Continuity Mission (LDCM) and Global Precipitation Measurement (GPM).

Planetary Science
The budget request would provide $1.486 billion for Planetary Science, an increase of $144 million, or 10.8 percent, over the FY 2010 enacted level. The request includes:
- Funding to launch Mars Science Laboratory (MSL) in the fall of 2011;
- Continued funding of concept development for a future Europa Jupiter System Mission; and
- $16 million for identification and cataloging of Near Earth Objects.

Astrophysics
The budget request would provide $1.076 billion for Astrophysics, a decrease of $28 million, or 2.5 percent, from the FY 2010 enacted level. The Administration is waiting for the completion of the Astro2010 Decadal Survey to establish new priorities in this theme. However, the request includes funding for the next Explorer Mission, NuSTAR, to launch in 2012 and continues funding for Astro-H and the James Webb Space Telescope (JWST) to launch in 2014.
**Heliophysics**
The budget request would provide $642 million for Heliophysics, an increase of $14 million, or 2.3 percent, over the FY 2010 enacted level. The request includes funding to initiate the Solar Probe Plus mission.

**Aeronautics and Space Research and Technology**
The budget request would provide $1.152 billion for Aeronautics and Space Research and Technology, an increase of $645 million, or 127.2 percent, over the FY 2010 enacted level. Of this increase, $572 million is for a new Space Technology program.

**Aeronautics Research**
The Aeronautics Research program would receive $580 million, an increase of $73 million, or 14.3 percent, over the FY 2010 enacted level. This is the first real increase for Aeronautics Research in eight years and comes after large decreases from the account’s $1.5 billion peak in 2002.

**Space Technology**
The budget request proposes $572 million for a new Space Technology Program that would build on the current Innovative Partnerships Program for universities and industry to develop advanced technologies in areas such as communications, sensors, robotics, materials, and propulsion. Congress has highlighted advanced technologies in several hearings as an area for NASA to refocus its energy and connect to the Administration’s Innovation agenda.

**Exploration**
The Administration’s budget request would provide $4.263 billion for the Exploration account, an increase of $484 million, or 12.8 percent, over the FY 2010 enacted level. The budget request reflects the recommendations of the Augustine Committee’s Review of U.S. Human Spaceflight Plans, which proposed an end to development of the Ares-1 rocket in favor of commercial space flight to Low Earth Orbit and a broadening of potential human spaceflight destinations beyond the moon to include asteroids, planetary flybys, and others on a flexible path of exploration.

The budget request would replace Constellation with several new programs:
- $652 million (which would increase to $1.26 billion in 2012) for Exploration Technology and Demonstration through a Flagship Demonstration Program and an Enabling Technology Development Program;
- $559 million for Heavy-lift and Propulsion Research and Development to replace Constellation’s Ares-5 heavy-lift launch vehicle;
- $125 million (which would increase to $506 million in 2012) for Robotic Precursor Missions to the Moon, Mars, Lagrange points, and asteroids to explore targets for future human spaceflight; and
- $500 million (which would increase to $1.4 billion in 2012) to spur the development of commercial human spaceflight vehicles.
- In addition, the budget request would provide a 42 percent increase over the FY 2010 enacted level for the Human Research Program.
Education
The President’s budget request would provide $146 million for Education, a decrease of $38 million, or 20.7 percent, from the FY 2010 enacted level. This reduction is primarily the result of the proposed elimination of funds for Congressional earmarks included in the FY 2010 appropriations bill. The request proposes a $20 million increase in the base NASA education program, including funding for a new Innovation in Higher Education STEM Education program that will attempt to engage undergraduate and graduate students in STEM (science, technology, engineering, and mathematics) disciplines.

Space Operations
The President’s budget request would provide $4.888 billion for Space Operations, a decrease of $1.293 billion, or 20.9 percent, from the FY 2010 enacted level. This decrease is primarily due to the planned retirement of the space shuttle in late 2010 or early 2011.

The request includes:
- $989 million for the Space Shuttle program;
- $2.78 billion for the International Space Station (ISS), including an extension of the U.S. commitment to the ISS to 2020 and funding to fully utilize the ISS’s capabilities to conduct research and demonstrate new technologies;
- $1.12 billion for Space and Flight Support.

Cross-Agency Support
The budget request would provide $3.111 billion for Cross-Agency Support, an increase of $16 million, or 0.5 percent, over the FY 2010 enacted level.

National Endowment for the Humanities and National Endowment for the Arts
National Endowment for the Humanities (NEH)

The President’s FY 2011 budget request includes $161.3 million for NEH, a decrease of $6.2 million or 3.7 percent below the FY 2010 appropriated level. This proposed decrease is likely attributed to the President’s broad effort to reduce the Federal deficit, and not a reflection of a lack of support for the humanities.

The most significant cut would come from the We The People program, with a decrease of $3 million, or 20.7 percent under the FY 2010 appropriated level. The Federal/State Partnership program would also see a proposed cut of $1.9 million, or 4.6 percent under the previous appropriated level. Additionally, Preservation and Access, the Digital Humanities, and Education, Public, and Research programs would each decrease by $866,000. Both NEH Program Development and Treasury Funds would see a decrease of $250,000.

Despite the $9.7 million in proposed cuts, the President’s budget request would include $2.5 million for a new initiative entitled Bridging Cultures, which would aim to enhance America’s understanding of its own diverse heritage, as well as the history and culture of other societies.
To accomplish this objective, the FY 2011 budget request for Bridging Cultures provides support for scholars, teachers, individuals, and institutions to develop humanities projects. These projects could include: reading and discussion programs for public audiences; projects that help schools and teachers make use of digital technologies for humanities education; and partnerships between NEH and international funders to support an international collaboration of scholars.

The Challenge Grant program would be level funded at $9.5 million, and there would be a $1 million increase in administrative areas within NEH, which would bring the total decrease down to $6.2 million.


National Endowment for the Arts (NEA)

As is traditional, the NEA request is the same as the NEH request, i.e. the President’s FY 2011 budget request includes $161.3 million for NEA, which would be a decrease of $6.2 million or 3.7 percent under the FY 2010 appropriated level. The budget would include a decrease of $10 million from the American Masterpieces program (the proposed budget would fold this program into the basic grant-making categories, eliminating the need for a separate line within the budget), as well as a decrease of $2.9 million from NEA State and Regional Partnerships.

The President’s budget request would include $5 million for the implementation of a new initiative entitled Our Town, which would aim to strengthen communities through the arts. Specifically, the FY 2011 budget request for Our Town would provide communities with support to: promote the arts and artists as integral components of community life and community planning; encourage partnerships that would link architecture, sustainable arts, and landscapes as a means of developing more livable communities; and enhance the availability and accessibility of the arts. This initiative would be implemented in approximately 35 communities across the United States.

Proposed small-scale increases can also be found in NEH Salaries and Expenses, Direct Grants, and Program Support.


National Science Foundation

The National Science Foundation (NSF) would receive $7.424 billion in the President’s FY 2011 budget request, an increase of $498 million or 7.2 percent above the FY 2010 enacted level. (If the $54 million transfer to the Coast Guard for icebreaking services in FY 2010 is not included in the FY 2010 baseline, the increase would be 8 percent.)

The proposed FY 2011 increase would build on the 6.2 percent increase NSF received in FY 2010 and its 7.6 percent increase in FY 2009. This rate of growth indicates that the
Administration intends to continue its efforts to double NSF funding, although the pace and final target have slowed compared to the plan the Obama Administration released in 2010. The goal is now to reach $10.9 billion in FY 2017, with a 5 percent increase next year, and 7 percent increases in future years.

Overall, the majority of the funding increase at NSF is directed to research and facilities programs, not education programs. Some initiatives from last year are continued, such as the expansion of the Graduate Research Fellowship program. Other initiatives are expanded—the climate research program has been modified to include energy research under a sustainability umbrella.

The FY 2011 request does not include any of NSF’s $3.0 billion in ARRA funds, as those were mostly obligated in FY 2009, with the remainder expected to be expended by the end of FY 2010. However, the impact of those funds is clearly seen in success rate data—in FY 2009, NSF's funding rate was 32 percent, the highest level since FY 2000. NSF does not expect to sustain this level, but rather return to funding rates of 23 and 24 percent in FY 2010 and FY 2011 respectively.

**Research and Related Activities**

The NSF Research and Related Activities (R&RA) account would receive $6.019 billion in the FY 2011 budget request, an increase of $401 million or 7.1 percent above the FY 2010 appropriated level (including the funds transferred to the Coast Guard).

The R&RA increase is not spread evenly among the research directorates; from the high end to the low the proposed increases are Engineering (11.0 percent); Computer and Information Science and Engineering (10.6 percent); Biological Sciences (7.5 percent); Geosciences (7.4 percent); Office of Cyberinfrastructure (6.4 percent); Social, Behavioral & Economic Sciences (5.3 percent); and Mathematical & Physical Sciences (4.3 percent).

**New and Priority Initiatives**

**Science, Engineering, and Education for Sustainability:** Last year, NSF highlighted a new initiative in Climate Research, which received $197 million in new funding in FY 2010. In the FY 2011 budget request, this initiative has been subsumed into a new Science, Engineering, and Education for Sustainability (SEES) initiative which includes both climate and energy research and education programs. This expanded initiative would receive $766 million in FY 2011, 15.9 percent or $105 million above what NSF invested in programs in these areas in FY 2010. The largest participants in the SEES initiative would be the Geosciences, Biological Sciences, Engineering, and Mathematical and Physical Sciences Directorates.

**Innovation Ecosystems:** NSF is establishing a new $12 million program in the Engineering Directorate to provide research grants to universities in partnerships with state and local governments, private sector firms, and nonprofit organizations to increase the economic and social impacts of university research. The goals of the Innovation Ecosystem grants would be to (1) increase the engagement of faculty and students across all disciplines in the innovation and
entrepreneurship process; (2) increase the impact of the most promising university innovations through commercialization, industry alliances, and start-up formulation; and (3) develop a regional community that supports the “innovation ecosystem” around a university.

The establishment of this new program reflects the engagement of the academic community with staff at the White House, NSF, and other agencies to highlight the role of universities in national and regional economic development. The NSF program is complemented by other innovation efforts, such as an Economic Development Administration program to support the creation of regional innovation clusters and other activities aimed at small businesses.

Cyberlearning Transforming Education: The President’s budget request includes a new initiative at NSF on cyberlearning. The funding would be $41.3 million in FY 2011, 63.0 percent or $16.0 million above what NSF invested in programs in these areas in FY 2010. This initiative would mainly be funded by the Computer and Information Science and Engineering and the Education and Human Resources Directorates. The goal is to capture the transformative potential of advanced learning technologies, with particular emphasis on using the technologies to study the learning process itself and rigorously assessing the value of the technologies and how they might be scaled up.

Continued Investment in Young Researchers: The FY 2011 President’s budget request would continue the FY 2010 emphasis on the pipeline of students choosing science and engineering careers by providing increases for the Graduate Research Fellowship (GRF) program and the Faculty Early Career Development (CAREER) program. The GRF program would receive $158 million (16.4 percent over FY 2010), which would support 2,000 new graduate student awards, on track to triple the number of GRFs to 3,000 by 2013. The CAREER program would receive $209 million (6.5 percent over FY 2010).

Other Programs of Interest

Agency-Wide Programs: NSF has several multidisciplinary and agency-wide programs that receive particular attention from universities. In addition to the sustainability, cyberlearning, and research career pipeline programs described above, highlights of cross-NSF programs in the FY 2011 President’s budget request include:

- Major Research Instrumentation (MRI): The MRI program would receive $90 million in FY 2011, the same level as in FY 2010. (Since the MRI program received $300 million in ARRA funding, the final distribution of which will occur in the first several months of 2010, Congress has been skeptical that expanded investment in this program is necessary at this time.)
- Academic Research Infrastructure (ARI): NSF does not request any funding to repeat the ongoing ARRA-funded ARI competition in future years.
- Cyber-Enabled Discovery and Innovation (CDI): Funding for the CDI program, an NSF-wide initiative which began in FY 2008, would level off in FY 2011. The proposed level is $106 million, an increase of 2.8 percent above the estimated FY 2010 level.
- Science and Engineering Beyond Moore’s Law (SEBML): NSF continues to sharply ramp up investment in the multi-directorate SEBML initiative that was begun in FY 2009. FY 2011 funding would be $70 million, 50 percent above the FY 2010 level.
Cybersecurity: NSF’s support for cybersecurity research, primarily through the Trustworthy Computing program, would increase by 10.6 percent to $145 million in FY 2011. The funding for the Cybersecurity Scholarships for Service program would remain flat at $15 million.

Experimental Program to Stimulate Competitive Research (EPSCoR): EPSCoR would increase 4.9 percent to $154 million in FY 2011. EPSCoR would contribute to the Science, Engineering, and Education for Sustainability initiative outlined above by co-funding EPSCoR jurisdiction’s projects in this area.

Centers: NSF provides large-scale multidisciplinary awards through a variety of center programs which, in most cases, do not run competitions every year. The status of some of these center programs is:

- Engineering Research Centers (ERCs): Five additional ERCs are expected to receive funding based on the awards made through the current competition scheduled to be completed in FY 2010. A new competition for ERCs is not expected in FY 2011.
- Materials Research Science and Engineering Centers (MRSECs): In FY 2011, a total of 25 MRSECs are expected to be funded, including four to six new centers established as a result of a FY 2011 competition.
- Nanoscale Science and Engineering Centers (NSECs): The original class of NSECs receives final funding in FY 2010. Plans are currently in development for a competition for the next round of centers with a nanotechnology focus; 19 NSECs are expected to be supported in FY 2011.
- Environmental Synthesis Center: The funding for the existing National Center for Ecological Analysis and Synthesis will conclude in FY 2010; a competition is currently open for a new Environmental Synthesis Center.

Education and Human Resources

The NSF Education and Human Resources (EHR) account would receive $892 million in the FY 2010 budget request, an increase of $19.2 million or 2.2 percent above the FY 2010 appropriated level. In past years, proposed EHR increases have usually been lower than the increases proposed for the R&RA account (comparing percentages), but Congress often increases the EHR funding levels during the appropriations process.

The Obama Administration continues to emphasize the important role of science, technology, engineering, and mathematics (STEM) education in improving U.S. economic competitiveness. However, this emphasis does not translate into significant increases in NSF education programs, especially K-12 education programs. The Administration’s focus is on activities at the Department of Education, programs to evaluate existing efforts and scale them up, and efforts to inspire and leverage investments made by private organizations and state and local governments.

At NSF, there are a number of education programs that are highlighted in the FY 2011 budget request; however, the emphasis does not always include funding increases or new funding within EHR. For example, while the Advanced Technological Education (ATE) program and the Climate Change Education (CCE) program both continue to be labeled as Administration priorities (as they were in the FY 2010 budget request), both programs would be flat funded in
FY 2011, with ATE receiving $64 million and CCE receiving $10 million, only $5.5 million of which is within EHR.

Other education programs would receive noticeable increases, but the new funding is within the R&RA account. The new initiative in cyberlearning and the expansion of the Graduate Research Fellowship program, both described above, fall into this category.

One area that is within EHR and would receive significant new funding is the effort to increase participation in STEM by traditionally underrepresented groups. The budget request would increase funding for activities in this area to $103 million in FY 2011, 14.4 percent, but would also consolidate several existing programs into one new activity. Specifically, the budget request proposes that NSF create a Comprehensive Broadening Participation of Undergraduates in STEM program that builds on the current Historically Black Colleges and Universities Undergraduate Program, the Louis Stokes Alliances for Minority Participation, and the Tribal Colleges and Universities Program and adds support for Hispanic-serving institutions, as authorized in the America COMPETES Act in 2007.

While most of NSF’s K-12-related programs would not receive increases in FY 2011, there is significant support for evaluation activities. The Project and Program Evaluation activity would grow to $19.0 million in FY 2011, a 58.3 percent increase. The focus of this effort would be on expanded activities to enrich the tools for evaluation of STEM learning programs and projects and, in collaboration with the U.S. Department of Education and other agencies, planning and implementation of evaluation efforts in STEM teacher professional development.

Another interagency effort is the President’s Regaining our Energy Science and Engineering Edge (RE-ENERGYSE) initiative, which aims to inspire and enable students to pursue careers related to sustainable energy and the environment. The Department of Energy has new funds and activities proposed under this initiative, including support for interdisciplinary professional masters programs in the area of clean energy, but for FY 2011, NSF’s $19 million contribution appears to reflect ongoing clean energy-related activities within existing programs (the Graduate Research Fellowship Program, the Integrative Graduate Education and Research Traineeship Program, Research Experiences for Undergraduates, the Advanced Technological Education Program, and the Graduate STEM Fellows in K–12 Education).

Other programs of interest in EHR include:

- Integrative Graduate Education and Research Traineeships (IGERT) program: The IGERT program would receive $61.8 million in FY 2011 (from EHR and R&RA), a decrease of $7.4 million or 10.7 percent, from FY 2010.
- Professional Science Masters (PSM) program: A PSM competition was held in FY 2009 to distribute $15 million in ARRA funding. NSF does not request additional funding in FY 2011 to continue the program.
- Robert Noyce Teacher Scholarship Program: The Noyce program would receive $55 million in FY 2011, the same as its FY 2010 level. It received $60 million from ARRA.
- Math and Science Partnerships: The Math and Science Partnership Program would receive $58 million in FY 2011, the same as its FY 2010 level. It received $25 million from ARRA. In a related initiative, the Department of Education’s version of the Math and Science...
Partnership program would form the basis of an expanded new program (see Department of Education section of this document).

- STEM Talent Expansion Program (STEP): The STEP program would receive $32.5 million in FY 2011, the same as its FY 2010 level.

**Major Research Equipment and Facilities Construction**

The NSF Major Research Equipment and Facilities Construction (MREFC) account would receive $165.2 million in the FY 2011 budget request, an increase of $47.9 million or 40.8 percent above the FY 2010 appropriated level.

In FY 2011, funds are requested for four ongoing MREFC projects: Advanced LIGO (AdvLIGO), the Advanced Technology Solar Telescope (ATST), the Atacama Large Millimeter Array (ALMA), and the Ocean Observatories Initiative (OOI). The request also includes $20 million in funding to begin one new project, the National Ecological Observatory Network (NEON), which completed final design review in November 2009. Total estimated construction cost for NEON is $434 million; it is scheduled to be finished in FY 2016. (NEON also would receive $15 million in FY 2011 from the Biological Sciences Directorate for completion of design work.)

NSF is using $400 million in ARRA funds for three MREFC projects, the Alaska Region Research Vessel (ARRV), ATST, and OOI. This expenditure has reduced the amount of MREFC spending needed for these projects through regular appropriations.

The budget request also contains information on future major facilities projects. For example, the Deep Underground Science and Engineering Laboratory (DUSEL) project, a collaboration between NSF and the Department of Energy, is receiving funds from the Mathematical and Physical Sciences Directorate for preliminary design activities which are expected to conclude in FY 2011. The budget request also includes notification that NSF no longer plans to undertake the Water and Environmental Research Systems (WATERS) Network MREFC project. Funding for research in related areas will continue through the R&RA account; a solicitation seeking research proposals on Water Sustainability and Climate is currently open.

The FY 2011 NSF budget request is available online at: [http://nsf.gov/about/budget/fy2011/toc.jsp](http://nsf.gov/about/budget/fy2011/toc.jsp).

**U. S. Department of Agriculture**

The President’s FY 2011 Budget Request would provide a total of $26 billion in discretionary funding for the United States Department of Agriculture (USDA). If adopted, this would represent a decrease of $1 billion, or 3.7 percent below the FY 2010 enacted level. USDA would also receive $123 billion in mandatory funding under the President’s FY 2011 request, bringing the agency’s total budget to $149 billion. The Administration requests funding for USDA in support of four specific strategic goals: help America promote agricultural production and biotechnology exports as America works to increase food security; ensure that all of America’s children have access to safe, nutritious, and balanced meals; assist rural communities to create
prosperity so they are self-sustaining, repopulating, and economically thriving; and ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources. Substantial new funding would be allocated to research and education programs as the Administration seeks to enhance USDA’s reputation in the scientific enterprise.

**National Institute of Food and Agriculture**
The National Institute of Food and Agriculture (NIFA) was created in the 2008 Farm Bill to replace the former Cooperative Research, Education, and Extension Service (CSREES). NIFA administers a nationwide system of agricultural research and education programs, with its primary responsibility to facilitate coordination between State institutions and USDA. Specifically, NIFA partners with the nation’s colleges and universities to carry out USDA’s extramural research and education programs. NIFA would receive a total of $1.347 billion in discretionary funding in the President’s FY 2011 budget, a figure roughly equivalent to the FY 2010 enacted level. In addition, NIFA would receive another $147 million in mandatory funding, bringing the Institute’s total budget authority for FY 2011 to $1.49 billion.

**Integrated Activities**
NIFA would receive a total of $25 million for its Integrated Activities account in the FY 2011 budget request, a decrease of $35 million or 58 percent, below the FY 2010 enacted level. NIFA’s Integrated Activities account supports a variety of competitive and non-competitive research and education initiatives.

**International Science and Education Grants Program**
- Within the Integrated Activities account, the President’s FY 2011 budget request would provide $3 million for an international science and education grants program which incorporates international aspects into programs focusing on food systems and agriculture and natural resources at colleges and land-grant universities. This figure is equal to the FY 2010 enacted level.

**Sustainable Agriculture Federal-State Matching Grant Program**
- The President’s FY 2011 budget request includes $10 million for a new Sustainable Agriculture Federal-State Matching Grants Program within NIFA’s Integrated Activities account. The program is designed to leverage state and private matching funds for initiatives at colleges and Land-grant universities which integrate sustainable agriculture in all State research, extension, and education projects; support new research at sustainable agriculture centers; and incorporate sustainable agriculture studies and curriculum in undergraduate and graduate degree programs.

**Research and Education Activities**
The FY 2011 budget request would provide $839 million, an increase of $47 million or 5.9 percent above the FY 2010 enacted level, for Research and Education Activities within NIFA.

**Agriculture and Food Research Initiative**
The Agriculture and Food Research Initiative (AFRI) is USDA’s primary competitive grants program, and supports projects which lead to breakthroughs in agricultural science. AFRI would receive a total of $429 million in the President’s FY 2011 budget request, an increase of $167 million or 64 percent above the FY 2010 enacted level. This increase reflects the Administration’s desire to expand peer-reviewed
competitive research at USDA as the agency plays a key role in debates over climate, agricultural, and energy policy. Furthermore, the President’s FY 2011 budget stipulates that AFRI funding would be used to support projects in the program’s stated priority areas of global food security and hunger, climate change, sustainable bioenergy, childhood obesity, and food safety. Of the proposed $429 million, $34 million would be used to develop non-food crops for the production of biofuels, $50 million would be used for research projects to help the agricultural community mitigate and adapt to the effects of global climate change, $13 million would be to expand international food security research, $20 million would be used for an integrated food safety research program, and $50 million would be directed towards nutrition and obesity prevention research.

Electronic Grants Administration- In response to the expected increase in grant applications due to the substantial funding bump for AFRI, the President’s FY 2011 budget would provide $5 million to upgrade USDA’s electronic grants management systems. The FY 2011 request represents an increase of $3 million or 150 percent above the FY 2010 enacted level.

Higher Education Programs- The President’s FY 2011 budget request would provide a total of $52 million, an increase of $5 million or 10.6 percent above the FY 2010 enacted level, for Higher Education programs within NIFA. This amount includes funding for graduate fellowship grants, $10 million for a Hispanic-serving institutions education grants program, and $8.2 million for a multicultural scholars program. In addition, $2.5 million is proposed for a Higher Education Institution Challenge Grants Program, which would assist rural institutions of higher education in preparing students for careers in science, technology, engineering, and mathematics (STEM) fields. These programs are designed to allow universities to broaden their curricula, increase faculty development, and expand the number of new scholars and graduate students involved in agricultural sciences.

Hispanic-serving Agricultural Colleges and Universities Endowment Fund- The President’s FY 2011 budget request includes $10 million in mandatory funding for a new Hispanic-serving Agricultural Colleges and Universities Endowment Fund with the goal of ensuring that Hispanic-serving Agricultural Colleges and Universities can compete for NIFA funds.

Formula Payments Under the Hatch Act- The President’s FY 2011 request proposes a freeze of all USDA formula funds, including the Hatch Act, at the FY 2010 enacted levels. Under this proposal, Hatch Act funds are allocated $215 million in the President’s FY 2011 budget request. The Hatch Act makes grants on a formula basis to agricultural experiment stations in all 50 states and numerous U.S. territories.

Special Research Grants- The President’s FY 2011 budget request would provide $42 million for Special Research Grants through NIFA, a reduction of $86 million, or 67 percent below the FY 2010 enacted level. NIFA’s Special Research Grants account funds projects related to a variety of pressing national needs in agriculture, including pest management, aquaculture, and sustainable agriculture. The steep reduction in the FY 2011 President’s request can be attributed to the Administration’s belief that many projects previously funded through this account are eligible to compete for the increased AFRI funds and the termination of Congressional earmarks within the account.
Extension Activities
NIFA Extension Activities would receive a total of $479 million in the President’s FY 2011 budget request, a decrease of $16 million or 3 percent below the FY 2010 enacted level. The USDA Extension Service combines the resources of Federal, State, and local partners to meet the country’s agricultural needs.

Formula Funding Under the Smith-Lever Act- As is the case with all NIFA formula funds, funding through the Smith-Lever Act would be held steady at the FY 2010 enacted level of $298 million under the President’s FY 2011 budget request. Funding from the Smith-Lever Act supports the majority of the Extension Service’s major education programs.

Beginning Farmer and Rancher Development Program- The President’s FY 2011 budget request would provide $19 million for the Beginning Farmer and Rancher Development Program, which provides education, training, and technical assistance to beginning farmers and ranchers in the United States. This is the same amount at which the program was funded during the FY 2010 appropriations process.

Biomass Research and Development
The NIFA Biomass Research and Development Program would receive $30 million in the President’s FY 2011 budget request, an amount equal to the FY 2010 enacted level. This jointly-administered USDA-DOE program provides competitive grants for research, development, and demonstration projects to encourage the innovation and commercialization of new biomass technologies.

Agricultural Research Service
The Agricultural Research Service (ARS) is USDA’s primary internal research agency. ARS would receive a total allocation of $1.224 billion in mandatory and discretionary funding through the President’s FY 2011 budget request. This would represent a decrease of $51 million, or 4 percent below the FY 2010 enacted level.

Salaries and Expenses
The vast majority of ARS’s funding is administered through its Salaries and Expenses Account. ARS Salaries and Expenses would receive $1.2 billion in the President’s FY 2011 budget request, an increase of $20 million or 1 percent above the FY 2010 enacted level. This figure includes a reduction of $42 million in Congressional earmarks which were not included in the FY 2011 President’s request.

Environmental Stewardship- The President’s FY 2011 budget request would provide $240 million, an increase of $6 million or 2.5 percent above the FY 2010 enacted level, for Environmental Stewardship activities within ARS. Activities supported by the ARS Environmental Stewardship account include a broad range of projects focused on natural resources, water resources, air resources management, and global climate change. Specifically, the President’s FY 2011 budget would provide $5.4 million for research designed to enhance agriculture’s ability to adapt to the effects of global climate change. The figure also includes a proposed $6.3 million for an integrated research program focused on sustainable agriculture and
would support a modeling initiative to gauge the effects of greenhouse gas emissions from agriculture.

**Food Safety** - The President’s FY 2011 budget request includes $104 million for ARS Food Safety initiatives, an increase of $6 million or 6 percent above the FY 2010 enacted level. ARS food safety research is designed to produce science based knowledge on the safe production, storage, processing, and handling plant and animal products and control of toxin producing fungi and bacteria.

**Human Nutrition** - ARS’s human nutrition programs would receive $91 million, an increase of $5 million or 5.8 percent above the FY 2010 enacted level in the President’s FY 2011 budget request. ARS Human Nutrition programs focus on lifelong health and the prevention of chronic diseases through food-based recommendations. These programs are part of the Administration’s broader focus on improving nutrition, and specifically fighting obesity, in its FY 2011 budget request.

**U.S. Geological Survey**

Within the Department of Interior (DOI), the U.S. Geological Survey (USGS) would receive $1.133 billion in the President’s FY 2011 budget request. The request is $21.6 million (1.9 percent) above the FY 2010 enacted level. For FY 2011, as in FY 2010, the President’s budget would fund programs that were zeroed out in previous Administrations requests, such as the Water Resources Research Act Program, which supports the Water Resources Research Institutes. Not surprisingly, the request follows the Obama Administration’s priorities and would increase funding in the areas of climate change, renewable energy, water availability and use, and natural hazards. The budget request would eliminate Congressionally directed funding from FY 2010.

**Initiatives**

**New Energy Frontier Initiative**

The budget request would provide an additional $3 million to USGS as part of a larger initiative with other DOI bureaus to assess the impacts to wildlife associated with the development of wind energy.

**Climate Change Adaptation Initiative**

The FY 2011 budget request includes a total of $171.3 million for DOI’s new Climate Change Adaptation Initiative. DOI has been on record in recent months stating its intention to become the “adaptation agency” of the federal government. Within this amount, USGS, as DOI’s lead scientific agency, would receive $77.9 million, an increase of $10.4 million. The increase would be used to provide additional support to the National Climate Change and Wildlife Science Center, which under the Secretary’s Initiative would provide a “nexus for Interior Climate Science Centers.” The budget request would bring the total to five science centers if funded. The increase to USGS would also provide $2 million for the national assessment of biologic carbon sequestration and $1 million for science applications and decision support tools for Interior bureaus to cope with and adapt to a changing climate.
Other DOI bureaus would also receive increased funding under the Climate Change Adaptation Initiative within the President’s request, including:

- Bureau of Land Management – $17.5 million, a $2.5 million increase;
- Bureau of Reclamation – $7 million, a $3.5 million increase;
- Fish and Wildlife Service – $58.8 million, an $18.8 million increase;
- National Park Service – $10 million, which represents new funding; and
- Bureau of Indian Affairs – $200 million in new funding, specifically to support the Northwest Landscape Conservation Cooperative

WaterSMART Program
USGS would receive a $9 million increase over the FY 2010 enacted level for the WaterSMART Availability and Use Assessment, which is part of DOI’s sustainable water strategy, the WaterSMART program. The first year effort would initiate studies in the Colorado River Basin, Delaware River Basin, and Apalachicola-Chattahoochee-Flint River Basin.

Youth in Natural Resources Initiative
There is no increase to report for FY 2011, but USGS would maintain FY 2010 efforts to expand education and training opportunities and would increase the number of internships supported by USGS from 120 to 175.

Treasured Landscapes Initiative
The FY 2011 budget request would provide a $3.6 million increase for ecosystem work in the Chesapeake Bay. The proposed increase is in response to an Executive Order to participate in a federal partnership to protect and restore the Chesapeake Bay and its watershed.

Geography
The President’s budget would provide $153.4 million for Geography, an increase of $7.85 million (5.4 percent) above the FY 2010 enacted level. Of this amount, Land Remote Sensing would be funded at $75.9 million, a $12.2 million net increase over FY 2010. The National Geospatial Program would be funded at $65.9 million, a decrease of $4.9 million, including $3.5 million to eliminate funds used to leverage participation with Federal, State, and local agencies to acquire new data for the National Map Partnerships. A $500,000 increase would be provided for Geographic Analysis and Monitoring for participation in the WaterSMART Availability and Use Assessment and $250,000 for research to increase resilience to natural hazards.

Geology
The FY 2011 budget request would provide $253.8 million for Geology, an increase of $4.7 million (1.9 percent) above the FY 2010 enacted level. The total FY 2011 budget request for Geologic Hazards Assessments is $92.9 million, a $157,000 increase over the FY 2010 enacted level. Within this amount, the earthquake hazards program would receive a $1.8 million increase and the volcano hazards program would receive a $1.5 million increase. Specific budget request details for the earthquake hazards program and the Advanced National Seismic System were not available at the time of this write-up.
Geologic Landscape and Coastal Processes would receive $77.6 million in the budget request, a $3.2 million increase over FY 2010. Geologic Resource Assessments would be funded at $83.3 million, an increase of $1.3 million over FY 2010.

**Water Resources**
The Water Resources discipline would receive $228.8 million in the FY 2011 budget request, a decrease of $3.5 million (1.5 percent) below the FY 2010 enacted level. The request would flat-fund the Water Resources Research Act program at $6.5 million. This program funds the 54 Water Resources Research Institutes. An increase of $1.1 million is requested for the Groundwater Resources program and an increase of $6.4 million is requested in the Hydrologic Networks and Analysis program.

**Biological Research**
The FY 2011 budget request would provide $201.3 million for the Biological Research activity, a decrease of $3.6 million (1.8 percent) below the FY 2010 enacted level. Proposed program increases include $500,000 for participation in the WaterSMART Availability and Use Assessment; $200,000 for research on increasing resilience to natural hazards; and $4 million to increase science support to DOI bureaus.

**Global Change**
The President’s budget request would provide $72.1 million for the Global Change activity in FY 2011, an increase of $13.9 million (23.9 percent) over the FY 2010 enacted level. The proposed budget would provide $8 million for the National Climate Change and Wildlife Science Center; $2 million for biological carbon sequestration assessment; $1 million for science applications and decision support to enable resource managers and policymakers to cope with and adapt to a changing climate; and $3.6 million for the Treasured Landscapes initiative.

The USGS FY 2011 budget request is on line at:

**Other Activities and Interagency Programs**

**U.S. Global Change Research Program**
The President’s budget request includes $2.6 billion for the U.S. Global Change Research Program (USGCRP), which is $439 million or 21 percent over the FY 2010 enacted level. USGCRP, an interagency effort that began in 1990 to coordinate the federal government’s work related to understanding global change, has been reinvigorated under the Obama Administration as part of the President’s over-arching efforts to address and respond to a changing climate. The proposed budget would direct the 13 participating federal agencies to address four identified areas of need: Earth observations, adaptation research, integrated assessment, and climate services.
The below table outlines the proposed funding contributions for each participating agency:

<table>
<thead>
<tr>
<th>Agency</th>
<th>FY 2011 (in millions)</th>
<th>FY 2010 Change</th>
<th>Percentage Change</th>
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<tbody>
<tr>
<td>NSF</td>
<td>370</td>
<td>160</td>
<td>16.0%</td>
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<tr>
<td>DOE</td>
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<td>138</td>
<td>15.8%</td>
</tr>
<tr>
<td>DOC (NOAA and NIST)</td>
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<td>355</td>
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<tr>
<td>USDA</td>
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<td>125</td>
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<tr>
<td>Interior (USGS)</td>
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<td>65</td>
<td>28.6%</td>
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<tr>
<td>EPA</td>
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<td>16</td>
<td>4.8%</td>
</tr>
<tr>
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<td>3</td>
<td>0%</td>
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<tr>
<td>NASA</td>
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<td>20.0%</td>
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<tr>
<td>Smithsonian</td>
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<td>6</td>
<td>57.1%</td>
</tr>
<tr>
<td>Transportation</td>
<td>3</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td><strong>TOTAL USGCRP</strong></td>
<td><strong>2,561</strong></td>
<td></td>
<td><strong>20.1%</strong></td>
</tr>
</tbody>
</table>

*USAID, Department of State and DOD fund USGCRP activities separately

**Networking and Information Technology Research and Development Program**
The FY 2011 budget request would provide $4 billion for the multi-agency Networking and Information Technology Research and Development (NITRD) Program, which is level with the FY 2010 appropriation. Going forward, particular areas of emphasis will continue to include high-end computing research for both national security and large-scale scientific applications, particularly in advanced scalable simulations, and foundations for assured computing and secure hardware, software and network design and engineering to improve Internet security and reliability.

**National Nanotechnology Initiative**
The FY 2011 budget request would provide $1.7 billion for the multi-agency National Nanotechnology Initiative, which is flat with the FY 2010 level. Particular areas of focus in FY 2011 will include the responsible development of nanotechnology with attention to the human health and environmental impacts ($119 million across the agencies) and nanomanufacturing ($87 million across the agencies).

**Corporation for National and Community Service**
The Corporation for National and Community Service (CNCS) would receive $1.416 billion in the President’s budget request, an increase of $265.9 million (23.1 percent) above the FY 2010 enacted level. The most significant increase would be for the AmeriCorps state and national program, which would be funded at $488 million, a $115.5 million increase over the FY 2010 enacted level. Learn and Serve America, the service learning arm of CNCS, would be funded at $40.2 million in the budget request, a small increase of $698,000 over the FY 2010 level. Finally, the Social Innovation Fund authorized within the 2009 Kennedy Serve America Act would be funded at $60 million, a $10 million increase over the FY 2010 enacted level which was also its first year of funding.

The CNCS FY 2011 budget justification is on line at: